

RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY

MALES

ANIMAL NUMBER		RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
GROUP 3 (1000 MG/KG/DAY)								
75	AFTER 2 WEEKS	7.90	9.6	0.44	55.6	0.127	1.22	21.91
	AFTER 6 WEEKS	8.91	10.7	0.47	52.7	0.122	1.21	22.89
	AFTER 13 WEEKS	9.68	10.5	0.48	50.1	0.127	1.08	21.57
76	AFTER 2 WEEKS	6.98	8.8	0.40	56.7	0.116	1.25	22.11
	AFTER 6 WEEKS	8.05	9.8	0.43	53.0	0.116	1.22	22.97
	AFTER 13 WEEKS	8.56	9.6	0.44	51.3	0.136	1.12	21.80
77	AFTER 2 WEEKS	7.17	9.3	0.42	58.3	0.116	1.30	22.37
	AFTER 6 WEEKS	8.08	10.3	0.44	54.6	0.116	1.28	23.35
	AFTER 13 WEEKS	8.83	10.5	0.46	52.4	0.124	1.19	22.73
78	AFTER 2 WEEKS	7.33	9.2	0.41	55.4	0.126	1.26	22.72
	AFTER 6 WEEKS	8.07	10.2	0.43	52.8	0.174	1.27	23.98
	AFTER 13 WEEKS	8.56	10.1	0.43	50.8	0.190	1.17	23.11
79	AFTER 2 WEEKS	7.74	9.4	0.43	55.0	0.128	1.21	21.98
	AFTER 6 WEEKS	8.67	10.5	0.45	52.3	0.126	1.21	23.12
	AFTER 13 WEEKS	9.21	10.2	0.46	50.0	0.135	1.11	22.20
80	AFTER 2 WEEKS	---	---	---	---	---	---	---
	AFTER 6 WEEKS	8.35	10.3	0.43	51.5	0.141	1.23	23.86
	AFTER 13 WEEKS	8.98	10.0	0.44	49.5	0.142	1.12	22.56
81	AFTER 2 WEEKS	7.22	9.5	0.42	58.6	0.119	1.31	22.39
	AFTER 6 WEEKS	8.28	10.5	0.45	54.6	0.115	1.27	23.20
	AFTER 13 WEEKS	8.98	10.3	0.47	52.1	0.128	1.15	22.10
82	AFTER 2 WEEKS	7.72	9.3	0.42	54.7	0.122	1.21	22.12
	AFTER 6 WEEKS	8.72	10.2	0.45	51.1	0.123	1.17	22.90
	AFTER 13 WEEKS	9.39	9.9	0.46	48.8	0.136	1.06	21.68
GROUP 4 (2000 MG/KG/DAY)								
89	AFTER 2 WEEKS	7.05	9.2	0.40	56.4	0.132	1.31	23.22
	AFTER 6 WEEKS	8.35	10.8	0.45	53.8	0.188	1.30	24.12
	AFTER 13 WEEKS	8.70	10.5	0.46	52.4	0.235	1.20	22.95
90	AFTER 2 WEEKS	7.87	9.7	0.43	54.4	0.119	1.23	22.54
	AFTER 6 WEEKS	8.47	10.4	0.45	52.6	0.122	1.23	23.41
	AFTER 13 WEEKS	9.22	10.6	0.47	51.5	0.125	1.15	22.43
91	AFTER 2 WEEKS	7.33	9.2	0.42	57.0	0.118	1.26	22.03
	AFTER 6 WEEKS	8.60	10.5	0.47	54.3	0.115	1.23	22.59
	AFTER 13 WEEKS	8.77	9.7	0.45	51.2	0.124	1.11	21.63
92	AFTER 2 WEEKS	7.86	9.2	0.43	54.1	0.123	1.17	21.65
	AFTER 6 WEEKS	9.21	10.4	0.46	49.7	0.130	1.13	22.71
	AFTER 13 WEEKS	9.60	10.2	0.47	49.2	0.136	1.06	21.55
93	AFTER 2 WEEKS	7.46	9.3	0.42	56.1	0.120	1.25	22.21
	AFTER 6 WEEKS	8.60	10.4	0.46	52.9	0.119	1.21	22.81
	AFTER 13 WEEKS	9.51	10.5	0.48	51.0	0.125	1.11	21.72
94	AFTER 2 WEEKS	7.41	9.4	0.42	56.5	0.119	1.27	22.39
	AFTER 6 WEEKS	8.36	10.3	0.44	52.9	0.123	1.23	23.24
	AFTER 13 WEEKS	9.13	10.1	0.46	50.8	0.129	1.11	21.78
95	AFTER 2 WEEKS	7.18	9.3	0.41	57.7	0.121	1.30	22.46
	AFTER 6 WEEKS	8.48	10.8	0.46	54.4	0.117	1.28	23.47
	AFTER 13 WEEKS	8.60	9.9	0.46	53.2	0.134	1.15	21.69
96	AFTER 2 WEEKS	6.98	9.0	0.40	57.5	0.118	1.29	22.43
	AFTER 6 WEEKS	8.20	10.2	0.44	54.2	0.115	1.24	22.90
	AFTER 13 WEEKS	9.00	10.2	0.48	53.0	0.123	1.14	21.45

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MALES

ANIMAL NUMBER		RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
GROUP 4 (2000 MG/KG/DAY)								
97	AFTER 2 WEEKS	7.93	9.9	0.44	55.0	0.123	1.25	22.63
	AFTER 6 WEEKS	9.32	11.6	0.50	52.9	0.117	1.24	23.53
	AFTER 13 WEEKS	9.82	11.2	0.52	52.6	0.123	1.14	21.68
98	AFTER 2 WEEKS	7.09	9.7	0.42	59.6	0.123	1.36	22.88
	AFTER 6 WEEKS	8.25	10.9	0.46	55.9	0.121	1.32	23.56
	AFTER 13 WEEKS	8.57	10.5	0.46	54.0	0.139	1.22	22.57
99	AFTER 2 WEEKS	7.33	9.4	0.41	56.1	0.124	1.28	22.76
	AFTER 6 WEEKS	8.30	10.7	0.45	53.9	0.115	1.29	23.83
	AFTER 13 WEEKS	9.08	10.5	0.47	51.5	0.124	1.16	22.56
100	AFTER 2 WEEKS	7.82	9.3	0.41	52.3	0.118	1.19	22.75
	AFTER 6 WEEKS	8.89	10.7	0.45	50.1	0.135	1.20	23.93
	AFTER 13 WEEKS	8.88	9.8	0.43	48.3	0.141	1.10	22.82
101	AFTER 2 WEEKS	7.25	9.4	0.41	55.9	0.129	1.30	23.29
	AFTER 6 WEEKS	8.11	10.6	0.43	53.3	0.167	1.30	24.47
	AFTER 13 WEEKS	8.67	10.2	0.45	51.4	0.153	1.18	22.91
102	AFTER 2 WEEKS	7.37	9.1	0.41	55.9	0.120	1.24	22.20
	AFTER 6 WEEKS	8.41	10.3	0.45	53.0	0.122	1.23	23.20
	AFTER 13 WEEKS	9.39	10.3	0.47	50.1	0.127	1.10	21.93
103	AFTER 2 WEEKS	7.34	9.3	0.40	54.9	0.123	1.27	23.08
	AFTER 6 WEEKS	8.56	10.6	0.45	52.4	0.127	1.24	23.56
	AFTER 13 WEEKS	9.22	10.3	0.46	50.2	0.130	1.12	22.24
104	AFTER 2 WEEKS	7.70	9.4	0.42	55.2	0.127	1.21	22.01
	AFTER 6 WEEKS	8.83	10.4	0.46	52.0	0.123	1.18	22.69
	AFTER 13 WEEKS	9.58	10.3	0.47	49.1	0.133	1.07	21.85
105	AFTER 2 WEEKS	7.39	9.4	0.40	54.6	0.133	1.27	23.25
	AFTER 6 WEEKS	8.50	10.4	0.44	51.4	0.143	1.22	23.80
	AFTER 13 WEEKS	8.88	10.0	0.44	49.3	0.146	1.12	22.80
106	AFTER 2 WEEKS	7.19	8.7	0.38	53.1	0.127	1.21	22.86
	AFTER 6 WEEKS	8.93	10.7	0.45	50.8	0.127	1.20	23.56
	AFTER 13 WEEKS	9.23	10.2	0.46	49.3	0.136	1.10	22.30
107	AFTER 2 WEEKS	7.62	9.3	0.42	55.2	0.115	1.22	22.07
	AFTER 6 WEEKS	8.27	10.0	0.43	52.3	0.115	1.21	23.11
	AFTER 13 WEEKS	9.01	9.9	0.45	50.0	0.124	1.10	22.04
108	AFTER 2 WEEKS	7.13	9.2	0.41	57.7	0.116	1.29	22.43
	AFTER 6 WEEKS	8.12	10.3	0.45	55.1	0.114	1.27	22.99
	AFTER 13 WEEKS	8.70	10.0	0.46	52.4	0.121	1.15	21.96
109	AFTER 2 WEEKS	7.56	9.6	0.42	55.5	0.126	1.27	22.86
	AFTER 6 WEEKS	8.66	10.8	0.46	52.6	0.122	1.24	23.65
	AFTER 13 WEEKS	9.11	10.4	0.46	50.5	0.126	1.14	22.60
	AFTER 17 WEEKS	9.32	10.5	0.49	52.5	0.190	1.13	21.44
110	AFTER 2 WEEKS	7.76	9.4	0.42	54.7	0.124	1.21	22.12
	AFTER 6 WEEKS	8.62	10.0	0.45	51.7	0.120	1.16	22.52
	AFTER 13 WEEKS	9.28	10.1	0.46	49.4	0.126	1.08	21.93
	AFTER 17 WEEKS	9.28	9.9	0.47	51.0	0.137	1.07	20.95
111	AFTER 2 WEEKS	7.63	9.3	0.42	55.2	0.122	1.22	22.15
	AFTER 6 WEEKS	8.77	10.5	0.46	52.1	0.119	1.20	23.05
	AFTER 13 WEEKS	9.18	9.9	0.46	49.7	0.124	1.07	21.59
	AFTER 17 WEEKS	9.52	10.2	0.49	51.8	0.135	1.07	20.63
112	AFTER 2 WEEKS	7.63	8.9	0.40	52.5	0.122	1.17	22.32
	AFTER 6 WEEKS	8.79	10.3	0.44	49.7	0.138	1.17	23.47
	AFTER 13 WEEKS	9.06	9.8	0.44	48.8	0.141	1.08	22.21

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HEMATOLOGY
MALES

ANIMAL NUMBER		RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
GROUP 4 (2000 MG/KG/DAY)								
112	AFTER 17 WEEKS	8.97	10.1	0.47	52.5	0.216	1.12	21.36
113	AFTER 2 WEEKS	7.52	9.1	0.41	55.0	0.121	1.21	21.92
	AFTER 6 WEEKS	8.61	10.1	0.45	51.8	0.121	1.17	22.65
	AFTER 13 WEEKS	9.44	10.2	0.47	49.7	0.123	1.08	21.82
	AFTER 17 WEEKS	9.05	9.8	0.46	50.8	0.134	1.08	21.34
114	AFTER 2 WEEKS	7.42	9.2	0.41	55.0	0.122	1.23	22.45
	AFTER 6 WEEKS	8.86	10.1	0.45	50.4	0.122	1.14	22.67
	AFTER 13 WEEKS	9.30	9.8	0.45	47.9	0.134	1.06	22.09
	AFTER 17 WEEKS	9.61	10.1	0.48	50.2	0.144	1.05	20.92
115	AFTER 2 WEEKS	7.21	9.0	0.40	55.3	0.124	1.24	22.50
	AFTER 6 WEEKS	8.33	9.9	0.43	52.1	0.120	1.18	22.72
	AFTER 13 WEEKS	9.21	9.7	0.45	49.1	0.131	1.06	21.56
	AFTER 17 WEEKS	9.04	9.7	0.46	51.1	0.139	1.08	21.09
116	AFTER 2 WEEKS	7.87	9.2	0.42	53.4	0.120	1.17	21.94
	AFTER 6 WEEKS	9.03	10.4	0.45	50.3	0.120	1.16	23.02
	AFTER 13 WEEKS	9.44	10.0	0.46	48.3	0.132	1.06	22.01
	AFTER 17 WEEKS	9.43	10.0	0.48	50.7	0.142	1.06	20.94
117	AFTER 2 WEEKS	7.52	9.4	0.42	56.1	0.121	1.25	22.26
	AFTER 6 WEEKS	8.60	10.6	0.46	53.0	0.117	1.24	23.38
	AFTER 13 WEEKS	9.20	10.4	0.47	50.8	0.127	1.13	22.24
	AFTER 17 WEEKS	9.36	10.4	0.49	52.4	0.133	1.11	21.15
118	AFTER 2 WEEKS	7.56	9.3	0.42	55.2	0.119	1.23	22.24
	AFTER 6 WEEKS	8.54	10.2	0.44	52.1	0.116	1.19	22.92
	AFTER 13 WEEKS	8.93	9.9	0.46	51.1	0.132	1.10	21.62
	AFTER 17 WEEKS	9.26	10.0	0.49	52.6	0.135	1.08	20.60

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REPORT

HEMATOLOGY

MALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 1 (0 MG/KG/DAY)								
1	AFTER 2 WEEKS	1.30	0.040	291	0.470	0.388	0.142	7.16
	AFTER 6 WEEKS	1.48	0.021	166	0.705	0.269	0.026	5.35
	AFTER 13 WEEKS	1.64	0.016	145	0.730	0.251	0.019	5.99
2	AFTER 2 WEEKS	1.45	0.051	373	0.392	0.351	0.257	9.64
	AFTER 6 WEEKS	1.85	0.023	193	0.605	0.346	0.049	9.69
	AFTER 13 WEEKS	1.92	0.019	174	0.660	0.304	0.036	10.45
3	AFTER 2 WEEKS	1.34	0.044	341	0.477	0.381	0.142	7.22
	AFTER 6 WEEKS	1.53	0.017	159	0.721	0.253	0.027	7.02
	AFTER 13 WEEKS	1.59	0.014	136	0.776	0.215	0.010	8.00
4	AFTER 2 WEEKS	1.37	0.048	354	0.479	0.367	0.154	5.81
	AFTER 6 WEEKS	1.55	0.020	167	0.696	0.261	0.044	6.65
	AFTER 13 WEEKS	1.60	0.016	145	0.708	0.263	0.030	8.86
5	AFTER 2 WEEKS	1.46	0.044	321	0.443	0.362	0.195	6.47
	AFTER 6 WEEKS	1.84	0.016	132	0.730	0.249	0.021	8.87
	AFTER 13 WEEKS	1.74	0.014	115	0.766	0.205	0.030	7.53
6	AFTER 2 WEEKS	1.33	0.046	329	0.468	0.359	0.173	6.62
	AFTER 6 WEEKS	1.56	0.017	139	0.701	0.267	0.032	7.15
	AFTER 13 WEEKS	1.57	0.012	103	0.734	0.254	0.012	7.18
7	AFTER 2 WEEKS	1.20	0.033	256	0.514	0.367	0.120	4.75
	AFTER 6 WEEKS	1.53	0.015	135	0.721	0.249	0.030	5.29
	AFTER 13 WEEKS	1.57	0.014	131	0.756	0.227	0.018	5.34
8	AFTER 2 WEEKS	1.29	0.041	321	0.456	0.346	0.198	6.56
	AFTER 6 WEEKS	1.62	0.017	153	0.671	0.304	0.026	7.82
	AFTER 13 WEEKS	1.59	0.015	140	0.765	0.222	0.014	8.15
9	AFTER 2 WEEKS	1.46	0.049	353	0.491	0.357	0.152	6.72
	AFTER 6 WEEKS	1.81	0.017	140	0.739	0.235	0.027	11.37
	AFTER 13 WEEKS	1.74	0.012	107	0.827	0.166	0.007	11.37
10	AFTER 2 WEEKS	1.33	0.038	301	0.507	0.359	0.134	7.56
	AFTER 6 WEEKS	1.81	0.019	168	0.636	0.338	0.026	7.18
	AFTER 13 WEEKS	1.83	0.013	124	0.723	0.254	0.023	8.48
11	AFTER 2 WEEKS	1.46	0.041	314	0.439	0.384	0.177	6.55
	AFTER 6 WEEKS	1.80	0.014	123	0.733	0.245	0.022	5.88
	AFTER 13 WEEKS	1.74	0.018	164	0.735	0.247	0.018	5.36
12	AFTER 2 WEEKS	1.29	0.043	333	0.408	0.343	0.249	5.77
	AFTER 6 WEEKS	1.65	0.015	128	0.700	0.249	0.052	6.09
	AFTER 13 WEEKS	1.66	0.012	118	0.785	0.208	0.007	5.53
13	AFTER 2 WEEKS	1.29	0.047	358	0.515	0.367	0.118	7.03
	AFTER 6 WEEKS	1.42	0.016	148	0.764	0.222	0.014	9.99
	AFTER 13 WEEKS	1.52	0.017	160	0.731	0.255	0.014	7.79
14	AFTER 2 WEEKS	1.50	0.041	295	0.421	0.354	0.225	4.26
	AFTER 6 WEEKS	1.89	0.020	169	0.701	0.268	0.031	4.16
	AFTER 13 WEEKS	1.84	0.018	163	0.729	0.250	0.021	5.71
15	AFTER 2 WEEKS	1.42	0.040	316	0.510	0.355	0.134	5.84
	AFTER 6 WEEKS	1.71	0.020	175	0.680	0.285	0.035	5.27
	AFTER 13 WEEKS	1.80	0.019	185	0.707	0.262	0.031	6.44
16	AFTER 2 WEEKS	1.48	0.041	296	0.497	0.372	0.131	5.39
	AFTER 6 WEEKS	1.83	0.016	128	0.742	0.235	0.023	5.95
	AFTER 13 WEEKS	1.92	0.017	149	0.740	0.236	0.023	5.31
17	AFTER 2 WEEKS	1.49	0.050	376	0.443	0.382	0.175	6.34
	AFTER 6 WEEKS	1.84	0.013	108	0.732	0.236	0.032	6.68

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ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 1 (0 MG/KG/DAY)								
17	AFTER 13 WEEKS	1.85	0.016	142	0.728	0.251	0.021	6.21
18	AFTER 2 WEEKS	1.40	0.040	292	0.565	0.354	0.081	6.71
	AFTER 6 WEEKS	1.58	0.017	145	0.707	0.252	0.042	6.23
	AFTER 13 WEEKS	1.54	0.015	138	0.767	0.212	0.021	8.15
19	AFTER 2 WEEKS	1.52	0.051	360	0.490	0.365	0.145	7.53
	AFTER 6 WEEKS	1.85	0.022	171	0.681	0.274	0.045	7.19
	AFTER 13 WEEKS	1.92	0.023	203	0.748	0.228	0.024	7.33
20	AFTER 2 WEEKS	1.51	0.039	307	0.504	0.383	0.113	7.53
	AFTER 6 WEEKS	1.81	0.015	127	0.701	0.272	0.026	6.61
	AFTER 13 WEEKS	1.81	0.016	147	0.771	0.200	0.029	5.88
21	AFTER 2 WEEKS	1.47	0.039	283	0.458	0.409	0.132	7.24
	AFTER 6 WEEKS	1.87	0.016	126	0.668	0.296	0.036	5.67
	AFTER 13 WEEKS	1.80	0.016	127	0.651	0.305	0.044	6.27
	AFTER 17 WEEKS	1.83	0.015	126	0.702	0.272	0.027	7.17
22	AFTER 2 WEEKS	1.41	0.046	345	0.452	0.365	0.184	6.31
	AFTER 6 WEEKS	1.76	0.014	125	0.735	0.222	0.043	6.30
	AFTER 13 WEEKS	1.73	0.014	142	0.729	0.248	0.023	7.09
	AFTER 17 WEEKS	1.91	0.018	173	0.756	0.211	0.033	7.94
23	AFTER 2 WEEKS	1.44	0.035	264	0.543	0.366	0.091	6.31
	AFTER 6 WEEKS	1.79	0.017	154	0.763	0.216	0.021	6.42
	AFTER 13 WEEKS	1.79	0.012	119	0.795	0.191	0.014	4.93
	AFTER 17 WEEKS	1.83	0.013	125	0.793	0.176	0.031	6.18
24	AFTER 2 WEEKS	1.47	0.037	285	0.530	0.372	0.099	6.57
	AFTER 6 WEEKS	1.78	0.020	170	0.684	0.287	0.029	6.81
	AFTER 13 WEEKS	1.65	0.016	158	0.765	0.210	0.025	6.79
	AFTER 17 WEEKS	1.88	0.018	171	0.727	0.253	0.021	7.21
25	AFTER 2 WEEKS	1.49	0.036	272	0.547	0.377	0.075	5.35
	AFTER 6 WEEKS	1.87	0.016	139	0.714	0.264	0.022	4.86
	AFTER 13 WEEKS	1.81	0.013	122	0.773	0.194	0.033	5.95
	AFTER 17 WEEKS	1.87	0.015	131	0.735	0.244	0.021	6.55
26	AFTER 2 WEEKS	1.33	0.038	291	0.497	0.389	0.115	9.73
	AFTER 6 WEEKS	1.67	0.020	172	0.667	0.298	0.035	7.08
	AFTER 13 WEEKS	1.72	0.019	179	0.761	0.223	0.015	6.60
	AFTER 17 WEEKS	1.77	0.016	162	0.699	0.274	0.028	6.18
27	AFTER 2 WEEKS	1.33	0.035	280	0.506	0.383	0.111	6.21
	AFTER 6 WEEKS	1.81	0.014	124	0.747	0.221	0.032	6.12
	AFTER 13 WEEKS	1.82	0.015	148	0.763	0.220	0.017	6.31
	AFTER 17 WEEKS	1.87	0.016	154	0.705	0.275	0.020	5.82
28	AFTER 2 WEEKS	1.32	0.039	290	0.472	0.383	0.145	8.49
	AFTER 6 WEEKS	1.64	0.019	162	0.722	0.254	0.024	9.53
	AFTER 13 WEEKS	1.68	0.022	201	0.711	0.270	0.019	7.54
	AFTER 17 WEEKS	1.61	0.019	177	0.686	0.281	0.033	7.75
29	AFTER 2 WEEKS	1.34	0.040	308	0.490	0.385	0.125	4.66
	AFTER 6 WEEKS	1.68	0.017	149	0.732	0.249	0.020	6.03
	AFTER 13 WEEKS	1.78	0.017	156	0.702	0.274	0.024	5.41
	AFTER 17 WEEKS	1.75	0.017	157	0.669	0.299	0.033	5.83
30	AFTER 2 WEEKS	1.42	0.046	341	0.448	0.380	0.172	8.57
	AFTER 6 WEEKS	1.79	0.018	152	0.724	0.241	0.034	8.28
	AFTER 13 WEEKS	1.74	0.019	177	0.680	0.293	0.027	8.76
	AFTER 17 WEEKS	1.83	0.020	183	0.687	0.269	0.044	8.94

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 2 (500 MG/KG/DAY)								
37	AFTER 2 WEEKS	1.28	0.034	248	0.495	0.362	0.143	6.80
	AFTER 6 WEEKS	1.62	0.016	141	0.722	0.248	0.030	7.13
	AFTER 13 WEEKS	1.50	0.012	110	0.770	0.214	0.017	5.96
38	AFTER 2 WEEKS	1.31	0.043	337	0.495	0.392	0.113	7.27
	AFTER 6 WEEKS	1.57	0.018	157	0.738	0.243	0.020	7.81
	AFTER 13 WEEKS	1.55	0.012	117	0.804	0.175	0.021	6.76
39	AFTER 2 WEEKS	1.44	0.045	356	0.456	0.359	0.185	7.40
	AFTER 6 WEEKS	1.81	0.017	154	0.688	0.283	0.029	7.72
	AFTER 13 WEEKS	1.77	0.018	168	0.737	0.239	0.025	6.07
40	AFTER 2 WEEKS	1.37	0.038	272	0.504	0.376	0.120	5.24
	AFTER 6 WEEKS	1.65	0.015	127	0.737	0.232	0.032	6.95
	AFTER 13 WEEKS	1.67	0.013	123	0.770	0.201	0.028	5.33
41	AFTER 2 WEEKS	1.38	0.045	335	0.448	0.365	0.187	6.87
	AFTER 6 WEEKS	1.61	0.017	149	0.689	0.289	0.023	7.87
	AFTER 13 WEEKS	1.75	0.016	150	0.721	0.246	0.034	8.18
42	AFTER 2 WEEKS	1.35	0.041	296	0.425	0.342	0.233	8.48
	AFTER 6 WEEKS	1.65	0.017	145	0.713	0.249	0.038	10.44
	AFTER 13 WEEKS	1.70	0.018	167	0.659	0.308	0.033	8.15
43	AFTER 2 WEEKS	1.51	0.038	269	0.468	0.378	0.153	4.88
	AFTER 6 WEEKS	1.98	0.016	131	0.721	0.254	0.025	6.05
	AFTER 13 WEEKS	1.85	0.014	124	0.779	0.206	0.015	6.01
44	AFTER 2 WEEKS	1.45	0.035	249	0.504	0.384	0.111	9.11
	AFTER 6 WEEKS	---	---	---	---	---	---	---
	AFTER 13 WEEKS	---	---	---	---	---	---	---
45	AFTER 2 WEEKS	1.48	0.043	332	0.506	0.345	0.149	6.13
	AFTER 6 WEEKS	1.72	0.016	145	0.654	0.314	0.032	7.55
	AFTER 13 WEEKS	1.80	0.016	155	0.746	0.231	0.023	7.05
46	AFTER 2 WEEKS	1.39	0.046	354	0.518	0.378	0.104	6.58
	AFTER 6 WEEKS	1.76	0.016	136	0.737	0.227	0.036	6.26
	AFTER 13 WEEKS	1.85	0.016	146	0.767	0.219	0.014	6.32
47	AFTER 2 WEEKS	1.38	0.039	274	0.425	0.359	0.217	5.70
	AFTER 6 WEEKS	1.65	0.015	117	0.769	0.201	0.030	6.48
	AFTER 13 WEEKS	1.72	0.015	133	0.779	0.206	0.015	7.41
48	AFTER 2 WEEKS	1.31	0.042	326	0.523	0.364	0.113	5.98
	AFTER 6 WEEKS	1.57	0.017	144	0.743	0.224	0.033	6.33
	AFTER 13 WEEKS	1.71	0.019	179	0.734	0.250	0.017	6.04
49	AFTER 2 WEEKS	1.27	0.040	324	0.509	0.393	0.098	5.86
	AFTER 6 WEEKS	1.52	0.016	149	0.764	0.213	0.023	6.64
	AFTER 13 WEEKS	1.62	0.018	176	0.805	0.177	0.018	5.49
50	AFTER 2 WEEKS	1.34	0.035	278	0.559	0.360	0.081	5.81
	AFTER 6 WEEKS	1.70	0.013	112	0.764	0.204	0.032	7.62
	AFTER 13 WEEKS	1.78	0.014	132	0.765	0.226	0.009	7.80
51	AFTER 2 WEEKS	1.39	0.039	295	0.536	0.376	0.089	5.27
	AFTER 6 WEEKS	1.80	0.018	159	0.789	0.192	0.019	8.46
	AFTER 13 WEEKS	1.86	0.018	175	0.819	0.157	0.024	6.54
52	AFTER 2 WEEKS	1.34	0.044	326	0.498	0.396	0.106	6.46
	AFTER 6 WEEKS	1.50	0.018	148	0.712	0.253	0.034	7.96
	AFTER 13 WEEKS	1.62	0.018	167	0.733	0.246	0.021	7.04
53	AFTER 2 WEEKS	1.66	0.042	305	0.491	0.385	0.124	5.77
	AFTER 6 WEEKS	2.09	0.019	149	0.739	0.239	0.021	6.02

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 2 (500 MG/KG/DAY)								
53	AFTER 13 WEEKS	1.90	0.017	143	0.760	0.219	0.021	5.12
54	AFTER 2 WEEKS	1.38	0.048	361	0.470	0.386	0.145	5.96
	AFTER 6 WEEKS	1.53	0.018	152	0.706	0.253	0.041	6.37
	AFTER 13 WEEKS	1.62	0.016	151	0.740	0.240	0.019	6.00
55	AFTER 2 WEEKS	1.40	0.044	326	0.505	0.382	0.113	7.34
	AFTER 6 WEEKS	1.59	0.018	155	0.772	0.208	0.021	8.19
	AFTER 13 WEEKS	1.71	0.017	155	0.753	0.231	0.016	6.94
56	AFTER 2 WEEKS	1.40	0.037	271	0.507	0.376	0.117	4.80
	AFTER 6 WEEKS	1.68	0.016	138	0.764	0.209	0.027	5.39
	AFTER 13 WEEKS	1.70	0.014	124	0.737	0.243	0.020	5.19
GROUP 3 (1000 MG/KG/DAY)								
63	AFTER 2 WEEKS	1.36	0.044	328	0.444	0.400	0.156	6.01
	AFTER 6 WEEKS	1.79	0.014	117	0.797	0.187	0.016	6.85
	AFTER 13 WEEKS	1.82	0.010	87	0.780	0.198	0.021	5.71
64	AFTER 2 WEEKS	1.40	0.042	324	0.458	0.367	0.176	5.39
	AFTER 6 WEEKS	1.76	0.015	125	0.748	0.218	0.034	5.58
	AFTER 13 WEEKS	1.62	0.013	123	0.763	0.210	0.027	5.89
65	AFTER 2 WEEKS	1.58	0.041	304	0.507	0.375	0.118	6.18
	AFTER 6 WEEKS	1.82	0.018	142	0.677	0.277	0.046	6.07
	AFTER 13 WEEKS	1.71	0.014	123	0.789	0.202	0.010	4.56
66	AFTER 2 WEEKS	1.51	0.045	326	0.505	0.368	0.127	5.12
	AFTER 6 WEEKS	1.64	0.017	150	0.698	0.264	0.039	4.87
	AFTER 13 WEEKS	1.78	0.015	140	0.779	0.196	0.025	3.94
67	AFTER 2 WEEKS	1.33	0.050	391	0.442	0.407	0.151	3.97
	AFTER 6 WEEKS	1.52	0.018	155	0.682	0.277	0.041	5.36
	AFTER 13 WEEKS	1.68	0.018	173	0.732	0.239	0.028	4.84
68	AFTER 2 WEEKS	1.41	0.040	299	0.502	0.391	0.107	6.72
	AFTER 6 WEEKS	1.63	0.018	147	0.730	0.238	0.032	4.60
	AFTER 13 WEEKS	1.66	0.013	120	0.736	0.252	0.012	5.22
69	AFTER 2 WEEKS	1.36	0.049	374	0.447	0.378	0.175	7.38
	AFTER 6 WEEKS	1.59	0.015	131	0.679	0.281	0.039	6.05
	AFTER 13 WEEKS	1.65	0.015	137	0.751	0.230	0.020	5.05
70	AFTER 2 WEEKS	1.63	0.040	281	0.479	0.397	0.124	6.48
	AFTER 6 WEEKS	1.97	0.019	144	0.702	0.257	0.042	5.87
	AFTER 13 WEEKS	1.90	0.016	132	0.760	0.219	0.020	6.39
71	AFTER 2 WEEKS	1.36	0.044	324	0.460	0.380	0.160	6.08
	AFTER 6 WEEKS	1.61	0.021	162	0.641	0.311	0.048	4.99
	AFTER 13 WEEKS	1.62	0.015	130	0.695	0.268	0.037	5.01
72	AFTER 2 WEEKS	1.34	0.043	311	0.469	0.382	0.149	6.04
	AFTER 6 WEEKS	1.60	0.016	138	0.709	0.247	0.044	7.40
	AFTER 13 WEEKS	1.70	0.018	170	0.709	0.261	0.030	6.58
73	AFTER 2 WEEKS	1.38	0.039	293	0.539	0.371	0.091	6.91
	AFTER 6 WEEKS	1.71	0.017	145	0.778	0.208	0.014	8.29
	AFTER 13 WEEKS	1.76	0.017	159	0.774	0.203	0.023	6.85
74	AFTER 2 WEEKS	1.39	0.044	317	0.403	0.369	0.228	7.03
	AFTER 6 WEEKS	1.78	0.019	156	0.677	0.279	0.044	7.22
	AFTER 13 WEEKS	1.79	0.020	191	0.724	0.254	0.021	7.10

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY

MALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 3 (1000 MG/KG/DAY)								
75	AFTER 2 WEEKS	1.28	0.043	342	0.432	0.365	0.203	8.52
	AFTER 6 WEEKS	1.55	0.017	153	0.762	0.209	0.030	7.89
	AFTER 13 WEEKS	1.56	0.021	202	0.746	0.239	0.015	8.10
76	AFTER 2 WEEKS	1.31	0.048	331	0.394	0.341	0.265	4.69
	AFTER 6 WEEKS	1.58	0.018	148	0.706	0.266	0.028	4.50
	AFTER 13 WEEKS	1.71	0.027	228	0.659	0.320	0.022	5.38
77	AFTER 2 WEEKS	1.32	0.041	297	0.383	0.369	0.248	6.30
	AFTER 6 WEEKS	1.64	0.019	150	0.708	0.264	0.028	6.65
	AFTER 13 WEEKS	1.73	0.017	150	0.730	0.242	0.028	8.96
78	AFTER 2 WEEKS	1.36	0.047	344	0.425	0.375	0.200	6.03
	AFTER 6 WEEKS	1.77	0.014	113	0.804	0.175	0.022	4.36
	AFTER 13 WEEKS	1.75	0.015	129	0.813	0.174	0.013	5.08
79	AFTER 2 WEEKS	1.37	0.044	340	0.445	0.382	0.173	6.74
	AFTER 6 WEEKS	1.74	0.016	141	0.750	0.218	0.032	8.74
	AFTER 13 WEEKS	1.92	0.017	155	0.817	0.170	0.014	6.59
80	AFTER 2 WEEKS	---	---	---	---	---	---	---
	AFTER 6 WEEKS	1.91	0.014	116	0.795	0.176	0.029	7.37
	AFTER 13 WEEKS	2.06	0.020	177	0.764	0.214	0.022	4.80
81	AFTER 2 WEEKS	1.36	0.043	313	0.397	0.372	0.231	5.38
	AFTER 6 WEEKS	1.65	0.018	149	0.721	0.247	0.032	7.19
	AFTER 13 WEEKS	1.73	0.020	181	0.697	0.274	0.029	5.07
82	AFTER 2 WEEKS	1.37	0.045	350	0.457	0.400	0.143	9.29
	AFTER 6 WEEKS	1.78	0.021	180	0.675	0.292	0.033	8.50
	AFTER 13 WEEKS	2.05	0.021	199	0.688	0.287	0.025	8.29
GROUP 4 (2000 MG/KG/DAY)								
89	AFTER 2 WEEKS	1.49	0.039	278	0.510	0.368	0.122	5.73
	AFTER 6 WEEKS	1.85	0.015	127	0.707	0.247	0.046	6.50
	AFTER 13 WEEKS	1.81	0.015	129	0.756	0.219	0.025	5.51
90	AFTER 2 WEEKS	1.25	0.032	256	0.522	0.369	0.109	6.93
	AFTER 6 WEEKS	1.63	0.024	205	0.635	0.322	0.043	8.47
	AFTER 13 WEEKS	1.79	0.014	125	0.778	0.203	0.019	6.58
91	AFTER 2 WEEKS	1.35	0.039	288	0.445	0.361	0.194	6.65
	AFTER 6 WEEKS	1.55	0.020	171	0.661	0.298	0.041	7.32
	AFTER 13 WEEKS	1.57	0.013	116	0.730	0.239	0.031	6.38
92	AFTER 2 WEEKS	1.37	0.044	349	0.408	0.372	0.219	8.63
	AFTER 6 WEEKS	1.68	0.019	170	0.728	0.259	0.013	8.79
	AFTER 13 WEEKS	1.80	0.017	166	0.706	0.269	0.024	7.32
93	AFTER 2 WEEKS	1.35	0.048	355	0.427	0.334	0.239	7.59
	AFTER 6 WEEKS	1.64	0.025	218	0.622	0.325	0.053	5.27
	AFTER 13 WEEKS	1.67	0.019	183	0.673	0.303	0.024	7.28
94	AFTER 2 WEEKS	1.43	0.047	346	0.474	0.393	0.133	6.09
	AFTER 6 WEEKS	1.74	0.021	179	0.685	0.275	0.039	6.96
	AFTER 13 WEEKS	1.81	0.019	174	0.705	0.273	0.021	6.29
95	AFTER 2 WEEKS	1.27	0.038	271	0.430	0.347	0.223	6.74
	AFTER 6 WEEKS	1.58	0.014	120	0.678	0.276	0.046	6.07
	AFTER 13 WEEKS	1.61	0.017	147	0.668	0.309	0.023	5.15
96	AFTER 2 WEEKS	1.35	0.040	279	0.428	0.359	0.213	7.12
	AFTER 6 WEEKS	1.63	0.018	151	0.676	0.286	0.038	5.93
	AFTER 13 WEEKS	1.53	0.013	116	0.714	0.269	0.017	6.63

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 4 (2000 MG/KG/DAY)								
97	AFTER 2 WEEKS	1.28	0.037	291	0.451	0.392	0.156	7.07
	AFTER 6 WEEKS	1.60	0.018	165	0.641	0.325	0.035	8.71
	AFTER 13 WEEKS	1.71	0.014	138	0.668	0.303	0.029	6.50
98	AFTER 2 WEEKS	1.41	0.039	279	0.411	0.384	0.205	7.93
	AFTER 6 WEEKS	1.83	0.018	148	0.638	0.323	0.039	9.81
	AFTER 13 WEEKS	1.90	0.014	122	0.759	0.213	0.028	8.85
99	AFTER 2 WEEKS	1.34	0.040	292	0.451	0.383	0.166	5.18
	AFTER 6 WEEKS	1.61	0.018	152	0.658	0.299	0.043	5.47
	AFTER 13 WEEKS	1.71	0.018	168	0.705	0.272	0.023	6.18
100	AFTER 2 WEEKS	1.45	0.031	244	0.538	0.359	0.103	5.49
	AFTER 6 WEEKS	1.79	0.015	134	0.785	0.199	0.015	6.99
	AFTER 13 WEEKS	1.84	0.017	147	0.728	0.254	0.018	4.53
101	AFTER 2 WEEKS	1.49	0.037	268	0.485	0.383	0.132	5.74
	AFTER 6 WEEKS	1.88	0.014	114	0.686	0.280	0.034	5.51
	AFTER 13 WEEKS	1.96	0.019	168	0.676	0.297	0.027	5.52
102	AFTER 2 WEEKS	1.35	0.035	259	0.485	0.407	0.108	6.70
	AFTER 6 WEEKS	1.60	0.017	144	0.709	0.259	0.032	8.06
	AFTER 13 WEEKS	1.89	0.019	182	0.739	0.234	0.026	7.12
103	AFTER 2 WEEKS	1.39	0.041	299	0.436	0.382	0.183	5.36
	AFTER 6 WEEKS	1.78	0.020	167	0.635	0.331	0.034	7.75
	AFTER 13 WEEKS	1.79	0.021	192	0.620	0.337	0.043	8.94
104	AFTER 2 WEEKS	1.42	0.045	349	0.475	0.373	0.152	8.50
	AFTER 6 WEEKS	1.67	0.021	187	0.690	0.279	0.032	7.83
	AFTER 13 WEEKS	1.81	0.020	187	0.706	0.271	0.023	6.65
105	AFTER 2 WEEKS	1.51	0.042	310	0.594	0.339	0.067	8.69
	AFTER 6 WEEKS	1.89	0.017	141	0.715	0.239	0.046	7.57
	AFTER 13 WEEKS	1.96	0.020	175	0.764	0.211	0.024	7.99
106	AFTER 2 WEEKS	1.45	0.044	316	0.501	0.378	0.120	7.85
	AFTER 6 WEEKS	1.73	0.015	135	0.692	0.275	0.033	9.54
	AFTER 13 WEEKS	1.84	0.018	170	0.756	0.225	0.019	8.75
107	AFTER 2 WEEKS	1.37	0.044	337	0.485	0.374	0.140	6.37
	AFTER 6 WEEKS	1.59	0.017	142	0.676	0.289	0.035	5.11
	AFTER 13 WEEKS	1.69	0.019	171	0.742	0.233	0.025	5.40
108	AFTER 2 WEEKS	1.35	0.044	311	0.442	0.348	0.210	6.01
	AFTER 6 WEEKS	1.59	0.019	154	0.674	0.293	0.032	5.39
	AFTER 13 WEEKS	1.59	0.018	157	0.639	0.327	0.034	6.48
109	AFTER 2 WEEKS	1.44	0.046	349	0.438	0.366	0.196	5.60
	AFTER 6 WEEKS	1.67	0.017	151	0.664	0.300	0.036	6.80
	AFTER 13 WEEKS	1.63	0.013	118	0.769	0.213	0.018	6.28
	AFTER 17 WEEKS	1.78	0.015	139	0.717	0.246	0.036	6.34
110	AFTER 2 WEEKS	1.43	0.048	376	0.483	0.390	0.127	4.88
	AFTER 6 WEEKS	1.69	0.019	164	0.682	0.296	0.022	5.19
	AFTER 13 WEEKS	1.72	0.017	153	0.734	0.248	0.018	6.17
	AFTER 17 WEEKS	1.86	0.017	162	0.664	0.305	0.032	4.60
111	AFTER 2 WEEKS	1.30	0.042	321	0.506	0.398	0.096	4.50
	AFTER 6 WEEKS	1.53	0.016	144	0.700	0.270	0.030	4.37
	AFTER 13 WEEKS	1.46	0.017	158	0.675	0.293	0.032	5.76
	AFTER 17 WEEKS	1.68	0.016	151	0.688	0.279	0.033	4.89
112	AFTER 2 WEEKS	1.54	0.037	285	0.468	0.412	0.121	8.95
	AFTER 6 WEEKS	1.99	0.019	165	0.749	0.237	0.014	7.53
	AFTER 13 WEEKS	2.09	0.013	120	0.664	0.305	0.031	9.34

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 4 (2000 MG/KG/DAY)								
112	AFTER 17 WEEKS	1.95	0.012	111	0.717	0.270	0.013	6.68
113	AFTER 2 WEEKS	1.38	0.043	321	0.420	0.382	0.198	6.58
	AFTER 6 WEEKS	1.62	0.029	251	0.618	0.332	0.050	7.12
	AFTER 13 WEEKS	1.63	0.016	150	0.714	0.251	0.034	6.95
	AFTER 17 WEEKS	1.77	0.017	149	0.670	0.296	0.034	4.95
114	AFTER 2 WEEKS	1.33	0.042	309	0.504	0.381	0.115	4.17
	AFTER 6 WEEKS	1.63	0.016	140	0.739	0.219	0.042	5.15
	AFTER 13 WEEKS	1.68	0.017	158	0.763	0.221	0.016	7.34
	AFTER 17 WEEKS	1.81	0.015	147	0.755	0.214	0.031	6.46
115	AFTER 2 WEEKS	1.37	0.047	336	0.465	0.386	0.149	5.93
	AFTER 6 WEEKS	1.61	0.019	160	0.698	0.266	0.036	6.67
	AFTER 13 WEEKS	1.79	0.016	149	0.780	0.195	0.025	7.63
	AFTER 17 WEEKS	1.85	0.014	131	0.758	0.214	0.028	6.48
116	AFTER 2 WEEKS	1.43	0.045	356	0.471	0.401	0.128	8.09
	AFTER 6 WEEKS	1.57	0.019	172	0.760	0.222	0.018	9.56
	AFTER 13 WEEKS	1.85	0.022	210	0.756	0.221	0.024	8.63
	AFTER 17 WEEKS	1.81	0.019	174	0.733	0.234	0.033	5.96
117	AFTER 2 WEEKS	1.41	0.046	348	0.436	0.363	0.201	5.13
	AFTER 6 WEEKS	1.59	0.020	176	0.645	0.303	0.052	6.69
	AFTER 13 WEEKS	1.71	0.022	199	0.687	0.275	0.038	6.06
	AFTER 17 WEEKS	1.79	0.019	177	0.681	0.281	0.039	5.03
118	AFTER 2 WEEKS	1.40	0.046	347	0.490	0.396	0.114	4.72
	AFTER 6 WEEKS	1.47	0.027	228	0.614	0.343	0.043	4.34
	AFTER 13 WEEKS	1.68	0.025	219	0.685	0.275	0.040	6.07
	AFTER 17 WEEKS	1.67	0.014	128	0.743	0.234	0.023	4.43

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		DIFF.WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 1 (0 MG/KG/DAY)							
1	AFTER 2 WEEKS	0.094	0.013	0.004	0.863	0.017	0.009
	AFTER 6 WEEKS	0.159	0.014	0.002	0.798	0.015	0.012
	AFTER 13 WEEKS	0.213	0.020	0.005	0.736	0.020	0.005
2	AFTER 2 WEEKS	0.056	0.006	0.003	0.907	0.012	0.016
	AFTER 6 WEEKS	0.093	0.011	0.004	0.871	0.010	0.010
	AFTER 13 WEEKS	0.140	0.017	0.005	0.815	0.015	0.008
3	AFTER 2 WEEKS	0.097	0.008	0.004	0.864	0.015	0.012
	AFTER 6 WEEKS	0.164	0.015	0.002	0.790	0.019	0.010
	AFTER 13 WEEKS	0.212	0.023	0.006	0.719	0.033	0.006
4	AFTER 2 WEEKS	0.093	0.008	0.003	0.858	0.027	0.011
	AFTER 6 WEEKS	0.113	0.009	0.002	0.842	0.022	0.010
	AFTER 13 WEEKS	0.132	0.013	0.005	0.816	0.026	0.007
5	AFTER 2 WEEKS	0.086	0.007	0.003	0.875	0.019	0.011
	AFTER 6 WEEKS	0.151	0.009	0.004	0.794	0.026	0.017
	AFTER 13 WEEKS	0.160	0.014	0.004	0.782	0.033	0.007
6	AFTER 2 WEEKS	0.110	0.011	0.001	0.848	0.014	0.016
	AFTER 6 WEEKS	0.168	0.017	0.003	0.784	0.015	0.013
	AFTER 13 WEEKS	0.159	0.022	0.003	0.794	0.016	0.006
7	AFTER 2 WEEKS	0.139	0.008	0.004	0.828	0.014	0.008
	AFTER 6 WEEKS	0.221	0.018	0.003	0.727	0.019	0.012
	AFTER 13 WEEKS	0.210	0.018	0.008	0.732	0.023	0.008
8	AFTER 2 WEEKS	0.092	0.006	0.004	0.869	0.020	0.009
	AFTER 6 WEEKS	0.148	0.009	0.002	0.799	0.023	0.019
	AFTER 13 WEEKS	0.174	0.017	0.005	0.779	0.021	0.004
9	AFTER 2 WEEKS	0.100	0.004	0.002	0.877	0.010	0.008
	AFTER 6 WEEKS	0.133	0.010	0.004	0.833	0.008	0.013
	AFTER 13 WEEKS	0.177	0.008	0.006	0.786	0.017	0.006
10	AFTER 2 WEEKS	0.131	0.005	0.002	0.835	0.018	0.009
	AFTER 6 WEEKS	0.221	0.011	0.002	0.743	0.016	0.007
	AFTER 13 WEEKS	0.204	0.016	0.004	0.755	0.017	0.004
11	AFTER 2 WEEKS	0.097	0.009	0.001	0.869	0.014	0.010
	AFTER 6 WEEKS	0.166	0.017	0.003	0.778	0.016	0.020
	AFTER 13 WEEKS	0.215	0.034	0.002	0.728	0.016	0.005
12	AFTER 2 WEEKS	0.103	0.007	0.002	0.857	0.018	0.012
	AFTER 6 WEEKS	0.160	0.014	0.004	0.787	0.020	0.015
	AFTER 13 WEEKS	0.152	0.018	0.003	0.792	0.025	0.010
13	AFTER 2 WEEKS	0.104	0.013	0.003	0.857	0.012	0.011
	AFTER 6 WEEKS	0.131	0.011	0.002	0.830	0.013	0.013
	AFTER 13 WEEKS	0.154	0.016	0.003	0.786	0.025	0.016
14	AFTER 2 WEEKS	0.091	0.006	0.001	0.875	0.018	0.009
	AFTER 6 WEEKS	0.169	0.015	0.003	0.780	0.024	0.009
	AFTER 13 WEEKS	0.134	0.023	0.003	0.813	0.021	0.006
15	AFTER 2 WEEKS	0.122	0.027	0.002	0.815	0.022	0.013
	AFTER 6 WEEKS	0.157	0.016	0.003	0.794	0.019	0.011
	AFTER 13 WEEKS	0.195	0.024	0.005	0.725	0.032	0.019
16	AFTER 2 WEEKS	0.162	0.013	0.003	0.792	0.018	0.011
	AFTER 6 WEEKS	0.112	0.010	0.003	0.840	0.020	0.015
	AFTER 13 WEEKS	0.157	0.019	0.004	0.789	0.026	0.006
17	AFTER 2 WEEKS	0.093	0.008	0.004	0.867	0.014	0.014
	AFTER 6 WEEKS	0.136	0.014	0.003	0.825	0.015	0.008

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		DIFF.WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 1 (0 MG/KG/DAY)							
17	AFTER 13 WEEKS	0.174	0.017	0.004	0.784	0.017	0.006
18	AFTER 2 WEEKS	0.073	0.008	0.005	0.892	0.009	0.014
	AFTER 6 WEEKS	0.103	0.012	0.004	0.855	0.016	0.011
	AFTER 13 WEEKS	0.094	0.009	0.006	0.864	0.015	0.011
19	AFTER 2 WEEKS	0.081	0.005	0.004	0.879	0.014	0.016
	AFTER 6 WEEKS	0.146	0.015	0.002	0.810	0.015	0.013
	AFTER 13 WEEKS	0.168	0.011	0.005	0.796	0.015	0.006
20	AFTER 2 WEEKS	0.092	0.005	0.006	0.864	0.023	0.010
	AFTER 6 WEEKS	0.161	0.014	0.003	0.791	0.022	0.008
	AFTER 13 WEEKS	0.202	0.021	0.007	0.724	0.032	0.013
21	AFTER 2 WEEKS	0.103	0.008	0.005	0.853	0.017	0.015
	AFTER 6 WEEKS	0.179	0.015	0.005	0.774	0.018	0.009
	AFTER 13 WEEKS	0.176	0.022	0.005	0.768	0.023	0.005
	AFTER 17 WEEKS	0.162	0.023	0.007	0.786	0.015	0.007
22	AFTER 2 WEEKS	0.115	0.010	0.004	0.847	0.013	0.011
	AFTER 6 WEEKS	0.172	0.017	0.002	0.784	0.016	0.008
	AFTER 13 WEEKS	0.206	0.022	0.005	0.745	0.019	0.004
	AFTER 17 WEEKS	0.188	0.025	0.008	0.750	0.020	0.009
23	AFTER 2 WEEKS	0.084	0.005	0.003	0.878	0.013	0.017
	AFTER 6 WEEKS	0.126	0.011	0.002	0.825	0.019	0.017
	AFTER 13 WEEKS	0.171	0.010	0.004	0.785	0.025	0.006
	AFTER 17 WEEKS	0.163	0.010	0.007	0.788	0.022	0.011
24	AFTER 2 WEEKS	0.136	0.009	0.005	0.819	0.018	0.013
	AFTER 6 WEEKS	0.174	0.013	0.003	0.786	0.017	0.007
	AFTER 13 WEEKS	0.139	0.023	0.006	0.820	0.010	0.002
	AFTER 17 WEEKS	0.173	0.015	0.005	0.776	0.025	0.007
25	AFTER 2 WEEKS	0.198	0.020	0.004	0.757	0.011	0.010
	AFTER 6 WEEKS	0.191	0.019	0.002	0.770	0.012	0.006
	AFTER 13 WEEKS	0.168	0.015	0.005	0.783	0.020	0.008
	AFTER 17 WEEKS	0.159	0.015	0.005	0.790	0.019	0.011
26	AFTER 2 WEEKS	0.065	0.008	0.003	0.900	0.011	0.013
	AFTER 6 WEEKS	0.105	0.013	0.004	0.857	0.011	0.010
	AFTER 13 WEEKS	0.156	0.029	0.003	0.787	0.019	0.006
	AFTER 17 WEEKS	0.171	0.042	0.006	0.762	0.016	0.004
27	AFTER 2 WEEKS	0.159	0.013	0.005	0.782	0.031	0.009
	AFTER 6 WEEKS	0.205	0.024	0.005	0.715	0.029	0.022
	AFTER 13 WEEKS	0.209	0.020	0.006	0.714	0.039	0.011
	AFTER 17 WEEKS	0.281	0.021	0.010	0.654	0.027	0.007
28	AFTER 2 WEEKS	0.105	0.009	0.003	0.862	0.013	0.008
	AFTER 6 WEEKS	0.160	0.016	0.003	0.783	0.019	0.019
	AFTER 13 WEEKS	0.182	0.021	0.004	0.762	0.025	0.006
	AFTER 17 WEEKS	0.180	0.023	0.006	0.768	0.016	0.007
29	AFTER 2 WEEKS	0.167	0.010	0.005	0.785	0.019	0.014
	AFTER 6 WEEKS	0.185	0.013	0.002	0.768	0.022	0.010
	AFTER 13 WEEKS	0.216	0.017	0.006	0.724	0.031	0.007
	AFTER 17 WEEKS	0.241	0.023	0.006	0.698	0.023	0.011
30	AFTER 2 WEEKS	0.121	0.005	0.004	0.840	0.016	0.013
	AFTER 6 WEEKS	0.142	0.013	0.003	0.814	0.014	0.013
	AFTER 13 WEEKS	0.184	0.013	0.004	0.772	0.021	0.005
	AFTER 17 WEEKS	0.182	0.011	0.008	0.776	0.018	0.007

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY

MALES

ANIMAL NUMBER	DIFF. WBC COUNT (REL)					
	NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 2 (500 MG/KG/DAY)						
37	AFTER 2 WEEKS	0.088	0.008	0.003	0.875	0.011
	AFTER 6 WEEKS	0.120	0.011	0.002	0.839	0.016
	AFTER 13 WEEKS	0.131	0.016	0.004	0.827	0.016
38	AFTER 2 WEEKS	0.210	0.034	0.003	0.727	0.013
	AFTER 6 WEEKS	0.136	0.009	0.003	0.815	0.021
	AFTER 13 WEEKS	0.229	0.016	0.005	0.697	0.035
39	AFTER 2 WEEKS	0.122	0.004	0.003	0.846	0.013
	AFTER 6 WEEKS	0.171	0.009	0.004	0.777	0.019
	AFTER 13 WEEKS	0.185	0.012	0.005	0.775	0.017
40	AFTER 2 WEEKS	0.093	0.009	0.003	0.871	0.013
	AFTER 6 WEEKS	0.105	0.014	0.003	0.837	0.020
	AFTER 13 WEEKS	0.127	0.016	0.004	0.825	0.025
41	AFTER 2 WEEKS	0.130	0.006	0.003	0.836	0.019
	AFTER 6 WEEKS	0.136	0.011	0.003	0.819	0.019
	AFTER 13 WEEKS	0.158	0.016	0.007	0.791	0.022
42	AFTER 2 WEEKS	0.093	0.006	0.004	0.872	0.017
	AFTER 6 WEEKS	0.118	0.008	0.003	0.840	0.016
	AFTER 13 WEEKS	0.129	0.018	0.006	0.825	0.015
43	AFTER 2 WEEKS	0.149	0.014	0.003	0.807	0.017
	AFTER 6 WEEKS	0.206	0.016	0.001	0.733	0.031
	AFTER 13 WEEKS	0.223	0.023	0.004	0.718	0.028
44	AFTER 2 WEEKS	0.083	0.009	0.002	0.878	0.013
	AFTER 6 WEEKS	---	---	---	---	---
	AFTER 13 WEEKS	---	---	---	---	---
45	AFTER 2 WEEKS	0.237	0.045	0.002	0.697	0.010
	AFTER 6 WEEKS	0.207	0.013	0.005	0.750	0.015
	AFTER 13 WEEKS	0.175	0.021	0.007	0.765	0.024
46	AFTER 2 WEEKS	0.098	0.006	0.003	0.859	0.019
	AFTER 6 WEEKS	0.157	0.014	0.003	0.786	0.023
	AFTER 13 WEEKS	0.164	0.014	0.003	0.793	0.018
47	AFTER 2 WEEKS	0.106	0.008	0.002	0.854	0.018
	AFTER 6 WEEKS	0.195	0.013	0.002	0.730	0.032
	AFTER 13 WEEKS	0.203	0.016	0.005	0.739	0.033
48	AFTER 2 WEEKS	0.096	0.006	0.003	0.871	0.013
	AFTER 6 WEEKS	0.140	0.012	0.003	0.819	0.015
	AFTER 13 WEEKS	0.150	0.021	0.004	0.785	0.027
49	AFTER 2 WEEKS	0.164	0.014	0.003	0.791	0.016
	AFTER 6 WEEKS	0.149	0.015	0.004	0.796	0.026
	AFTER 13 WEEKS	0.220	0.016	0.005	0.729	0.022
50	AFTER 2 WEEKS	0.074	0.004	0.002	0.893	0.011
	AFTER 6 WEEKS	0.087	0.008	0.004	0.872	0.016
	AFTER 13 WEEKS	0.115	0.014	0.005	0.838	0.021
51	AFTER 2 WEEKS	0.079	0.004	0.003	0.884	0.015
	AFTER 6 WEEKS	0.103	0.007	0.003	0.842	0.022
	AFTER 13 WEEKS	0.115	0.012	0.004	0.827	0.027
52	AFTER 2 WEEKS	0.101	0.013	0.003	0.857	0.017
	AFTER 6 WEEKS	0.156	0.016	0.002	0.778	0.029
	AFTER 13 WEEKS	0.225	0.015	0.003	0.717	0.032
53	AFTER 2 WEEKS	0.095	0.011	0.004	0.860	0.016
	AFTER 6 WEEKS	0.185	0.021	0.002	0.752	0.021

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
MALES

		DIFF.WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 2 (500 MG/KG/DAY)							
53	AFTER 13 WEEKS	0.241	0.025	0.005	0.704	0.021	0.004
54	AFTER 2 WEEKS	0.090	0.006	0.003	0.859	0.025	0.017
	AFTER 6 WEEKS	0.133	0.010	0.003	0.824	0.019	0.011
	AFTER 13 WEEKS	0.155	0.013	0.005	0.791	0.028	0.007
55	AFTER 2 WEEKS	0.068	0.009	0.004	0.885	0.020	0.014
	AFTER 6 WEEKS	0.102	0.013	0.003	0.856	0.016	0.010
	AFTER 13 WEEKS	0.155	0.021	0.006	0.781	0.027	0.012
56	AFTER 2 WEEKS	0.113	0.014	0.003	0.837	0.019	0.015
	AFTER 6 WEEKS	0.148	0.014	0.003	0.795	0.028	0.013
	AFTER 13 WEEKS	0.175	0.017	0.005	0.767	0.030	0.006
GROUP 3 (1000 MG/KG/DAY)							
63	AFTER 2 WEEKS	0.082	0.006	0.002	0.887	0.012	0.011
	AFTER 6 WEEKS	0.128	0.007	0.003	0.842	0.013	0.008
	AFTER 13 WEEKS	0.120	0.010	0.005	0.843	0.013	0.009
64	AFTER 2 WEEKS	0.152	0.006	0.003	0.806	0.022	0.011
	AFTER 6 WEEKS	0.139	0.008	0.003	0.816	0.022	0.011
	AFTER 13 WEEKS	0.220	0.014	0.005	0.734	0.021	0.007
65	AFTER 2 WEEKS	0.079	0.006	0.003	0.887	0.015	0.009
	AFTER 6 WEEKS	0.125	0.012	0.002	0.813	0.028	0.020
	AFTER 13 WEEKS	0.129	0.012	0.003	0.827	0.022	0.008
66	AFTER 2 WEEKS	0.114	0.008	0.004	0.850	0.016	0.009
	AFTER 6 WEEKS	0.172	0.014	0.003	0.771	0.024	0.015
	AFTER 13 WEEKS	0.203	0.020	0.006	0.746	0.022	0.004
67	AFTER 2 WEEKS	0.145	0.010	0.003	0.816	0.016	0.010
	AFTER 6 WEEKS	0.220	0.015	0.003	0.730	0.018	0.012
	AFTER 13 WEEKS	0.239	0.024	0.007	0.702	0.020	0.008
68	AFTER 2 WEEKS	0.071	0.007	0.005	0.891	0.011	0.015
	AFTER 6 WEEKS	0.135	0.015	0.003	0.821	0.014	0.011
	AFTER 13 WEEKS	0.148	0.014	0.007	0.804	0.016	0.011
69	AFTER 2 WEEKS	0.091	0.005	0.002	0.859	0.027	0.015
	AFTER 6 WEEKS	0.167	0.007	0.003	0.785	0.022	0.016
	AFTER 13 WEEKS	0.169	0.009	0.004	0.789	0.020	0.009
70	AFTER 2 WEEKS	0.051	0.005	0.004	0.914	0.013	0.012
	AFTER 6 WEEKS	0.121	0.021	0.002	0.808	0.025	0.022
	AFTER 13 WEEKS	0.088	0.016	0.005	0.862	0.016	0.013
71	AFTER 2 WEEKS	0.099	0.011	0.003	0.850	0.021	0.015
	AFTER 6 WEEKS	0.164	0.013	0.003	0.775	0.031	0.013
	AFTER 13 WEEKS	0.186	0.025	0.005	0.744	0.031	0.008
72	AFTER 2 WEEKS	0.094	0.010	0.005	0.870	0.012	0.009
	AFTER 6 WEEKS	0.100	0.011	0.002	0.861	0.015	0.010
	AFTER 13 WEEKS	0.177	0.016	0.008	0.768	0.026	0.005
73	AFTER 2 WEEKS	0.079	0.007	0.005	0.885	0.014	0.011
	AFTER 6 WEEKS	0.142	0.009	0.002	0.821	0.016	0.010
	AFTER 13 WEEKS	0.148	0.009	0.007	0.812	0.018	0.006
74	AFTER 2 WEEKS	0.123	0.007	0.002	0.833	0.024	0.011
	AFTER 6 WEEKS	0.152	0.009	0.002	0.801	0.023	0.013
	AFTER 13 WEEKS	0.145	0.012	0.004	0.794	0.036	0.009

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		DIFF.WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 3 (1000 MG/KG/DAY)							
75	AFTER 2 WEEKS	0.105	0.011	0.005	0.846	0.019	0.014
	AFTER 6 WEEKS	0.161	0.017	0.003	0.791	0.019	0.009
	AFTER 13 WEEKS	0.140	0.020	0.004	0.808	0.019	0.009
76	AFTER 2 WEEKS	0.107	0.009	0.003	0.856	0.016	0.009
	AFTER 6 WEEKS	0.175	0.012	0.004	0.778	0.019	0.011
	AFTER 13 WEEKS	0.193	0.018	0.006	0.746	0.030	0.007
77	AFTER 2 WEEKS	0.090	0.006	0.003	0.870	0.019	0.012
	AFTER 6 WEEKS	0.141	0.005	0.002	0.825	0.017	0.009
	AFTER 13 WEEKS	0.159	0.011	0.004	0.772	0.034	0.019
78	AFTER 2 WEEKS	0.100	0.005	0.003	0.866	0.012	0.014
	AFTER 6 WEEKS	0.230	0.012	0.003	0.732	0.012	0.011
	AFTER 13 WEEKS	0.212	0.014	0.004	0.744	0.022	0.004
79	AFTER 2 WEEKS	0.067	0.007	0.003	0.889	0.018	0.016
	AFTER 6 WEEKS	0.156	0.008	0.003	0.794	0.025	0.013
	AFTER 13 WEEKS	0.130	0.015	0.006	0.823	0.023	0.004
80	AFTER 2 WEEKS	---	---	---	---	---	---
	AFTER 6 WEEKS	0.123	0.008	0.003	0.840	0.015	0.010
	AFTER 13 WEEKS	0.185	0.012	0.004	0.774	0.018	0.006
81	AFTER 2 WEEKS	0.092	0.010	0.003	0.862	0.015	0.018
	AFTER 6 WEEKS	0.125	0.018	0.003	0.819	0.020	0.014
	AFTER 13 WEEKS	0.151	0.021	0.005	0.800	0.020	0.004
82	AFTER 2 WEEKS	0.089	0.010	0.005	0.872	0.011	0.014
	AFTER 6 WEEKS	0.152	0.012	0.004	0.799	0.017	0.016
	AFTER 13 WEEKS	0.165	0.020	0.005	0.780	0.016	0.014
GROUP 4 (2000 MG/KG/DAY)							
89	AFTER 2 WEEKS	0.070	0.003	0.002	0.905	0.011	0.009
	AFTER 6 WEEKS	0.097	0.007	0.004	0.865	0.013	0.014
	AFTER 13 WEEKS	0.158	0.013	0.004	0.786	0.029	0.009
90	AFTER 2 WEEKS	0.125	0.012	0.003	0.826	0.018	0.016
	AFTER 6 WEEKS	0.154	0.009	0.005	0.793	0.029	0.010
	AFTER 13 WEEKS	0.134	0.015	0.005	0.824	0.016	0.006
91	AFTER 2 WEEKS	0.063	0.007	0.004	0.896	0.016	0.015
	AFTER 6 WEEKS	0.126	0.010	0.003	0.832	0.018	0.012
	AFTER 13 WEEKS	0.134	0.014	0.003	0.817	0.024	0.008
92	AFTER 2 WEEKS	0.111	0.015	0.003	0.844	0.016	0.012
	AFTER 6 WEEKS	0.136	0.016	0.003	0.820	0.014	0.011
	AFTER 13 WEEKS	0.180	0.015	0.003	0.780	0.014	0.008
93	AFTER 2 WEEKS	0.107	0.008	0.004	0.849	0.017	0.015
	AFTER 6 WEEKS	0.203	0.013	0.003	0.750	0.021	0.010
	AFTER 13 WEEKS	0.216	0.012	0.005	0.729	0.034	0.004
94	AFTER 2 WEEKS	0.121	0.013	0.005	0.829	0.019	0.014
	AFTER 6 WEEKS	0.133	0.014	0.004	0.812	0.020	0.016
	AFTER 13 WEEKS	0.147	0.020	0.006	0.801	0.019	0.007
95	AFTER 2 WEEKS	0.127	0.007	0.003	0.802	0.039	0.023
	AFTER 6 WEEKS	0.147	0.005	0.002	0.810	0.024	0.011
	AFTER 13 WEEKS	0.168	0.012	0.003	0.784	0.027	0.007
96	AFTER 2 WEEKS	0.071	0.011	0.003	0.885	0.018	0.011
	AFTER 6 WEEKS	0.152	0.012	0.002	0.805	0.018	0.011
	AFTER 13 WEEKS	0.165	0.014	0.007	0.786	0.021	0.006

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		DIFF. WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 4 (2000 MG/KG/DAY)							
97	AFTER 2 WEEKS	0.176	0.009	0.006	0.773	0.024	0.012
	AFTER 6 WEEKS	0.185	0.013	0.005	0.761	0.023	0.015
	AFTER 13 WEEKS	0.152	0.018	0.005	0.800	0.019	0.006
98	AFTER 2 WEEKS	0.187	0.012	0.004	0.765	0.023	0.009
	AFTER 6 WEEKS	0.196	0.010	0.002	0.755	0.026	0.011
	AFTER 13 WEEKS	0.199	0.013	0.007	0.750	0.022	0.009
99	AFTER 2 WEEKS	0.133	0.018	0.004	0.819	0.018	0.009
	AFTER 6 WEEKS	0.183	0.022	0.004	0.748	0.027	0.017
	AFTER 13 WEEKS	0.185	0.018	0.004	0.753	0.033	0.006
100	AFTER 2 WEEKS	0.126	0.022	0.002	0.829	0.014	0.006
	AFTER 6 WEEKS	0.143	0.013	0.003	0.816	0.017	0.007
	AFTER 13 WEEKS	0.181	0.021	0.005	0.762	0.025	0.006
101	AFTER 2 WEEKS	0.084	0.004	0.003	0.877	0.018	0.014
	AFTER 6 WEEKS	0.125	0.009	0.003	0.828	0.021	0.014
	AFTER 13 WEEKS	0.116	0.011	0.008	0.835	0.023	0.007
102	AFTER 2 WEEKS	0.097	0.007	0.004	0.867	0.013	0.013
	AFTER 6 WEEKS	0.145	0.012	0.002	0.805	0.021	0.015
	AFTER 13 WEEKS	0.137	0.012	0.007	0.815	0.021	0.008
103	AFTER 2 WEEKS	0.138	0.009	0.004	0.824	0.016	0.009
	AFTER 6 WEEKS	0.157	0.008	0.002	0.807	0.018	0.009
	AFTER 13 WEEKS	0.166	0.014	0.005	0.785	0.021	0.010
104	AFTER 2 WEEKS	0.140	0.009	0.003	0.812	0.022	0.013
	AFTER 6 WEEKS	0.174	0.014	0.002	0.768	0.019	0.023
	AFTER 13 WEEKS	0.223	0.018	0.006	0.726	0.022	0.005
105	AFTER 2 WEEKS	0.098	0.005	0.003	0.869	0.014	0.011
	AFTER 6 WEEKS	0.115	0.007	0.002	0.848	0.015	0.012
	AFTER 13 WEEKS	0.138	0.014	0.004	0.818	0.016	0.010
106	AFTER 2 WEEKS	0.102	0.009	0.004	0.860	0.017	0.008
	AFTER 6 WEEKS	0.112	0.015	0.003	0.839	0.017	0.013
	AFTER 13 WEEKS	0.126	0.015	0.005	0.832	0.013	0.008
107	AFTER 2 WEEKS	0.139	0.010	0.004	0.817	0.021	0.008
	AFTER 6 WEEKS	0.186	0.015	0.003	0.765	0.022	0.010
	AFTER 13 WEEKS	0.201	0.011	0.005	0.757	0.021	0.005
108	AFTER 2 WEEKS	0.099	0.009	0.002	0.858	0.023	0.010
	AFTER 6 WEEKS	0.168	0.019	0.002	0.779	0.019	0.014
	AFTER 13 WEEKS	0.186	0.017	0.005	0.738	0.041	0.013
109	AFTER 2 WEEKS	0.081	0.007	0.003	0.887	0.014	0.008
	AFTER 6 WEEKS	0.122	0.009	0.003	0.839	0.017	0.011
	AFTER 13 WEEKS	0.117	0.017	0.007	0.836	0.016	0.008
	AFTER 17 WEEKS	0.149	0.015	0.005	0.812	0.013	0.006
110	AFTER 2 WEEKS	0.108	0.013	0.005	0.840	0.024	0.011
	AFTER 6 WEEKS	0.163	0.017	0.002	0.782	0.024	0.010
	AFTER 13 WEEKS	0.306	0.018	0.004	0.634	0.032	0.005
	AFTER 17 WEEKS	0.223	0.020	0.011	0.711	0.027	0.008
111	AFTER 2 WEEKS	0.206	0.029	0.005	0.727	0.026	0.009
	AFTER 6 WEEKS	0.175	0.023	0.003	0.770	0.021	0.009
	AFTER 13 WEEKS	0.156	0.033	0.004	0.786	0.018	0.003
	AFTER 17 WEEKS	0.198	0.025	0.005	0.749	0.019	0.004
112	AFTER 2 WEEKS	0.093	0.006	0.003	0.872	0.020	0.007
	AFTER 6 WEEKS	0.120	0.008	0.003	0.846	0.013	0.009
	AFTER 13 WEEKS	0.106	0.013	0.004	0.854	0.017	0.004

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		DIFF.WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 4 (2000 MG/KG/DAY)							
112	AFTER 17 WEEKS	0.151	0.021	0.007	0.793	0.020	0.008
113	AFTER 2 WEEKS	0.127	0.008	0.002	0.837	0.015	0.011
	AFTER 6 WEEKS	0.208	0.008	0.002	0.736	0.031	0.015
	AFTER 13 WEEKS	0.197	0.017	0.004	0.744	0.030	0.008
	AFTER 17 WEEKS	0.234	0.018	0.007	0.715	0.014	0.012
114	AFTER 2 WEEKS	0.093	0.012	0.007	0.863	0.013	0.012
	AFTER 6 WEEKS	0.160	0.015	0.002	0.793	0.017	0.013
	AFTER 13 WEEKS	0.162	0.011	0.008	0.777	0.035	0.005
	AFTER 17 WEEKS	0.254	0.013	0.010	0.691	0.022	0.009
115	AFTER 2 WEEKS	0.113	0.009	0.004	0.851	0.014	0.009
	AFTER 6 WEEKS	0.189	0.014	0.003	0.755	0.020	0.018
	AFTER 13 WEEKS	0.129	0.011	0.004	0.827	0.018	0.010
	AFTER 17 WEEKS	0.199	0.014	0.006	0.756	0.021	0.005
116	AFTER 2 WEEKS	0.085	0.008	0.003	0.870	0.021	0.013
	AFTER 6 WEEKS	0.124	0.012	0.003	0.817	0.019	0.024
	AFTER 13 WEEKS	0.206	0.018	0.004	0.749	0.016	0.006
	AFTER 17 WEEKS	0.176	0.020	0.007	0.776	0.013	0.008
117	AFTER 2 WEEKS	0.082	0.006	0.002	0.886	0.011	0.013
	AFTER 6 WEEKS	0.089	0.007	0.003	0.863	0.015	0.023
	AFTER 13 WEEKS	0.112	0.014	0.007	0.846	0.016	0.005
	AFTER 17 WEEKS	0.154	0.016	0.011	0.798	0.014	0.007
118	AFTER 2 WEEKS	0.086	0.009	0.004	0.876	0.012	0.014
	AFTER 6 WEEKS	0.126	0.012	0.004	0.838	0.012	0.007
	AFTER 13 WEEKS	0.121	0.009	0.004	0.832	0.020	0.014
	AFTER 17 WEEKS	0.141	0.014	0.008	0.813	0.015	0.008

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY

MALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 1 (0 MG/KG/DAY)								
1	AFTER 2 WEEKS	0.68	0.09	0.03	6.18	0.12	0.06	893
	AFTER 6 WEEKS	0.85	0.07	0.01	4.27	0.08	0.06	1007
	AFTER 13 WEEKS	1.27	0.12	0.03	4.41	0.12	0.03	873
2	AFTER 2 WEEKS	0.54	0.06	0.03	8.74	0.12	0.15	1156
	AFTER 6 WEEKS	0.90	0.11	0.04	8.45	0.10	0.10	1005
	AFTER 13 WEEKS	1.46	0.18	0.05	8.52	0.16	0.08	974
3	AFTER 2 WEEKS	0.70	0.06	0.03	6.24	0.11	0.09	1114
	AFTER 6 WEEKS	1.15	0.11	0.02	5.54	0.13	0.07	925
	AFTER 13 WEEKS	1.70	0.19	0.05	5.75	0.26	0.05	998
4	AFTER 2 WEEKS	0.54	0.05	0.02	4.98	0.16	0.06	1194
	AFTER 6 WEEKS	0.75	0.06	0.02	5.60	0.15	0.07	1037
	AFTER 13 WEEKS	1.17	0.12	0.05	7.24	0.23	0.06	1040
5	AFTER 2 WEEKS	0.56	0.05	0.02	5.66	0.12	0.07	1233
	AFTER 6 WEEKS	1.34	0.08	0.04	7.05	0.23	0.15	1170
	AFTER 13 WEEKS	1.21	0.10	0.03	5.89	0.25	0.05	1083
6	AFTER 2 WEEKS	0.73	0.07	0.01	5.61	0.09	0.11	966
	AFTER 6 WEEKS	1.20	0.12	0.02	5.61	0.11	0.09	919
	AFTER 13 WEEKS	1.14	0.16	0.02	5.71	0.12	0.04	786
7	AFTER 2 WEEKS	0.66	0.04	0.02	3.93	0.07	0.04	961
	AFTER 6 WEEKS	1.17	0.10	0.01	3.85	0.10	0.06	983
	AFTER 13 WEEKS	1.12	0.10	0.04	3.91	0.12	0.05	933
8	AFTER 2 WEEKS	0.60	0.04	0.03	5.70	0.13	0.06	1077
	AFTER 6 WEEKS	1.16	0.07	0.01	6.25	0.18	0.15	995
	AFTER 13 WEEKS	1.42	0.14	0.04	6.35	0.17	0.04	1007
9	AFTER 2 WEEKS	0.67	0.03	0.01	5.89	0.06	0.05	1158
	AFTER 6 WEEKS	1.51	0.12	0.05	9.47	0.09	0.14	1112
	AFTER 13 WEEKS	2.01	0.09	0.07	8.94	0.19	0.07	966
10	AFTER 2 WEEKS	0.99	0.04	0.02	6.32	0.14	0.06	1053
	AFTER 6 WEEKS	1.59	0.08	0.02	5.33	0.12	0.05	939
	AFTER 13 WEEKS	1.73	0.14	0.03	6.40	0.15	0.03	982
11	AFTER 2 WEEKS	0.64	0.06	0.01	5.69	0.09	0.06	1133
	AFTER 6 WEEKS	0.98	0.10	0.02	4.58	0.10	0.12	941
	AFTER 13 WEEKS	1.15	0.18	0.01	3.90	0.08	0.03	935
12	AFTER 2 WEEKS	0.60	0.04	0.01	4.95	0.10	0.07	1136
	AFTER 6 WEEKS	0.97	0.09	0.02	4.79	0.12	0.09	965
	AFTER 13 WEEKS	0.84	0.10	0.02	4.37	0.14	0.06	1076
13	AFTER 2 WEEKS	0.73	0.09	0.02	6.02	0.08	0.08	1060
	AFTER 6 WEEKS	1.31	0.11	0.02	8.29	0.13	0.13	1023
	AFTER 13 WEEKS	1.20	0.13	0.02	6.13	0.19	0.13	1062
14	AFTER 2 WEEKS	0.39	0.02	0.01	3.73	0.08	0.04	1024
	AFTER 6 WEEKS	0.70	0.06	0.01	3.25	0.10	0.04	832
	AFTER 13 WEEKS	0.76	0.13	0.02	4.64	0.12	0.03	946
15	AFTER 2 WEEKS	0.71	0.16	0.01	4.76	0.13	0.07	986
	AFTER 6 WEEKS	0.83	0.08	0.01	4.18	0.10	0.06	1039
	AFTER 13 WEEKS	1.25	0.15	0.04	4.67	0.21	0.12	1022
16	AFTER 2 WEEKS	0.88	0.07	0.02	4.27	0.10	0.06	977
	AFTER 6 WEEKS	0.67	0.06	0.02	5.00	0.12	0.09	990
	AFTER 13 WEEKS	0.83	0.10	0.02	4.19	0.14	0.03	959
17	AFTER 2 WEEKS	0.59	0.05	0.03	5.50	0.09	0.09	989
	AFTER 6 WEEKS	0.91	0.09	0.02	5.51	0.10	0.06	762

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**HEMATOLOGY**
MALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 1 (0 MG/KG/DAY)								
17	AFTER 13 WEEKS	1.08	0.10	0.02	4.87	0.10	0.03	850
18	AFTER 2 WEEKS	0.49	0.05	0.03	5.98	0.06	0.09	946
	AFTER 6 WEEKS	0.64	0.07	0.02	5.33	0.10	0.07	811
	AFTER 13 WEEKS	0.76	0.08	0.05	7.04	0.12	0.09	798
19	AFTER 2 WEEKS	0.61	0.04	0.03	6.62	0.11	0.12	1135
	AFTER 6 WEEKS	1.05	0.11	0.02	5.82	0.10	0.10	911
	AFTER 13 WEEKS	1.23	0.08	0.03	5.83	0.11	0.04	852
20	AFTER 2 WEEKS	0.69	0.04	0.04	6.51	0.17	0.07	987
	AFTER 6 WEEKS	1.07	0.09	0.02	5.23	0.15	0.05	785
	AFTER 13 WEEKS	1.19	0.12	0.04	4.26	0.19	0.08	746
21	AFTER 2 WEEKS	0.74	0.06	0.04	6.18	0.12	0.11	1224
	AFTER 6 WEEKS	1.01	0.09	0.03	4.39	0.10	0.05	1049
	AFTER 13 WEEKS	1.10	0.14	0.03	4.81	0.15	0.03	1038
	AFTER 17 WEEKS	1.16	0.17	0.05	5.64	0.11	0.05	1120
22	AFTER 2 WEEKS	0.72	0.07	0.02	5.34	0.08	0.07	1208
	AFTER 6 WEEKS	1.08	0.11	0.02	4.94	0.10	0.05	1036
	AFTER 13 WEEKS	1.46	0.15	0.03	5.29	0.13	0.03	1092
	AFTER 17 WEEKS	1.50	0.20	0.06	5.95	0.16	0.08	973
23	AFTER 2 WEEKS	0.53	0.03	0.02	5.54	0.09	0.11	1260
	AFTER 6 WEEKS	0.81	0.07	0.01	5.30	0.13	0.11	951
	AFTER 13 WEEKS	0.84	0.05	0.02	3.87	0.12	0.03	953
	AFTER 17 WEEKS	1.01	0.06	0.04	4.87	0.14	0.07	905
24	AFTER 2 WEEKS	0.89	0.06	0.04	5.38	0.12	0.08	1115
	AFTER 6 WEEKS	1.18	0.09	0.02	5.35	0.11	0.05	816
	AFTER 13 WEEKS	0.94	0.16	0.04	5.56	0.07	0.01	872
	AFTER 17 WEEKS	1.24	0.11	0.04	5.59	0.18	0.05	845
25	AFTER 2 WEEKS	1.06	0.11	0.02	4.05	0.06	0.05	1094
	AFTER 6 WEEKS	0.93	0.09	0.01	3.74	0.06	0.03	919
	AFTER 13 WEEKS	1.00	0.09	0.03	4.66	0.12	0.05	868
	AFTER 17 WEEKS	1.04	0.10	0.04	5.17	0.12	0.08	931
26	AFTER 2 WEEKS	0.64	0.08	0.03	8.75	0.11	0.12	1145
	AFTER 6 WEEKS	0.75	0.09	0.03	6.07	0.08	0.07	935
	AFTER 13 WEEKS	1.03	0.19	0.02	5.19	0.13	0.04	984
	AFTER 17 WEEKS	1.05	0.26	0.04	4.71	0.10	0.03	997
27	AFTER 2 WEEKS	0.99	0.08	0.03	4.86	0.19	0.06	951
	AFTER 6 WEEKS	1.25	0.15	0.03	4.38	0.18	0.13	855
	AFTER 13 WEEKS	1.32	0.13	0.04	4.51	0.25	0.07	868
	AFTER 17 WEEKS	1.64	0.13	0.06	3.81	0.16	0.04	905
28	AFTER 2 WEEKS	0.89	0.08	0.02	7.32	0.11	0.07	1168
	AFTER 6 WEEKS	1.52	0.15	0.03	7.46	0.18	0.18	1048
	AFTER 13 WEEKS	1.37	0.16	0.03	5.75	0.19	0.05	1032
	AFTER 17 WEEKS	1.39	0.18	0.05	5.95	0.13	0.05	990
29	AFTER 2 WEEKS	0.78	0.05	0.02	3.66	0.09	0.07	1198
	AFTER 6 WEEKS	1.12	0.08	0.01	4.63	0.13	0.06	863
	AFTER 13 WEEKS	1.17	0.09	0.03	3.92	0.17	0.04	896
	AFTER 17 WEEKS	1.40	0.13	0.04	4.07	0.14	0.06	820
30	AFTER 2 WEEKS	1.04	0.04	0.03	7.21	0.14	0.11	1161
	AFTER 6 WEEKS	1.18	0.11	0.02	6.74	0.12	0.11	915
	AFTER 13 WEEKS	1.61	0.12	0.04	6.76	0.18	0.05	890
	AFTER 17 WEEKS	1.63	0.10	0.07	6.93	0.16	0.06	928

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 2 (500 MG/KG/DAY)								
37	AFTER 2 WEEKS	0.60	0.06	0.02	5.95	0.07	0.11	1319
	AFTER 6 WEEKS	0.86	0.08	0.02	5.98	0.11	0.08	913
	AFTER 13 WEEKS	0.78	0.09	0.02	4.93	0.09	0.04	745
38	AFTER 2 WEEKS	1.53	0.25	0.02	5.28	0.09	0.09	844
	AFTER 6 WEEKS	1.06	0.07	0.03	6.36	0.16	0.12	971
	AFTER 13 WEEKS	1.55	0.11	0.03	4.71	0.24	0.12	739
39	AFTER 2 WEEKS	0.90	0.03	0.02	6.26	0.09	0.09	1331
	AFTER 6 WEEKS	1.32	0.07	0.03	6.00	0.14	0.16	1132
	AFTER 13 WEEKS	1.12	0.07	0.03	4.71	0.10	0.04	964
40	AFTER 2 WEEKS	0.49	0.05	0.01	4.56	0.07	0.06	1198
	AFTER 6 WEEKS	0.73	0.10	0.02	5.81	0.14	0.14	1126
	AFTER 13 WEEKS	0.67	0.08	0.02	4.40	0.13	0.02	964
41	AFTER 2 WEEKS	0.89	0.04	0.02	5.75	0.13	0.04	1457
	AFTER 6 WEEKS	1.07	0.09	0.02	6.45	0.15	0.10	1090
	AFTER 13 WEEKS	1.30	0.13	0.06	6.47	0.18	0.04	798
42	AFTER 2 WEEKS	0.79	0.05	0.03	7.40	0.14	0.07	1161
	AFTER 6 WEEKS	1.23	0.09	0.03	8.77	0.17	0.15	1038
	AFTER 13 WEEKS	1.06	0.14	0.05	6.73	0.13	0.06	922
43	AFTER 2 WEEKS	0.73	0.07	0.02	3.94	0.08	0.05	1162
	AFTER 6 WEEKS	1.25	0.10	0.00	4.44	0.19	0.08	907
	AFTER 13 WEEKS	1.34	0.14	0.02	4.32	0.17	0.03	836
44	AFTER 2 WEEKS	0.75	0.08	0.02	8.00	0.11	0.14	1209
	AFTER 6 WEEKS	---	---	---	---	---	---	---
	AFTER 13 WEEKS	---	---	---	---	---	---	---
45	AFTER 2 WEEKS	1.45	0.28	0.01	4.27	0.06	0.05	983
	AFTER 6 WEEKS	1.57	0.10	0.04	5.67	0.11	0.07	1026
	AFTER 13 WEEKS	1.24	0.15	0.05	5.39	0.17	0.06	1026
46	AFTER 2 WEEKS	0.65	0.04	0.02	5.65	0.12	0.10	1253
	AFTER 6 WEEKS	0.98	0.09	0.02	4.92	0.15	0.11	1059
	AFTER 13 WEEKS	1.04	0.09	0.02	5.01	0.12	0.04	873
47	AFTER 2 WEEKS	0.61	0.05	0.01	4.87	0.11	0.06	1268
	AFTER 6 WEEKS	1.26	0.08	0.01	4.73	0.21	0.18	1011
	AFTER 13 WEEKS	1.50	0.12	0.04	5.48	0.24	0.03	938
48	AFTER 2 WEEKS	0.58	0.03	0.02	5.20	0.08	0.06	1251
	AFTER 6 WEEKS	0.89	0.08	0.02	5.18	0.10	0.07	1148
	AFTER 13 WEEKS	0.91	0.13	0.02	4.74	0.17	0.07	1086
49	AFTER 2 WEEKS	0.96	0.08	0.02	4.64	0.09	0.07	414
	AFTER 6 WEEKS	0.99	0.10	0.03	5.29	0.17	0.07	997
	AFTER 13 WEEKS	1.20	0.09	0.03	4.00	0.12	0.04	918
50	AFTER 2 WEEKS	0.43	0.02	0.01	5.19	0.06	0.09	1323
	AFTER 6 WEEKS	0.66	0.06	0.03	6.64	0.12	0.11	1340
	AFTER 13 WEEKS	0.90	0.11	0.04	6.54	0.16	0.06	1229
51	AFTER 2 WEEKS	0.42	0.02	0.02	4.66	0.08	0.08	1394
	AFTER 6 WEEKS	0.87	0.06	0.03	7.12	0.18	0.20	1254
	AFTER 13 WEEKS	0.75	0.08	0.03	5.41	0.18	0.10	1293
52	AFTER 2 WEEKS	0.65	0.08	0.02	5.54	0.11	0.06	1117
	AFTER 6 WEEKS	1.24	0.13	0.02	6.19	0.23	0.15	1091
	AFTER 13 WEEKS	1.58	0.10	0.02	5.05	0.23	0.05	1157
53	AFTER 2 WEEKS	0.55	0.06	0.02	4.96	0.09	0.08	1271
	AFTER 6 WEEKS	1.11	0.13	0.01	4.53	0.13	0.12	1036

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY

MALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 2 (500 MG/KG/DAY)								
53	AFTER 13 WEEKS	1.23	0.13	0.03	3.60	0.11	0.02	1076
54	AFTER 2 WEEKS	0.54	0.03	0.02	5.12	0.15	0.10	1281
	AFTER 6 WEEKS	0.85	0.06	0.02	5.25	0.12	0.07	1113
	AFTER 13 WEEKS	0.93	0.08	0.03	4.75	0.17	0.04	1075
55	AFTER 2 WEEKS	0.50	0.07	0.03	6.50	0.15	0.10	1170
	AFTER 6 WEEKS	0.83	0.11	0.02	7.01	0.13	0.08	963
	AFTER 13 WEEKS	1.07	0.15	0.04	5.41	0.19	0.08	332
56	AFTER 2 WEEKS	0.54	0.07	0.01	4.01	0.09	0.07	1137
	AFTER 6 WEEKS	0.80	0.07	0.02	4.28	0.15	0.07	796
	AFTER 13 WEEKS	0.91	0.09	0.03	3.98	0.15	0.03	895
GROUP 3 (1000 MG/KG/DAY)								
63	AFTER 2 WEEKS	0.50	0.03	0.01	5.33	0.07	0.06	1650
	AFTER 6 WEEKS	0.88	0.05	0.02	5.77	0.09	0.05	1482
	AFTER 13 WEEKS	0.69	0.06	0.03	4.82	0.07	0.05	1192
64	AFTER 2 WEEKS	0.82	0.03	0.02	4.35	0.12	0.06	1130
	AFTER 6 WEEKS	0.78	0.05	0.02	4.55	0.12	0.06	946
	AFTER 13 WEEKS	1.29	0.08	0.03	4.32	0.12	0.04	843
65	AFTER 2 WEEKS	0.49	0.04	0.02	5.48	0.09	0.06	1038
	AFTER 6 WEEKS	0.76	0.07	0.01	4.93	0.17	0.12	954
	AFTER 13 WEEKS	0.59	0.05	0.01	3.77	0.10	0.04	845
66	AFTER 2 WEEKS	0.58	0.04	0.02	4.35	0.08	0.05	1000
	AFTER 6 WEEKS	0.84	0.07	0.02	3.75	0.12	0.08	1004
	AFTER 13 WEEKS	0.80	0.08	0.02	2.93	0.09	0.02	874
67	AFTER 2 WEEKS	0.57	0.04	0.01	3.24	0.07	0.04	1096
	AFTER 6 WEEKS	1.18	0.08	0.02	3.91	0.10	0.07	1187
	AFTER 13 WEEKS	1.16	0.12	0.03	3.40	0.10	0.04	1071
68	AFTER 2 WEEKS	0.48	0.04	0.03	5.99	0.07	0.10	1178
	AFTER 6 WEEKS	0.62	0.07	0.01	3.78	0.07	0.05	1071
	AFTER 13 WEEKS	0.77	0.07	0.04	4.20	0.08	0.06	880
69	AFTER 2 WEEKS	0.67	0.04	0.02	6.34	0.20	0.11	1099
	AFTER 6 WEEKS	1.01	0.04	0.02	4.75	0.13	0.10	961
	AFTER 13 WEEKS	0.86	0.04	0.02	3.99	0.10	0.05	955
70	AFTER 2 WEEKS	0.33	0.04	0.03	5.93	0.09	0.08	1169
	AFTER 6 WEEKS	0.71	0.12	0.01	4.74	0.14	0.13	877
	AFTER 13 WEEKS	0.56	0.10	0.03	5.51	0.11	0.08	825
71	AFTER 2 WEEKS	0.60	0.07	0.02	5.16	0.13	0.09	1138
	AFTER 6 WEEKS	0.82	0.06	0.02	3.87	0.16	0.06	997
	AFTER 13 WEEKS	0.93	0.13	0.02	3.72	0.16	0.04	972
72	AFTER 2 WEEKS	0.56	0.06	0.03	5.26	0.07	0.06	1078
	AFTER 6 WEEKS	0.74	0.08	0.02	6.37	0.11	0.08	907
	AFTER 13 WEEKS	1.17	0.11	0.05	5.06	0.17	0.03	979
73	AFTER 2 WEEKS	0.54	0.05	0.03	6.12	0.10	0.07	900
	AFTER 6 WEEKS	1.18	0.07	0.02	6.80	0.13	0.08	895
	AFTER 13 WEEKS	1.02	0.06	0.05	5.56	0.12	0.04	812
74	AFTER 2 WEEKS	0.86	0.05	0.01	5.85	0.17	0.08	1378
	AFTER 6 WEEKS	1.10	0.06	0.01	5.78	0.17	0.09	1077
	AFTER 13 WEEKS	1.03	0.09	0.03	5.64	0.26	0.06	1038

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**HEMATOLOGY**
MALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 3 (1000 MG/KG/DAY)								
75	AFTER 2 WEEKS	0.89	0.10	0.04	7.21	0.16	0.12	1100
	AFTER 6 WEEKS	1.27	0.14	0.02	6.24	0.15	0.07	989
	AFTER 13 WEEKS	1.14	0.16	0.03	6.55	0.15	0.07	980
76	AFTER 2 WEEKS	0.50	0.04	0.01	4.01	0.07	0.04	950
	AFTER 6 WEEKS	0.79	0.06	0.02	3.50	0.09	0.05	892
	AFTER 13 WEEKS	1.04	0.10	0.03	4.01	0.16	0.04	902
77	AFTER 2 WEEKS	0.57	0.04	0.02	5.48	0.12	0.08	1074
	AFTER 6 WEEKS	0.94	0.03	0.02	5.49	0.11	0.06	932
	AFTER 13 WEEKS	1.43	0.10	0.04	6.91	0.30	0.17	960
78	AFTER 2 WEEKS	0.60	0.03	0.02	5.22	0.07	0.08	1325
	AFTER 6 WEEKS	1.00	0.05	0.02	3.19	0.05	0.05	992
	AFTER 13 WEEKS	1.08	0.07	0.02	3.78	0.11	0.02	967
79	AFTER 2 WEEKS	0.45	0.05	0.02	6.00	0.12	0.11	1227
	AFTER 6 WEEKS	1.37	0.07	0.03	6.94	0.22	0.11	1209
	AFTER 13 WEEKS	0.86	0.10	0.04	5.43	0.15	0.03	1168
80	AFTER 2 WEEKS	---	---	---	---	---	---	---
	AFTER 6 WEEKS	0.91	0.06	0.02	6.20	0.11	0.07	1251
	AFTER 13 WEEKS	0.89	0.06	0.02	3.72	0.09	0.03	1335
81	AFTER 2 WEEKS	0.49	0.05	0.01	4.64	0.08	0.10	1221
	AFTER 6 WEEKS	0.90	0.13	0.02	5.89	0.14	0.10	916
	AFTER 13 WEEKS	0.76	0.11	0.02	4.05	0.10	0.02	939
82	AFTER 2 WEEKS	0.83	0.09	0.04	8.10	0.11	0.13	1014
	AFTER 6 WEEKS	1.30	0.10	0.03	6.79	0.14	0.14	1008
	AFTER 13 WEEKS	1.37	0.17	0.04	6.47	0.13	0.11	961
GROUP 4 (2000 MG/KG/DAY)								
89	AFTER 2 WEEKS	0.40	0.02	0.01	5.18	0.06	0.05	1133
	AFTER 6 WEEKS	0.63	0.04	0.02	5.62	0.09	0.09	947
	AFTER 13 WEEKS	0.87	0.07	0.02	4.33	0.16	0.05	855
90	AFTER 2 WEEKS	0.87	0.08	0.02	5.73	0.13	0.11	1631
	AFTER 6 WEEKS	1.30	0.08	0.04	6.72	0.24	0.09	1371
	AFTER 13 WEEKS	0.88	0.10	0.03	5.42	0.10	0.04	1229
91	AFTER 2 WEEKS	0.42	0.04	0.02	5.96	0.11	0.10	1064
	AFTER 6 WEEKS	0.92	0.07	0.02	6.08	0.13	0.09	913
	AFTER 13 WEEKS	0.86	0.09	0.02	5.22	0.15	0.05	674
92	AFTER 2 WEEKS	0.96	0.13	0.03	7.28	0.13	0.10	1020
	AFTER 6 WEEKS	1.20	0.14	0.02	7.21	0.12	0.10	1075
	AFTER 13 WEEKS	1.32	0.11	0.02	5.71	0.10	0.06	988
93	AFTER 2 WEEKS	0.81	0.06	0.03	6.45	0.13	0.11	1300
	AFTER 6 WEEKS	1.07	0.07	0.01	3.95	0.11	0.05	1084
	AFTER 13 WEEKS	1.57	0.09	0.03	5.31	0.25	0.03	1037
94	AFTER 2 WEEKS	0.73	0.08	0.03	5.05	0.11	0.09	1021
	AFTER 6 WEEKS	0.93	0.10	0.03	5.66	0.14	0.11	985
	AFTER 13 WEEKS	0.93	0.12	0.04	5.04	0.12	0.04	875
95	AFTER 2 WEEKS	0.85	0.05	0.02	5.40	0.26	0.15	1101
	AFTER 6 WEEKS	0.89	0.03	0.01	4.92	0.15	0.07	957
	AFTER 13 WEEKS	0.86	0.06	0.02	4.04	0.14	0.03	936
96	AFTER 2 WEEKS	0.50	0.08	0.02	6.31	0.13	0.08	1019
	AFTER 6 WEEKS	0.90	0.07	0.01	4.78	0.11	0.07	916
	AFTER 13 WEEKS	1.10	0.09	0.04	5.22	0.14	0.04	836

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 4 (2000 MG/KG/DAY)								
97	AFTER 2 WEEKS	1.24	0.07	0.04	5.46	0.17	0.08	1112
	AFTER 6 WEEKS	1.61	0.11	0.04	6.63	0.20	0.13	892
	AFTER 13 WEEKS	0.99	0.12	0.03	5.20	0.12	0.04	946
98	AFTER 2 WEEKS	1.49	0.10	0.03	6.06	0.18	0.07	1132
	AFTER 6 WEEKS	1.92	0.10	0.02	7.40	0.25	0.11	904
	AFTER 13 WEEKS	1.76	0.11	0.06	6.64	0.20	0.08	894
99	AFTER 2 WEEKS	0.69	0.09	0.02	4.24	0.09	0.04	1017
	AFTER 6 WEEKS	1.00	0.12	0.02	4.09	0.15	0.09	877
	AFTER 13 WEEKS	1.15	0.11	0.03	4.66	0.20	0.04	852
100	AFTER 2 WEEKS	0.69	0.12	0.01	4.55	0.08	0.03	1061
	AFTER 6 WEEKS	1.00	0.09	0.02	5.70	0.12	0.05	988
	AFTER 13 WEEKS	0.82	0.10	0.02	3.45	0.11	0.03	825
101	AFTER 2 WEEKS	0.48	0.02	0.02	5.03	0.10	0.08	1376
	AFTER 6 WEEKS	0.69	0.05	0.01	4.56	0.12	0.08	1077
	AFTER 13 WEEKS	0.64	0.06	0.04	4.61	0.13	0.04	982
102	AFTER 2 WEEKS	0.65	0.04	0.02	5.81	0.09	0.09	1185
	AFTER 6 WEEKS	1.17	0.10	0.02	6.48	0.17	0.12	959
	AFTER 13 WEEKS	0.97	0.09	0.05	5.80	0.15	0.06	1055
103	AFTER 2 WEEKS	0.74	0.05	0.02	4.41	0.09	0.05	1158
	AFTER 6 WEEKS	1.22	0.06	0.01	6.25	0.14	0.07	1053
	AFTER 13 WEEKS	1.48	0.12	0.04	7.01	0.19	0.09	989
104	AFTER 2 WEEKS	1.19	0.08	0.03	6.91	0.19	0.11	1367
	AFTER 6 WEEKS	1.36	0.11	0.02	6.01	0.15	0.18	1043
	AFTER 13 WEEKS	1.48	0.12	0.04	4.82	0.14	0.03	960
105	AFTER 2 WEEKS	0.85	0.05	0.03	7.55	0.12	0.09	561
	AFTER 6 WEEKS	0.87	0.05	0.02	6.42	0.11	0.09	1077
	AFTER 13 WEEKS	1.10	0.11	0.03	6.54	0.13	0.08	1089
106	AFTER 2 WEEKS	0.80	0.07	0.03	6.75	0.13	0.07	1233
	AFTER 6 WEEKS	1.07	0.15	0.03	8.00	0.17	0.12	1045
	AFTER 13 WEEKS	1.11	0.13	0.04	7.28	0.12	0.07	1115
107	AFTER 2 WEEKS	0.89	0.07	0.02	5.20	0.14	0.05	1012
	AFTER 6 WEEKS	0.95	0.08	0.01	3.91	0.11	0.05	799
	AFTER 13 WEEKS	1.09	0.06	0.03	4.09	0.11	0.03	959
108	AFTER 2 WEEKS	0.59	0.05	0.01	5.16	0.14	0.06	864
	AFTER 6 WEEKS	0.91	0.10	0.01	4.20	0.10	0.07	783
	AFTER 13 WEEKS	1.21	0.11	0.03	4.78	0.27	0.09	738
109	AFTER 2 WEEKS	0.45	0.04	0.02	4.96	0.08	0.04	1250
	AFTER 6 WEEKS	0.83	0.06	0.02	5.71	0.12	0.07	1135
	AFTER 13 WEEKS	0.73	0.11	0.04	5.25	0.10	0.05	985
	AFTER 17 WEEKS	0.95	0.10	0.03	5.14	0.08	0.04	1005
110	AFTER 2 WEEKS	0.52	0.06	0.02	4.10	0.12	0.05	1224
	AFTER 6 WEEKS	0.85	0.09	0.01	4.06	0.13	0.05	1093
	AFTER 13 WEEKS	1.89	0.11	0.03	3.91	0.20	0.03	934
	AFTER 17 WEEKS	1.02	0.09	0.05	3.27	0.12	0.04	924
111	AFTER 2 WEEKS	0.93	0.13	0.02	3.27	0.12	0.04	911
	AFTER 6 WEEKS	0.77	0.10	0.01	3.36	0.09	0.04	1110
	AFTER 13 WEEKS	0.90	0.19	0.03	4.53	0.10	0.02	960
	AFTER 17 WEEKS	0.97	0.12	0.03	3.66	0.10	0.02	947
112	AFTER 2 WEEKS	0.83	0.05	0.03	7.80	0.18	0.06	1108
	AFTER 6 WEEKS	0.91	0.06	0.02	6.37	0.10	0.07	1155
	AFTER 13 WEEKS	0.99	0.12	0.04	7.98	0.16	0.04	1097

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 4 (2000 MG/KG/DAY)								
112	AFTER 17 WEEKS	1.01	0.14	0.05	5.30	0.13	0.05	1100
113	AFTER 2 WEEKS	0.83	0.05	0.02	5.51	0.10	0.07	1133
	AFTER 6 WEEKS	1.48	0.06	0.02	5.24	0.22	0.11	1146
	AFTER 13 WEEKS	1.37	0.12	0.03	5.18	0.21	0.05	1059
	AFTER 17 WEEKS	1.16	0.09	0.03	3.54	0.07	0.06	1043
114	AFTER 2 WEEKS	0.39	0.05	0.03	3.60	0.05	0.05	1172
	AFTER 6 WEEKS	0.83	0.08	0.01	4.09	0.09	0.07	941
	AFTER 13 WEEKS	1.19	0.08	0.06	5.71	0.26	0.04	888
	AFTER 17 WEEKS	1.64	0.09	0.06	4.47	0.14	0.06	906
115	AFTER 2 WEEKS	0.67	0.05	0.03	5.04	0.08	0.06	1449
	AFTER 6 WEEKS	1.26	0.10	0.02	5.04	0.14	0.12	1262
	AFTER 13 WEEKS	0.99	0.09	0.03	6.31	0.14	0.08	1128
	AFTER 17 WEEKS	1.29	0.09	0.04	4.90	0.14	0.03	1182
116	AFTER 2 WEEKS	0.69	0.07	0.03	7.04	0.17	0.10	972
	AFTER 6 WEEKS	1.19	0.12	0.03	7.82	0.18	0.23	858
	AFTER 13 WEEKS	1.78	0.16	0.04	6.47	0.14	0.05	865
	AFTER 17 WEEKS	1.05	0.12	0.04	4.63	0.08	0.05	840
117	AFTER 2 WEEKS	0.42	0.03	0.01	4.54	0.05	0.07	1293
	AFTER 6 WEEKS	0.60	0.05	0.02	5.78	0.10	0.15	1065
	AFTER 13 WEEKS	0.68	0.09	0.04	5.12	0.10	0.03	1055
	AFTER 17 WEEKS	0.78	0.08	0.06	4.02	0.07	0.03	1018
118	AFTER 2 WEEKS	0.41	0.04	0.02	4.13	0.06	0.06	1346
	AFTER 6 WEEKS	0.55	0.05	0.02	3.64	0.05	0.03	1069
	AFTER 13 WEEKS	0.73	0.05	0.03	5.05	0.12	0.09	1077
	AFTER 17 WEEKS	0.62	0.06	0.04	3.60	0.07	0.04	935

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

ANIMAL NUMBER		COAGULATION			
		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 1 (0 MG/KG/DAY)					
1	AFTER 2 WEEKS	0.0080	0.000	0.97	24.9
	AFTER 6 WEEKS	0.0120	0.000	0.78	24.0
	AFTER 13 WEEKS	0.0100	0.000	0.80	24.4
2	AFTER 2 WEEKS	0.0100	0.000	0.82	23.8
	AFTER 6 WEEKS	0.0120	0.000	0.78	24.2
	AFTER 13 WEEKS	0.0100	0.000	0.76	25.5
3	AFTER 2 WEEKS	0.0100	0.000	0.84	24.4
	AFTER 6 WEEKS	0.0110	0.000	0.76	27.0
	AFTER 13 WEEKS	0.0080	0.000	0.86	18.7
4	AFTER 2 WEEKS	0.0100	0.000	0.84	23.9
	AFTER 6 WEEKS	0.0110	0.000	0.87	21.0
	AFTER 13 WEEKS	0.0110	0.000	0.82	21.7
5	AFTER 2 WEEKS	0.0070	0.000	0.97	22.7
	AFTER 6 WEEKS	0.0100	0.000	0.87	21.9
	AFTER 13 WEEKS	0.0100	0.000	0.94	21.5
6	AFTER 2 WEEKS	0.0090	0.000	0.80	23.4
	AFTER 6 WEEKS	0.0110	0.000	0.68	29.7
	AFTER 13 WEEKS	0.0090	0.000	0.76	26.7
7	AFTER 2 WEEKS	0.0090	0.000	0.82	26.3
	AFTER 6 WEEKS	0.0100	0.000	0.74	25.7
	AFTER 13 WEEKS	0.0070	0.000	0.76	25.4
8	AFTER 2 WEEKS	0.0090	0.000	0.93	21.1
	AFTER 6 WEEKS	0.0110	0.000	0.86	21.2
	AFTER 13 WEEKS	0.0090	0.000	0.81	21.1
9	AFTER 2 WEEKS	0.0080	0.000	0.99	21.0
	AFTER 6 WEEKS	0.0110	0.000	0.76	24.3
	AFTER 13 WEEKS	0.0090	0.000	0.82	24.2
10	AFTER 2 WEEKS	0.0100	0.000	0.97	27.4
	AFTER 6 WEEKS	0.0110	0.000	0.73	28.5
	AFTER 13 WEEKS	0.0090	0.000	0.80	27.8
11	AFTER 2 WEEKS	0.0060	0.000	0.85	26.9
	AFTER 6 WEEKS	0.0110	0.000	0.77	27.4
	AFTER 13 WEEKS	0.0080	0.000	0.89	25.6
12	AFTER 2 WEEKS	0.0100	0.000	0.95	20.3
	AFTER 6 WEEKS	0.0120	0.000	0.68	27.2
	AFTER 13 WEEKS	0.0090	0.000	0.89	22.0
13	AFTER 2 WEEKS	0.0110	0.000	0.87	21.2
	AFTER 6 WEEKS	0.0110	0.000	0.76	22.7
	AFTER 13 WEEKS	0.0080	0.000	0.80	25.3
14	AFTER 2 WEEKS	0.0090	0.000	0.89	22.3
	AFTER 6 WEEKS	0.0110	0.000	0.72	24.1
	AFTER 13 WEEKS	0.0090	0.000	0.75	23.8
15	AFTER 2 WEEKS	0.0100	0.000	0.94	23.5
	AFTER 6 WEEKS	0.0110	0.000	0.80	26.0
	AFTER 13 WEEKS	0.0080	0.000	0.90	25.3
16	AFTER 2 WEEKS	0.0100	0.000	0.75	38.6
	AFTER 6 WEEKS	0.0110	0.000	0.69	27.7
	AFTER 13 WEEKS	0.0090	0.000	0.76	29.3
17	AFTER 2 WEEKS	0.0110	0.000	0.94	23.2
	AFTER 6 WEEKS	0.0120	0.000	0.72	27.9

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)HEMATOLOGY
MALES

		COAGULATION			
ANIMAL NUMBER		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 1 (0 MG/KG/DAY)					
17	AFTER 13 WEEKS	0.0080	0.000	0.82	28.1
18	AFTER 2 WEEKS	0.0100	0.000	0.85	25.2
	AFTER 6 WEEKS	0.0120	0.000	0.73	26.4
	AFTER 13 WEEKS	0.0090	0.000	0.87	21.5
19	AFTER 2 WEEKS	0.0100	0.000	0.97	26.4
	AFTER 6 WEEKS	0.0110	0.000	0.74	27.2
	AFTER 13 WEEKS	0.0060	0.000	0.78	26.9
20	AFTER 2 WEEKS	0.0090	0.000	0.91	25.5
	AFTER 6 WEEKS	0.0110	0.000	0.74	29.4
	AFTER 13 WEEKS	---	0.000	0.91	25.4
21	AFTER 2 WEEKS	0.0100	0.000	0.83	27.9
	AFTER 6 WEEKS	0.0100	0.000	0.87	23.2
	AFTER 13 WEEKS	0.0080	0.000	0.86	23.9
	AFTER 17 WEEKS	0.0120	0.000	0.83	25.8
22	AFTER 2 WEEKS	0.0090	0.000	0.85	23.9
	AFTER 6 WEEKS	0.0110	0.000	0.65	28.0
	AFTER 13 WEEKS	0.0090	0.000	0.78	25.0
	AFTER 17 WEEKS	0.0120	0.000	0.78	23.0
23	AFTER 2 WEEKS	0.0090	0.000	0.96	23.1
	AFTER 6 WEEKS	0.0120	0.000	0.79	25.8
	AFTER 13 WEEKS	0.0080	0.000	0.78	26.2
	AFTER 17 WEEKS	0.0100	0.000	0.79	24.8
24	AFTER 2 WEEKS	0.0110	0.000	0.80	24.9
	AFTER 6 WEEKS	0.0110	0.000	0.71	25.4
	AFTER 13 WEEKS	0.0090	0.000	0.83	22.8
	AFTER 17 WEEKS	0.0100	0.000	0.80	20.7
25	AFTER 2 WEEKS	0.0090	0.000	0.89	35.1
	AFTER 6 WEEKS	0.0110	0.000	0.63	27.7
	AFTER 13 WEEKS	0.0090	0.000	0.76	23.8
	AFTER 17 WEEKS	0.0100	0.000	0.77	25.6
26	AFTER 2 WEEKS	0.0110	0.000	0.87	20.1
	AFTER 6 WEEKS	0.0120	0.000	0.85	25.6
	AFTER 13 WEEKS	0.0090	0.000	0.89	25.6
	AFTER 17 WEEKS	0.0120	0.000	0.76	26.7
27	AFTER 2 WEEKS	0.0110	0.000	0.89	27.4
	AFTER 6 WEEKS	0.0110	0.000	0.80	26.9
	AFTER 13 WEEKS	0.0080	0.000	0.85	28.3
	AFTER 17 WEEKS	0.0120	0.000	0.78	26.5
28	AFTER 2 WEEKS	0.0090	0.000	0.90	27.7
	AFTER 6 WEEKS	0.0110	0.000	0.80	26.7
	AFTER 13 WEEKS	0.0090	0.000	0.85	31.3
	AFTER 17 WEEKS	0.0120	0.000	0.79	27.5
29	AFTER 2 WEEKS	0.0110	0.000	0.77	23.7
	AFTER 6 WEEKS	0.0120	0.000	0.63	29.0
	AFTER 13 WEEKS	0.0080	0.000	0.72	27.5
	AFTER 17 WEEKS	0.0100	0.000	0.78	22.2
30	AFTER 2 WEEKS	0.0100	0.000	0.86	23.5
	AFTER 6 WEEKS	0.0100	0.000	0.73	25.7
	AFTER 13 WEEKS	0.0090	0.000	0.98	24.8
	AFTER 17 WEEKS	0.0100	0.000	0.81	21.4

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		COAGULATION			
ANIMAL NUMBER		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 2 (500 MG/KG/DAY)					
37	AFTER 2 WEEKS	0.0080	0.000	0.94	22.4
	AFTER 6 WEEKS	0.0120	0.000	0.80	25.5
	AFTER 13 WEEKS	0.0100	0.000	0.88	19.6
38	AFTER 2 WEEKS	0.0080	0.000	0.90	27.1
	AFTER 6 WEEKS	0.0100	0.000	0.74	26.9
	AFTER 13 WEEKS	0.0100	0.000	0.78	26.6
39	AFTER 2 WEEKS	0.0100	0.000	1.04	18.4
	AFTER 6 WEEKS	0.0110	0.000	0.74	23.5
	AFTER 13 WEEKS	0.0090	0.000	0.80	22.8
40	AFTER 2 WEEKS	0.0100	0.000	1.04	23.5
	AFTER 6 WEEKS	0.0110	0.000	0.80	25.3
	AFTER 13 WEEKS	0.0080	0.000	0.95	19.7
41	AFTER 2 WEEKS	0.0110	0.000	0.87	22.0
	AFTER 6 WEEKS	0.0110	0.000	0.71	27.8
	AFTER 13 WEEKS	0.0100	0.000	0.89	21.9
42	AFTER 2 WEEKS	0.0100	0.000	0.89	24.6
	AFTER 6 WEEKS	0.0120	0.000	0.86	21.3
	AFTER 13 WEEKS	0.0080	0.000	0.79	24.6
43	AFTER 2 WEEKS	0.0110	0.000	0.91	22.3
	AFTER 6 WEEKS	0.0100	0.000	0.73	26.1
	AFTER 13 WEEKS	0.0080	0.000	0.96	25.1
44	AFTER 2 WEEKS	0.0110	0.000	0.85	20.4
	AFTER 6 WEEKS	---	---	---	---
	AFTER 13 WEEKS	---	---	---	---
45	AFTER 2 WEEKS	0.0090	0.000	1.07	21.1
	AFTER 6 WEEKS	0.0100	0.000	0.96	21.5
	AFTER 13 WEEKS	0.0080	0.000	0.91	21.6
46	AFTER 2 WEEKS	0.0100	0.000	0.82	25.1
	AFTER 6 WEEKS	0.0120	0.000	0.75	27.5
	AFTER 13 WEEKS	0.0100	0.000	0.76	29.2
47	AFTER 2 WEEKS	0.0110	0.000	0.83	25.0
	AFTER 6 WEEKS	0.0110	0.000	0.77	25.6
	AFTER 13 WEEKS	0.0080	0.000	0.87	26.1
48	AFTER 2 WEEKS	0.0100	0.000	0.86	24.0
	AFTER 6 WEEKS	0.0120	0.000	0.76	24.9
	AFTER 13 WEEKS	0.0080	0.000	0.84	26.2
49	AFTER 2 WEEKS	0.0100	0.000	0.71	127.8
	AFTER 6 WEEKS	0.0110	0.000	0.74	27.9
	AFTER 13 WEEKS	0.0080	0.000	0.81	28.1
50	AFTER 2 WEEKS	0.0100	0.000	0.96	21.9
	AFTER 6 WEEKS	0.0110	0.000	0.86	24.7
	AFTER 13 WEEKS	0.0090	0.000	0.96	25.0
51	AFTER 2 WEEKS	0.0090	0.000	0.81	44.0
	AFTER 6 WEEKS	0.0110	0.000	0.82	24.7
	AFTER 13 WEEKS	0.0090	0.000	0.90	25.7
52	AFTER 2 WEEKS	0.0120	0.000	0.99	24.7
	AFTER 6 WEEKS	0.0110	0.000	0.79	21.9
	AFTER 13 WEEKS	0.0080	0.000	0.87	22.9
53	AFTER 2 WEEKS	0.0080	0.000	0.89	21.6
	AFTER 6 WEEKS	0.0100	0.000	0.77	24.6

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**HEMATOLOGY**
MALES

ANIMAL NUMBER		COAGULATION			
		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 2 (500 MG/KG/DAY)					
53	AFTER 13 WEEKS	0.0090	0.000	0.89	24.5
54	AFTER 2 WEEKS	0.0100	0.000	0.93	26.7
	AFTER 6 WEEKS	0.0110	0.000	0.90	24.0
	AFTER 13 WEEKS	0.0090	0.000	0.82	27.9
55	AFTER 2 WEEKS	0.0090	0.000	0.82	22.2
	AFTER 6 WEEKS	0.0100	0.000	0.75	24.5
	AFTER 13 WEEKS	0.0090	0.000	1.00	24.2
56	AFTER 2 WEEKS	0.0100	0.000	0.90	24.3
	AFTER 6 WEEKS	0.0100	0.000	0.94	23.1
	AFTER 13 WEEKS	0.0090	0.000	0.91	23.2
GROUP 3 (1000 MG/KG/DAY)					
63	AFTER 2 WEEKS	0.0110	0.000	0.88	23.7
	AFTER 6 WEEKS	0.0100	0.000	0.69	25.7
	AFTER 13 WEEKS	0.0080	0.000	0.77	25.9
64	AFTER 2 WEEKS	0.0100	0.000	0.87	24.7
	AFTER 6 WEEKS	0.0090	0.000	0.79	24.0
	AFTER 13 WEEKS	0.0090	0.000	0.79	26.5
65	AFTER 2 WEEKS	0.0100	0.000	0.97	22.8
	AFTER 6 WEEKS	0.0090	0.000	0.85	22.3
	AFTER 13 WEEKS	0.0090	0.000	0.84	21.6
66	AFTER 2 WEEKS	0.0110	0.000	0.84	23.5
	AFTER 6 WEEKS	0.0100	0.000	0.74	24.8
	AFTER 13 WEEKS	0.0080	0.000	0.77	26.2
67	AFTER 2 WEEKS	0.0110	0.000	0.81	24.6
	AFTER 6 WEEKS	0.0110	0.000	0.75	25.9
	AFTER 13 WEEKS	0.0080	0.000	0.96	23.7
68	AFTER 2 WEEKS	0.0090	0.000	0.94	22.4
	AFTER 6 WEEKS	0.0100	0.000	0.74	28.7
	AFTER 13 WEEKS	0.0090	0.000	0.78	27.2
69	AFTER 2 WEEKS	0.0110	0.000	0.93	22.0
	AFTER 6 WEEKS	0.0100	0.000	0.83	23.3
	AFTER 13 WEEKS	0.0100	0.000	0.82	25.1
70	AFTER 2 WEEKS	0.0110	0.000	0.93	24.5
	AFTER 6 WEEKS	0.0100	0.000	0.92	26.1
	AFTER 13 WEEKS	0.0090	0.000	0.93	22.9
71	AFTER 2 WEEKS	0.0110	0.000	0.94	21.0
	AFTER 6 WEEKS	0.0090	0.000	0.87	22.7
	AFTER 13 WEEKS	0.0100	0.000	0.86	21.9
72	AFTER 2 WEEKS	0.0110	0.000	0.93	19.7
	AFTER 6 WEEKS	0.0090	0.000	0.77	25.0
	AFTER 13 WEEKS	0.0080	0.000	0.91	22.4
73	AFTER 2 WEEKS	0.0100	0.000	0.97	22.0
	AFTER 6 WEEKS	0.0100	0.000	0.80	26.4
	AFTER 13 WEEKS	0.0090	0.000	---	---
74	AFTER 2 WEEKS	0.0100	0.000	0.88	27.7
	AFTER 6 WEEKS	0.0110	0.000	0.68	30.1
	AFTER 13 WEEKS	0.0080	0.000	0.83	26.5

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		COAGULATION			
ANIMAL NUMBER		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 3 (1000 MG/KG/DAY)					
75	AFTER 2 WEEKS	0.0100	0.000	1.04	27.4
	AFTER 6 WEEKS	0.0100	0.000	0.72	29.4
	AFTER 13 WEEKS	0.0080	0.000	0.85	27.7
76	AFTER 2 WEEKS	0.0110	0.000	0.94	25.3
	AFTER 6 WEEKS	0.0100	0.000	0.96	35.5
	AFTER 13 WEEKS	0.0080	0.000	0.80	28.1
77	AFTER 2 WEEKS	0.0100	0.000	0.86	22.7
	AFTER 6 WEEKS	0.0080	0.000	0.78	26.0
	AFTER 13 WEEKS	0.0070	0.000	0.82	25.0
78	AFTER 2 WEEKS	0.0100	0.000	0.92	23.7
	AFTER 6 WEEKS	0.0100	0.000	0.65	30.6
	AFTER 13 WEEKS	0.0090	0.000	0.88	25.8
79	AFTER 2 WEEKS	0.0100	0.000	0.90	23.2
	AFTER 6 WEEKS	0.0090	0.000	0.80	25.3
	AFTER 13 WEEKS	0.0080	0.000	0.85	24.4
80	AFTER 2 WEEKS	0.0110	0.000	1.02	25.7
	AFTER 6 WEEKS	0.0090	0.000	0.75	29.9
	AFTER 13 WEEKS	0.0080	0.000	0.78	26.8
81	AFTER 2 WEEKS	0.0110	0.000	1.02	20.9
	AFTER 6 WEEKS	0.0100	0.000	0.79	26.8
	AFTER 13 WEEKS	0.0090	0.000	0.98	23.7
82	AFTER 2 WEEKS	0.0100	0.000	0.93	21.6
	AFTER 6 WEEKS	0.0110	0.000	0.79	25.2
	AFTER 13 WEEKS	0.0070	0.000	0.89	23.6
GROUP 4 (2000 MG/KG/DAY)					
89	AFTER 2 WEEKS	0.0110	0.000	0.89	23.7
	AFTER 6 WEEKS	0.0110	0.000	0.76	27.1
	AFTER 13 WEEKS	0.0100	0.000	0.89	24.4
90	AFTER 2 WEEKS	0.0100	0.000	1.04	20.5
	AFTER 6 WEEKS	0.0120	0.000	0.87	27.0
	AFTER 13 WEEKS	0.0100	0.000	0.89	24.2
91	AFTER 2 WEEKS	0.0100	0.000	0.83	22.8
	AFTER 6 WEEKS	0.0110	0.000	0.75	28.4
	AFTER 13 WEEKS	0.0100	0.000	0.74	23.3
92	AFTER 2 WEEKS	0.0090	0.000	0.89	21.5
	AFTER 6 WEEKS	0.0110	0.000	0.82	26.3
	AFTER 13 WEEKS	0.0100	0.000	0.82	24.5
93	AFTER 2 WEEKS	0.0100	0.000	0.96	22.4
	AFTER 6 WEEKS	0.0100	0.000	0.81	29.2
	AFTER 13 WEEKS	0.0090	0.000	0.87	25.1
94	AFTER 2 WEEKS	0.0100	0.000	0.90	21.7
	AFTER 6 WEEKS	0.0120	0.000	0.85	25.4
	AFTER 13 WEEKS	0.0080	0.000	0.93	22.5
95	AFTER 2 WEEKS	0.0100	0.000	0.88	26.9
	AFTER 6 WEEKS	0.0090	0.000	0.69	29.9
	AFTER 13 WEEKS	0.0080	0.000	0.80	28.2
96	AFTER 2 WEEKS	0.0110	0.000	0.84	23.1
	AFTER 6 WEEKS	0.0100	0.000	0.76	25.6
	AFTER 13 WEEKS	0.0100	0.000	0.85	25.1

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		COAGULATION			
ANIMAL NUMBER		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 4 (2000 MG/KG/DAY)					
97	AFTER 2 WEEKS	0.0110	0.000	0.90	27.8
	AFTER 6 WEEKS	0.0120	0.000	0.82	24.7
	AFTER 13 WEEKS	0.0090	0.000	0.86	22.5
98	AFTER 2 WEEKS	0.0110	0.000	0.99	25.0
	AFTER 6 WEEKS	0.0110	0.000	0.85	24.4
	AFTER 13 WEEKS	0.0100	0.000	0.85	25.0
99	AFTER 2 WEEKS	0.0100	0.000	0.84	24.8
	AFTER 6 WEEKS	0.0110	0.000	0.74	24.9
	AFTER 13 WEEKS	0.0070	0.000	0.90	44.5
100	AFTER 2 WEEKS	0.0110	0.000	1.04	25.0
	AFTER 6 WEEKS	0.0090	0.000	0.89	24.8
	AFTER 13 WEEKS	0.0080	0.000	0.84	30.1
101	AFTER 2 WEEKS	0.0100	0.000	0.96	19.9
	AFTER 6 WEEKS	0.0100	0.000	0.83	27.1
	AFTER 13 WEEKS	0.0100	0.000	0.85	26.2
102	AFTER 2 WEEKS	0.0100	0.000	0.78	25.4
	AFTER 6 WEEKS	0.0110	0.000	0.78	20.2
	AFTER 13 WEEKS	0.0080	0.000	0.81	27.8
103	AFTER 2 WEEKS	0.0100	0.000	0.88	25.7
	AFTER 6 WEEKS	0.0080	0.000	0.83	24.3
	AFTER 13 WEEKS	0.0090	0.000	0.83	29.6
104	AFTER 2 WEEKS	0.0100	0.000	0.92	23.3
	AFTER 6 WEEKS	0.0110	0.000	0.82	27.2
	AFTER 13 WEEKS	0.0080	0.000	1.01	28.7
105	AFTER 2 WEEKS	0.0100	0.000	1.00	27.7
	AFTER 6 WEEKS	0.0100	0.000	0.80	25.3
	AFTER 13 WEEKS	0.0090	0.000	0.92	25.5
106	AFTER 2 WEEKS	0.0100	0.000	0.87	23.1
	AFTER 6 WEEKS	0.0110	0.000	0.78	26.4
	AFTER 13 WEEKS	0.0090	0.000	0.94	25.2
107	AFTER 2 WEEKS	0.0110	0.000	0.97	21.5
	AFTER 6 WEEKS	0.0080	0.000	0.76	23.2
	AFTER 13 WEEKS	0.0080	0.000	0.95	23.1
108	AFTER 2 WEEKS	0.0110	0.000	0.82	24.2
	AFTER 6 WEEKS	0.0100	0.000	0.79	24.8
	AFTER 13 WEEKS	0.0090	0.000	0.83	24.8
109	AFTER 2 WEEKS	0.0110	0.000	0.92	24.0
	AFTER 6 WEEKS	0.0100	0.000	0.83	21.0
	AFTER 13 WEEKS	0.0100	0.000	0.84	23.3
	AFTER 17 WEEKS	0.0110	0.000	0.77	25.1
110	AFTER 2 WEEKS	0.0090	0.000	0.97	22.0
	AFTER 6 WEEKS	0.0110	0.000	0.74	23.6
	AFTER 13 WEEKS	0.0090	0.000	0.79	26.9
	AFTER 17 WEEKS	0.0120	0.000	0.75	30.4
111	AFTER 2 WEEKS	0.0100	0.000	1.04	25.0
	AFTER 6 WEEKS	0.0100	0.000	0.77	25.2
	AFTER 13 WEEKS	0.0100	0.000	0.79	22.7
	AFTER 17 WEEKS	0.0110	0.000	0.78	23.9
112	AFTER 2 WEEKS	0.0100	0.000	0.91	20.8
	AFTER 6 WEEKS	0.0090	0.000	0.79	26.6
	AFTER 13 WEEKS	0.0090	0.000	0.80	22.8

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
MALES

		COAGULATION			
ANIMAL NUMBER		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 4 (2000 MG/KG/DAY)					
112	AFTER 17 WEEKS	0.0110	0.000	0.80	23.3
113	AFTER 2 WEEKS	0.0110	0.000	0.86	24.5
	AFTER 6 WEEKS	0.0100	0.000	0.78	24.5
	AFTER 13 WEEKS	0.0080	0.000	0.84	48.8
	AFTER 17 WEEKS	0.0130	0.000	0.76	30.1
114	AFTER 2 WEEKS	0.0100	0.000	---	---
	AFTER 6 WEEKS	0.0120	0.000	0.73	26.9
	AFTER 13 WEEKS	0.0090	0.000	0.82	28.0
	AFTER 17 WEEKS	0.0120	0.000	0.73	27.7
115	AFTER 2 WEEKS	0.0110	0.000	0.87	22.0
	AFTER 6 WEEKS	0.0100	0.000	0.85	23.3
	AFTER 13 WEEKS	0.0080	0.000	0.77	29.2
	AFTER 17 WEEKS	0.0120	0.000	0.75	26.1
116	AFTER 2 WEEKS	0.0110	0.000	0.86	22.9
	AFTER 6 WEEKS	0.0110	0.000	0.84	23.3
	AFTER 13 WEEKS	0.0070	0.000	1.06	27.4
	AFTER 17 WEEKS	0.0100	0.000	0.86	27.0
117	AFTER 2 WEEKS	0.0100	0.000	0.88	23.1
	AFTER 6 WEEKS	0.0100	0.000	0.83	25.1
	AFTER 13 WEEKS	0.0100	0.000	0.87	24.2
	AFTER 17 WEEKS	0.0120	0.000	0.88	22.0
118	AFTER 2 WEEKS	0.0100	0.000	0.96	21.9
	AFTER 6 WEEKS	0.0110	0.000	0.79	26.3
	AFTER 13 WEEKS	0.0090	0.000	0.85	26.2
	AFTER 17 WEEKS	0.0100	0.000	0.77	25.4

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

ANIMAL NUMBER		RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
GROUP 1 (0 MG/KG/DAY)								
125	AFTER 2 WEEKS	8.09	9.9	0.43	53.4	0.113	1.22	22.87
	AFTER 6 WEEKS	8.69	10.3	0.46	52.5	0.119	1.18	22.53
	AFTER 13 WEEKS	9.20	10.2	0.47	51.6	0.114	1.11	21.48
126	AFTER 2 WEEKS	8.06	9.8	0.43	53.4	0.121	1.21	22.69
	AFTER 6 WEEKS	8.62	10.5	0.44	51.6	0.131	1.22	23.58
	AFTER 13 WEEKS	9.20	10.2	0.47	51.3	0.126	1.11	21.68
127	AFTER 2 WEEKS	7.80	10.0	0.43	54.9	0.107	1.28	23.33
	AFTER 6 WEEKS	8.07	10.1	0.43	53.6	0.118	1.25	23.37
	AFTER 13 WEEKS	8.50	10.2	0.46	53.9	0.121	1.20	22.32
128	AFTER 2 WEEKS	8.05	9.9	0.44	54.4	0.113	1.23	22.60
	AFTER 6 WEEKS	8.73	10.7	0.46	52.9	0.117	1.23	23.28
	AFTER 13 WEEKS	9.08	10.4	0.47	51.9	0.115	1.15	22.09
129	AFTER 2 WEEKS	7.17	9.1	0.40	55.2	0.117	1.27	23.01
	AFTER 6 WEEKS	8.09	10.2	0.44	53.9	0.115	1.26	23.35
	AFTER 13 WEEKS	8.29	10.0	0.45	53.5	0.122	1.20	22.39
130	AFTER 2 WEEKS	7.39	9.5	0.41	55.9	0.114	1.28	22.98
	AFTER 6 WEEKS	8.15	10.3	0.43	53.3	0.115	1.26	23.63
	AFTER 13 WEEKS	8.61	10.1	0.46	53.7	0.121	1.17	21.86
131	AFTER 2 WEEKS	8.26	9.4	0.43	51.7	0.120	1.14	22.06
	AFTER 6 WEEKS	8.61	10.1	0.44	51.0	0.125	1.17	22.92
	AFTER 13 WEEKS	9.02	9.8	0.46	50.6	0.119	1.08	21.40
132	AFTER 2 WEEKS	7.70	9.6	0.43	55.3	0.115	1.25	22.64
	AFTER 6 WEEKS	7.56	9.7	0.41	54.7	0.120	1.28	23.37
	AFTER 13 WEEKS	8.24	10.0	0.44	53.5	0.120	1.21	22.68
133	AFTER 2 WEEKS	7.73	9.4	0.42	54.1	0.116	1.21	22.38
	AFTER 6 WEEKS	8.09	9.7	0.42	52.2	0.113	1.20	23.02
	AFTER 13 WEEKS	8.75	9.7	0.44	50.8	0.117	1.11	21.77
134	AFTER 2 WEEKS	7.90	9.7	0.44	55.3	0.117	1.23	22.27
	AFTER 6 WEEKS	8.39	10.3	0.45	53.8	0.122	1.23	22.93
	AFTER 13 WEEKS	8.83	10.1	0.46	52.4	0.119	1.14	21.84
135	AFTER 2 WEEKS	7.51	9.7	0.43	56.9	0.110	1.29	22.72
	AFTER 6 WEEKS	7.82	10.2	0.43	54.8	0.121	1.30	23.69
	AFTER 13 WEEKS	8.06	9.9	0.44	54.1	0.124	1.23	22.68
136	AFTER 2 WEEKS	7.27	9.7	0.41	56.4	0.164	1.34	23.70
	AFTER 6 WEEKS	7.31	10.1	0.41	56.3	0.228	1.38	24.42
	AFTER 13 WEEKS	8.05	10.6	0.46	56.9	0.263	1.32	23.16
137	AFTER 2 WEEKS	7.47	9.5	0.41	54.7	0.114	1.27	23.32
	AFTER 6 WEEKS	8.21	10.1	0.44	53.9	0.120	1.23	22.87
	AFTER 13 WEEKS	8.56	10.3	0.45	53.0	0.123	1.20	22.64
138	AFTER 2 WEEKS	7.75	9.3	0.42	54.1	0.116	1.20	22.09
	AFTER 6 WEEKS	8.35	10.0	0.44	52.7	0.118	1.20	22.74
	AFTER 13 WEEKS	8.67	10.1	0.45	52.4	0.126	1.17	22.27
139	AFTER 2 WEEKS	6.91	8.9	0.39	57.1	0.115	1.29	22.62
	AFTER 6 WEEKS	7.28	9.4	0.41	55.9	0.117	1.29	23.02
	AFTER 13 WEEKS	7.68	9.6	0.43	56.5	0.120	1.25	22.20
140	AFTER 2 WEEKS	7.72	9.4	0.42	54.5	0.116	1.21	22.22
	AFTER 6 WEEKS	8.31	10.1	0.44	53.0	0.123	1.21	22.85
	AFTER 13 WEEKS	8.41	10.0	0.44	52.8	0.120	1.19	22.57
141	AFTER 2 WEEKS	8.26	9.6	0.43	52.1	0.118	1.17	22.38
	AFTER 6 WEEKS	8.64	9.9	0.43	50.2	0.118	1.15	22.88

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

ANIMAL NUMBER		RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
GROUP 1 (0 MG/KG/DAY)								
141	AFTER 13 WEEKS	8.95	9.9	0.44	49.4	0.122	1.10	22.34
142	AFTER 2 WEEKS	8.36	9.7	0.43	51.8	0.115	1.16	22.34
	AFTER 6 WEEKS	8.60	10.2	0.44	51.1	0.119	1.19	23.20
	AFTER 13 WEEKS	8.85	10.0	0.45	51.0	0.124	1.12	22.04
143	AFTER 2 WEEKS	7.88	9.8	0.43	54.9	0.114	1.24	22.56
	AFTER 6 WEEKS	8.35	10.3	0.45	54.0	0.122	1.23	22.87
	AFTER 13 WEEKS	8.24	9.7	0.44	53.6	0.128	1.18	22.00
144	AFTER 2 WEEKS	7.27	9.4	0.41	56.6	0.118	1.29	22.74
	AFTER 6 WEEKS	7.79	9.9	0.42	53.7	0.113	1.27	23.57
	AFTER 13 WEEKS	7.91	9.6	0.42	53.2	0.118	1.22	22.87
145	AFTER 2 WEEKS	8.02	9.5	0.42	51.9	0.113	1.19	22.90
	AFTER 6 WEEKS	8.17	9.6	0.42	51.8	0.126	1.18	22.77
	AFTER 13 WEEKS	8.44	9.4	0.43	51.0	0.119	1.11	21.79
	AFTER 17 WEEKS	8.25	9.9	0.46	55.9	0.150	1.20	21.43
146	AFTER 2 WEEKS	7.83	9.5	0.42	53.0	0.112	1.22	22.90
	AFTER 6 WEEKS	8.44	10.1	0.44	52.1	0.115	1.19	22.93
	AFTER 13 WEEKS	8.60	9.8	0.45	51.9	0.120	1.15	22.09
	AFTER 17 WEEKS	8.45	10.1	0.47	55.7	0.129	1.20	21.51
147	AFTER 2 WEEKS	7.75	9.5	0.42	54.5	0.118	1.23	22.54
	AFTER 6 WEEKS	8.30	10.2	0.44	53.6	0.128	1.23	22.97
	AFTER 13 WEEKS	8.57	10.0	0.45	52.1	0.124	1.17	22.46
	AFTER 17 WEEKS	8.01	9.7	0.45	56.5	0.144	1.21	21.33
148	AFTER 2 WEEKS	6.92	8.7	0.38	55.3	0.116	1.26	22.77
	AFTER 6 WEEKS	7.15	8.9	0.38	52.8	0.120	1.25	23.63
	AFTER 13 WEEKS	8.31	9.7	0.44	52.7	0.119	1.17	22.15
	AFTER 17 WEEKS	7.99	9.7	0.45	56.9	0.151	1.22	21.39
149	AFTER 2 WEEKS	7.55	9.1	0.40	53.0	0.123	1.20	22.64
	AFTER 6 WEEKS	8.02	9.7	0.41	51.1	0.123	1.22	23.77
	AFTER 13 WEEKS	8.56	9.5	0.43	50.0	0.128	1.11	22.27
	AFTER 17 WEEKS	8.72	10.3	0.48	54.6	0.184	1.18	21.56
150	AFTER 2 WEEKS	7.27	9.3	0.40	55.0	0.118	1.28	23.32
	AFTER 6 WEEKS	8.09	10.4	0.44	53.9	0.119	1.29	23.95
	AFTER 13 WEEKS	8.49	10.2	0.45	53.4	0.119	1.21	22.56
	AFTER 17 WEEKS	8.65	10.9	0.50	57.3	0.171	1.26	22.06
151	AFTER 2 WEEKS	7.19	9.1	0.40	56.2	0.116	1.27	22.53
	AFTER 6 WEEKS	7.95	10.0	0.43	53.8	0.109	1.26	23.47
	AFTER 13 WEEKS	8.10	9.9	0.44	54.9	0.116	1.22	22.18
	AFTER 17 WEEKS	8.01	10.0	0.46	58.0	0.132	1.25	21.52
152	AFTER 2 WEEKS	7.57	9.1	0.40	53.3	0.118	1.20	22.60
	AFTER 6 WEEKS	8.31	10.2	0.43	52.2	0.118	1.23	23.54
	AFTER 13 WEEKS	8.48	9.9	0.44	52.0	0.127	1.17	22.50
	AFTER 17 WEEKS	8.37	10.1	0.46	55.5	0.136	1.21	21.84
153	AFTER 2 WEEKS	7.51	9.6	0.42	56.0	0.129	1.27	22.74
	AFTER 6 WEEKS	8.29	10.6	0.45	54.5	0.118	1.28	23.55
	AFTER 13 WEEKS	8.74	10.5	0.47	53.3	0.121	1.20	22.50
	AFTER 17 WEEKS	8.27	10.5	0.48	57.8	0.166	1.27	22.05
154	AFTER 2 WEEKS	7.28	9.2	0.40	55.2	0.123	1.27	22.98
	AFTER 6 WEEKS	7.99	10.2	0.43	53.4	0.116	1.27	23.87
	AFTER 13 WEEKS	8.29	10.0	0.44	53.7	0.121	1.20	22.44
	AFTER 17 WEEKS	8.12	10.1	0.46	56.9	0.140	1.25	21.90

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

ANIMAL NUMBER		RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
GROUP 2 (500 MG/KG/DAY)								
161	AFTER 2 WEEKS	7.68	9.5	0.42	54.8	0.119	1.24	22.63
	AFTER 6 WEEKS	7.79	9.4	0.42	53.7	0.116	1.21	22.46
	AFTER 13 WEEKS	8.46	10.0	0.45	53.3	0.117	1.18	22.14
162	AFTER 2 WEEKS	7.68	9.3	0.41	53.8	0.116	1.21	22.52
	AFTER 6 WEEKS	8.40	10.2	0.44	51.8	0.115	1.21	23.45
	AFTER 13 WEEKS	8.35	9.3	0.43	51.1	0.113	1.11	21.82
163	AFTER 2 WEEKS	7.94	9.7	0.43	54.8	0.114	1.23	22.41
	AFTER 6 WEEKS	8.02	10.0	0.43	54.0	0.120	1.25	23.13
	AFTER 13 WEEKS	8.53	10.0	0.45	52.9	0.111	1.17	22.06
164	AFTER 2 WEEKS	7.60	9.5	0.42	55.1	0.118	1.26	22.78
	AFTER 6 WEEKS	7.62	9.6	0.41	53.9	0.120	1.26	23.35
	AFTER 13 WEEKS	8.53	10.0	0.45	52.8	0.114	1.18	22.29
165	AFTER 2 WEEKS	7.51	9.8	0.42	55.9	0.119	1.31	23.43
	AFTER 6 WEEKS	7.90	10.1	0.43	54.7	0.132	1.28	23.44
	AFTER 13 WEEKS	8.50	10.3	0.46	53.8	0.125	1.21	22.47
166	AFTER 2 WEEKS	7.57	9.5	0.41	54.6	0.113	1.25	22.94
	AFTER 6 WEEKS	8.31	10.3	0.44	52.6	0.108	1.24	23.54
	AFTER 13 WEEKS	8.72	10.0	0.45	52.1	0.114	1.15	22.07
167	AFTER 2 WEEKS	7.74	9.5	0.42	53.7	0.114	1.22	22.77
	AFTER 6 WEEKS	8.29	10.1	0.44	52.6	0.122	1.21	23.08
	AFTER 13 WEEKS	8.69	9.9	0.45	51.6	0.120	1.14	22.05
168	AFTER 2 WEEKS	7.96	9.7	0.42	53.1	0.115	1.22	22.96
	AFTER 6 WEEKS	8.56	10.3	0.44	51.9	0.111	1.20	23.12
	AFTER 13 WEEKS	8.99	10.3	0.46	51.6	0.112	1.15	22.27
169	AFTER 2 WEEKS	7.99	9.8	0.43	54.2	0.117	1.23	22.72
	AFTER 6 WEEKS	8.29	10.5	0.44	52.9	0.115	1.26	23.90
	AFTER 13 WEEKS	9.00	10.3	0.48	52.8	0.114	1.14	21.61
170	AFTER 2 WEEKS	7.63	9.6	0.41	54.3	0.119	1.26	23.12
	AFTER 6 WEEKS	8.35	10.4	0.44	53.2	0.119	1.24	23.37
	AFTER 13 WEEKS	8.86	10.1	0.46	52.0	0.114	1.14	22.00
171	AFTER 2 WEEKS	7.52	9.5	0.41	55.0	0.112	1.27	23.08
	AFTER 6 WEEKS	7.54	9.8	0.41	54.7	0.128	1.30	23.84
	AFTER 13 WEEKS	6.92	10.2	0.37	54.0	0.120	1.47	27.27
172	AFTER 2 WEEKS	7.56	9.5	0.42	55.7	0.116	1.25	22.49
	AFTER 6 WEEKS	7.99	10.0	0.43	53.9	0.112	1.25	23.25
	AFTER 13 WEEKS	7.69	9.6	0.42	55.0	0.119	1.25	22.70
173	AFTER 2 WEEKS	7.62	9.6	0.41	54.2	0.115	1.26	23.28
	AFTER 6 WEEKS	8.02	10.1	0.42	53.0	0.116	1.26	23.76
	AFTER 13 WEEKS	7.90	9.6	0.42	53.0	0.126	1.21	22.81
174	AFTER 2 WEEKS	7.91	10.2	0.44	55.7	0.116	1.29	23.13
	AFTER 6 WEEKS	8.01	10.5	0.44	55.0	0.130	1.31	23.89
	AFTER 13 WEEKS	8.16	10.3	0.44	54.4	0.124	1.26	23.09
175	AFTER 2 WEEKS	7.02	9.7	0.41	58.2	0.208	1.38	23.72
	AFTER 6 WEEKS	7.05	9.9	0.41	57.6	0.237	1.40	24.32
	AFTER 13 WEEKS	7.08	9.9	0.42	59.5	0.260	1.40	23.52
176	AFTER 2 WEEKS	8.09	9.5	0.42	51.5	0.117	1.17	22.71
	AFTER 6 WEEKS	8.16	9.9	0.42	51.0	0.125	1.21	23.75
	AFTER 13 WEEKS	9.26	10.1	0.46	50.1	0.118	1.10	21.88
177	AFTER 2 WEEKS	7.60	9.9	0.42	55.1	0.135	1.31	23.73
	AFTER 6 WEEKS	7.72	10.3	0.43	55.2	0.165	1.33	24.10

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

ANIMAL NUMBER		RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
GROUP 2 (500 MG/KG/DAY)								
177	AFTER 13 WEEKS	7.73	9.5	0.42	54.4	0.152	1.23	22.68
178	AFTER 2 WEEKS	7.55	9.5	0.41	54.0	0.113	1.26	23.35
	AFTER 6 WEEKS	7.99	9.9	0.42	51.9	0.125	1.24	23.78
	AFTER 13 WEEKS	8.60	10.2	0.45	52.0	0.120	1.19	22.85
179	AFTER 2 WEEKS	7.77	9.9	0.44	56.0	0.121	1.27	22.65
	AFTER 6 WEEKS	8.00	10.2	0.43	53.3	0.114	1.27	23.90
	AFTER 13 WEEKS	8.23	10.2	0.44	53.1	0.114	1.23	23.23
180	AFTER 2 WEEKS	7.29	9.2	0.40	55.1	0.115	1.26	22.97
	AFTER 6 WEEKS	7.60	9.8	0.41	53.9	0.129	1.28	23.80
	AFTER 13 WEEKS	7.96	9.7	0.43	54.3	0.131	1.22	22.39
GROUP 3 (1000 MG/KG/DAY)								
187	AFTER 2 WEEKS	7.30	9.7	0.41	55.7	0.158	1.33	23.82
	AFTER 6 WEEKS	7.59	10.0	0.42	55.8	0.215	1.32	23.57
	AFTER 13 WEEKS	7.58	9.9	0.44	57.4	0.241	1.31	22.80
188	AFTER 2 WEEKS	7.67	9.9	0.43	56.7	0.110	1.29	22.77
	AFTER 6 WEEKS	7.66	9.7	0.42	54.8	0.108	1.27	23.13
	AFTER 13 WEEKS	8.33	10.0	0.45	54.3	0.108	1.20	22.16
189	AFTER 2 WEEKS	8.19	10.0	0.44	54.0	0.117	1.22	22.67
	AFTER 6 WEEKS	8.21	10.2	0.43	53.0	0.118	1.24	23.45
	AFTER 13 WEEKS	9.23	10.7	0.49	52.7	0.113	1.16	22.00
190	AFTER 2 WEEKS	8.18	10.0	0.44	54.2	0.113	1.22	22.50
	AFTER 6 WEEKS	8.50	10.4	0.45	52.5	0.112	1.22	23.26
	AFTER 13 WEEKS	8.91	10.3	0.47	52.5	0.111	1.16	22.14
191	AFTER 2 WEEKS	7.34	9.4	0.41	56.4	0.119	1.28	22.69
	AFTER 6 WEEKS	7.64	9.8	0.42	54.5	0.125	1.28	23.43
	AFTER 13 WEEKS	8.28	9.8	0.44	53.4	0.121	1.19	22.28
192	AFTER 2 WEEKS	7.54	9.2	0.41	54.2	0.119	1.21	22.40
	AFTER 6 WEEKS	7.83	9.6	0.42	53.0	0.132	1.23	23.21
	AFTER 13 WEEKS	8.55	9.7	0.44	51.7	0.116	1.14	22.01
193	AFTER 2 WEEKS	7.40	9.6	0.41	54.8	0.116	1.29	23.59
	AFTER 6 WEEKS	7.66	9.8	0.41	53.2	0.134	1.28	23.96
	AFTER 13 WEEKS	8.34	10.1	0.44	53.0	0.157	1.21	22.81
194	AFTER 2 WEEKS	8.22	9.8	0.43	52.2	0.112	1.19	22.85
	AFTER 6 WEEKS	8.48	9.9	0.43	51.2	0.118	1.17	22.87
	AFTER 13 WEEKS	8.90	10.0	0.46	51.5	0.120	1.12	21.75
195	AFTER 2 WEEKS	7.87	9.8	0.44	55.6	0.113	1.25	22.47
	AFTER 6 WEEKS	8.18	10.3	0.44	54.2	0.119	1.26	23.31
	AFTER 13 WEEKS	8.77	10.2	0.47	53.9	0.121	1.17	21.68
196	AFTER 2 WEEKS	7.75	9.6	0.42	54.4	0.117	1.24	22.87
	AFTER 6 WEEKS	8.32	10.3	0.44	53.4	0.124	1.24	23.27
	AFTER 13 WEEKS	8.58	9.9	0.45	53.0	0.121	1.16	21.81
197	AFTER 2 WEEKS	7.78	9.5	0.42	53.5	0.109	1.22	22.89
	AFTER 6 WEEKS	8.18	10.0	0.43	52.6	0.119	1.22	23.13
	AFTER 13 WEEKS	8.83	10.3	0.46	52.0	0.121	1.17	22.44
198	AFTER 2 WEEKS	7.88	9.7	0.43	54.2	0.115	1.22	22.57
	AFTER 6 WEEKS	8.15	10.0	0.44	53.5	0.121	1.23	23.01
	AFTER 13 WEEKS	7.91	9.6	0.43	54.1	0.120	1.21	22.32

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

ANIMAL NUMBER		RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
GROUP 3 (1000 MG/KG/DAY)								
199	AFTER 2 WEEKS	7.55	9.7	0.41	54.2	0.113	1.28	23.60
	AFTER 6 WEEKS	7.68	9.9	0.41	53.0	0.125	1.29	24.39
	AFTER 13 WEEKS	7.90	9.8	0.43	54.6	0.134	1.25	22.81
200	AFTER 2 WEEKS	7.63	9.9	0.42	55.0	0.128	1.30	23.53
	AFTER 6 WEEKS	7.93	10.1	0.42	53.2	0.159	1.27	23.89
	AFTER 13 WEEKS	7.97	9.9	0.42	52.7	0.163	1.24	23.62
201	AFTER 2 WEEKS	8.11	9.8	0.43	53.6	0.112	1.20	22.49
	AFTER 6 WEEKS	8.03	9.8	0.42	52.4	0.129	1.22	23.22
	AFTER 13 WEEKS	8.57	10.0	0.44	51.5	0.128	1.17	22.76
202	AFTER 2 WEEKS	8.25	10.1	0.44	53.2	0.108	1.22	22.95
	AFTER 6 WEEKS	8.23	10.1	0.43	52.5	0.118	1.22	23.30
	AFTER 13 WEEKS	9.12	10.6	0.47	52.0	0.111	1.16	22.37
203	AFTER 2 WEEKS	7.25	9.2	0.40	55.2	0.116	1.27	23.05
	AFTER 6 WEEKS	7.60	9.5	0.40	53.3	0.119	1.25	23.39
	AFTER 13 WEEKS	8.37	10.1	0.44	53.0	0.113	1.21	22.75
204	AFTER 2 WEEKS	7.56	8.6	0.40	52.3	0.111	1.13	21.67
	AFTER 6 WEEKS	7.68	9.0	0.39	50.6	0.119	1.17	23.23
	AFTER 13 WEEKS	8.69	9.7	0.44	50.1	0.112	1.12	22.33
205	AFTER 2 WEEKS	7.59	9.2	0.40	52.1	0.115	1.22	23.37
	AFTER 6 WEEKS	7.93	9.4	0.40	50.1	0.116	1.19	23.77
	AFTER 13 WEEKS	8.94	10.2	0.45	50.7	0.118	1.14	22.51
206	AFTER 2 WEEKS	7.48	9.7	0.40	53.8	0.141	1.30	24.20
	AFTER 6 WEEKS	7.75	10.0	0.42	53.6	0.164	1.29	24.11
	AFTER 13 WEEKS	8.07	10.2	0.44	54.6	0.235	1.26	23.18
GROUP 4 (2000 MG/KG/DAY)								
213	AFTER 2 WEEKS	7.41	9.5	0.41	55.9	0.111	1.28	22.97
	AFTER 6 WEEKS	8.01	10.2	0.44	55.5	0.123	1.28	23.04
	AFTER 13 WEEKS	8.11	9.9	0.45	54.9	0.121	1.22	22.17
214	AFTER 2 WEEKS	7.93	9.6	0.43	53.9	0.115	1.22	22.54
	AFTER 6 WEEKS	8.52	9.8	0.44	52.0	0.114	1.15	22.01
	AFTER 13 WEEKS	8.78	9.9	0.45	50.9	0.115	1.13	22.21
215	AFTER 2 WEEKS	7.77	9.7	0.41	53.4	0.112	1.24	23.30
	AFTER 6 WEEKS	7.97	9.7	0.43	54.1	0.123	1.22	22.49
	AFTER 13 WEEKS	7.72	8.8	0.40	52.0	0.120	1.14	21.87
216	AFTER 2 WEEKS	7.46	9.3	0.40	53.4	0.115	1.24	23.29
	AFTER 6 WEEKS	7.89	9.6	0.42	53.5	0.125	1.22	22.78
	AFTER 13 WEEKS	8.63	9.8	0.45	51.8	0.120	1.14	21.91
217	AFTER 2 WEEKS	7.54	9.4	0.41	53.7	0.120	1.25	23.26
	AFTER 6 WEEKS	8.62	10.6	0.47	54.6	0.112	1.22	22.41
	AFTER 13 WEEKS	8.57	10.0	0.45	51.6	0.119	1.17	22.51
218	AFTER 2 WEEKS	7.99	9.9	0.43	54.2	0.106	1.24	22.85
	AFTER 6 WEEKS	8.12	10.1	0.43	53.2	0.116	1.24	23.36
	AFTER 13 WEEKS	8.48	9.9	0.46	53.7	0.111	1.17	21.71
219	AFTER 2 WEEKS	8.12	9.9	0.43	53.4	0.116	1.21	22.73
	AFTER 6 WEEKS	8.52	10.5	0.45	53.4	0.113	1.23	23.14
	AFTER 13 WEEKS	7.57	8.7	0.40	53.1	0.122	1.16	21.76
220	AFTER 2 WEEKS	7.88	9.6	0.41	52.4	0.117	1.22	23.35
	AFTER 6 WEEKS	8.43	10.1	0.44	51.8	0.120	1.20	23.12
	AFTER 13 WEEKS	8.85	10.0	0.45	50.4	0.120	1.13	22.43

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REPORT

HEMATOLOGY
FEMALES

ANIMAL NUMBER		RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
GROUP 4 (2000 MG/KG/DAY)								
221	AFTER 2 WEEKS	7.94	9.7	0.42	53.2	0.114	1.22	22.92
	AFTER 6 WEEKS	7.87	9.5	0.42	52.8	0.116	1.21	22.90
	AFTER 13 WEEKS	8.95	10.2	0.46	51.5	0.116	1.14	22.06
222	AFTER 2 WEEKS	8.03	9.7	0.42	52.3	0.115	1.20	23.01
	AFTER 6 WEEKS	8.68	10.2	0.45	52.2	0.129	1.17	22.51
	AFTER 13 WEEKS	8.92	10.0	0.45	51.0	0.120	1.12	22.05
223	AFTER 2 WEEKS	7.61	9.3	0.41	53.7	0.112	1.23	22.84
	AFTER 6 WEEKS	7.62	9.3	0.41	53.6	0.112	1.22	22.87
	AFTER 13 WEEKS	8.16	9.6	0.44	53.4	0.117	1.18	22.13
224	AFTER 2 WEEKS	7.74	9.6	0.41	53.5	0.112	1.24	23.23
	AFTER 6 WEEKS	8.22	10.2	0.43	52.3	0.119	1.24	23.77
	AFTER 13 WEEKS	8.62	10.2	0.45	52.6	0.125	1.18	22.46
225	AFTER 2 WEEKS	8.04	9.7	0.43	52.9	0.113	1.21	22.82
	AFTER 6 WEEKS	8.28	9.8	0.43	51.5	0.114	1.19	23.11
	AFTER 13 WEEKS	9.12	10.4	0.47	51.6	0.120	1.14	22.08
226	AFTER 2 WEEKS	8.33	9.6	0.41	49.3	0.121	1.15	23.26
	AFTER 6 WEEKS	8.30	9.7	0.41	49.9	0.136	1.17	23.40
	AFTER 13 WEEKS	8.65	10.0	0.43	50.1	0.128	1.16	23.14
227	AFTER 2 WEEKS	8.35	10.2	0.43	52.0	0.109	1.22	23.55
	AFTER 6 WEEKS	8.18	10.2	0.43	52.6	0.121	1.25	23.68
	AFTER 13 WEEKS	8.70	10.2	0.45	52.2	0.119	1.17	22.52
228	AFTER 2 WEEKS	7.79	9.5	0.42	54.1	0.114	1.22	22.58
	AFTER 6 WEEKS	8.50	10.4	0.46	53.8	0.114	1.22	22.68
	AFTER 13 WEEKS	8.58	10.2	0.46	53.3	0.115	1.18	22.23
229	AFTER 2 WEEKS	7.89	9.8	0.43	54.1	0.113	1.24	22.83
	AFTER 6 WEEKS	8.48	10.5	0.47	54.8	0.112	1.24	22.57
	AFTER 13 WEEKS	8.95	10.4	0.47	52.1	0.111	1.16	22.35
230	AFTER 2 WEEKS	7.91	9.9	0.42	53.7	0.108	1.25	23.24
	AFTER 6 WEEKS	7.89	9.4	0.42	53.8	0.116	1.19	22.15
	AFTER 13 WEEKS	8.72	10.2	0.46	52.3	0.115	1.17	22.38
231	AFTER 2 WEEKS	7.47	9.6	0.42	56.4	0.109	1.29	22.91
	AFTER 6 WEEKS	7.74	10.0	0.43	56.1	0.112	1.30	23.15
	AFTER 13 WEEKS	7.91	9.9	0.45	56.4	0.114	1.25	22.20
232	AFTER 2 WEEKS	7.14	9.7	0.40	56.4	0.114	1.36	24.11
	AFTER 6 WEEKS	7.38	10.0	0.42	57.2	0.123	1.35	23.59
	AFTER 13 WEEKS	7.73	10.0	0.44	56.7	0.121	1.29	22.84
233	AFTER 2 WEEKS	7.71	9.5	0.42	53.9	0.117	1.24	22.94
	AFTER 6 WEEKS	8.27	10.1	0.44	52.7	0.123	1.22	23.06
	AFTER 13 WEEKS	7.99	8.9	0.41	51.1	0.120	1.11	21.77
	AFTER 17 WEEKS	8.50	10.2	0.48	56.0	0.147	1.20	21.45
234	AFTER 2 WEEKS	7.67	9.9	0.42	54.7	0.113	1.29	23.54
	AFTER 6 WEEKS	7.91	9.8	0.43	54.1	0.121	1.24	23.02
	AFTER 13 WEEKS	8.26	9.6	0.44	52.8	0.115	1.16	22.00
	AFTER 17 WEEKS	8.30	10.3	0.48	58.1	0.141	1.24	21.40
235	AFTER 2 WEEKS	8.27	10.5	0.45	53.9	0.113	1.27	23.57
	AFTER 6 WEEKS	7.95	10.0	0.43	53.8	0.121	1.26	23.48
	AFTER 13 WEEKS	8.61	10.2	0.46	52.9	0.114	1.19	22.45
	AFTER 17 WEEKS	8.54	10.7	0.50	58.5	0.166	1.25	21.43
236	AFTER 2 WEEKS	8.13	9.6	0.42	51.6	0.117	1.18	22.79
	AFTER 6 WEEKS	8.41	9.8	0.43	51.5	0.121	1.17	22.63
	AFTER 13 WEEKS	8.84	9.8	0.44	50.0	0.122	1.10	22.04

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

ANIMAL NUMBER		RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
GROUP 4 (2000 MG/KG/DAY)								
236	AFTER 17 WEEKS	8.48	9.8	0.47	54.9	0.139	1.15	20.95
237	AFTER 2 WEEKS	7.35	9.1	0.40	54.4	0.110	1.24	22.86
	AFTER 6 WEEKS	7.54	9.4	0.40	53.7	0.120	1.24	23.17
	AFTER 13 WEEKS	8.02	9.3	0.42	52.7	0.117	1.16	22.11
	AFTER 17 WEEKS	7.87	9.9	0.45	56.8	0.131	1.25	22.03
238	AFTER 2 WEEKS	7.65	9.5	0.40	52.7	0.112	1.24	23.51
	AFTER 6 WEEKS	8.10	10.1	0.43	52.7	0.129	1.25	23.67
	AFTER 13 WEEKS	8.38	9.8	0.43	51.7	0.126	1.17	22.66
	AFTER 17 WEEKS	8.55	10.0	0.47	55.4	0.139	1.17	21.10
239	AFTER 2 WEEKS	8.67	9.9	0.43	49.6	0.119	1.14	23.07
	AFTER 6 WEEKS	8.87	10.0	0.44	49.3	0.129	1.13	22.90
	AFTER 13 WEEKS	9.20	9.8	0.45	48.4	0.121	1.07	22.10
	AFTER 17 WEEKS	9.40	10.4	0.49	52.6	0.151	1.11	21.13
240	AFTER 2 WEEKS	7.76	9.6	0.41	53.3	0.119	1.23	23.10
	AFTER 6 WEEKS	8.78	10.5	0.46	52.6	0.126	1.19	22.67
	AFTER 13 WEEKS	8.45	10.1	0.44	52.6	0.127	1.20	22.80
	AFTER 17 WEEKS	8.76	10.7	0.50	57.5	0.171	1.22	21.23
241	AFTER 2 WEEKS	8.03	9.7	0.43	53.2	0.113	1.20	22.63
	AFTER 6 WEEKS	8.52	10.3	0.45	52.7	0.114	1.21	23.02
	AFTER 13 WEEKS	8.77	10.3	0.46	52.6	0.114	1.17	22.24
	AFTER 17 WEEKS	8.76	10.5	0.49	56.4	0.122	1.19	21.16
242	AFTER 2 WEEKS	7.93	9.7	0.42	52.8	0.114	1.22	23.09
	AFTER 6 WEEKS	8.36	10.2	0.44	52.6	0.115	1.22	23.24
	AFTER 13 WEEKS	8.29	9.7	0.43	52.1	0.121	1.17	22.42
	AFTER 17 WEEKS	8.47	10.2	0.48	56.7	0.134	1.20	21.17

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 1 (0 MG/KG/DAY)								
125	AFTER 2 WEEKS	1.28	0.031	250	0.594	0.347	0.059	4.80
	AFTER 6 WEEKS	1.38	0.016	137	0.610	0.348	0.043	4.26
	AFTER 13 WEEKS	1.32	0.018	161	0.811	0.181	0.007	3.95
126	AFTER 2 WEEKS	1.40	0.024	192	0.607	0.351	0.041	6.97
	AFTER 6 WEEKS	1.57	0.015	128	0.602	0.372	0.026	4.81
	AFTER 13 WEEKS	1.54	0.013	122	0.753	0.236	0.011	5.01
127	AFTER 2 WEEKS	1.28	0.023	182	0.626	0.331	0.043	6.65
	AFTER 6 WEEKS	1.46	0.021	169	0.660	0.306	0.034	3.09
	AFTER 13 WEEKS	1.42	0.019	158	0.628	0.342	0.030	4.30
128	AFTER 2 WEEKS	1.26	0.028	228	0.500	0.388	0.112	6.77
	AFTER 6 WEEKS	1.41	0.015	127	0.712	0.248	0.041	6.23
	AFTER 13 WEEKS	1.42	0.016	148	0.726	0.255	0.018	3.47
129	AFTER 2 WEEKS	1.24	0.023	168	0.598	0.318	0.085	2.16
	AFTER 6 WEEKS	1.46	0.014	117	0.722	0.257	0.020	2.41
	AFTER 13 WEEKS	1.55	0.022	181	0.605	0.348	0.048	2.07
130	AFTER 2 WEEKS	1.31	0.030	224	0.461	0.402	0.137	4.38
	AFTER 6 WEEKS	1.43	0.013	105	0.696	0.261	0.044	3.88
	AFTER 13 WEEKS	1.33	0.024	202	0.600	0.367	0.033	3.99
131	AFTER 2 WEEKS	1.27	0.025	204	0.491	0.422	0.087	6.29
	AFTER 6 WEEKS	1.46	0.013	108	0.657	0.306	0.037	4.95
	AFTER 13 WEEKS	1.46	0.021	190	0.643	0.329	0.028	4.07
132	AFTER 2 WEEKS	1.24	0.020	157	0.557	0.361	0.082	7.73
	AFTER 6 WEEKS	1.46	0.020	148	0.605	0.342	0.053	4.85
	AFTER 13 WEEKS	1.49	0.016	133	0.735	0.230	0.035	5.86
133	AFTER 2 WEEKS	1.24	0.026	201	0.552	0.343	0.106	7.14
	AFTER 6 WEEKS	1.41	0.021	171	0.624	0.329	0.047	5.31
	AFTER 13 WEEKS	1.41	0.019	167	0.604	0.348	0.048	6.28
134	AFTER 2 WEEKS	1.29	0.032	249	0.482	0.403	0.115	6.05
	AFTER 6 WEEKS	1.46	0.017	140	0.663	0.304	0.032	4.95
	AFTER 13 WEEKS	1.49	0.020	177	0.630	0.340	0.030	4.43
135	AFTER 2 WEEKS	1.32	0.028	213	0.554	0.355	0.091	6.09
	AFTER 6 WEEKS	1.48	0.018	144	0.636	0.331	0.033	5.03
	AFTER 13 WEEKS	1.50	0.020	165	0.758	0.227	0.015	4.76
136	AFTER 2 WEEKS	1.54	0.022	163	0.592	0.325	0.083	4.91
	AFTER 6 WEEKS	1.65	0.023	169	0.630	0.326	0.043	2.13
	AFTER 13 WEEKS	1.62	0.019	151	0.773	0.200	0.026	3.85
137	AFTER 2 WEEKS	1.32	0.031	232	0.539	0.379	0.082	4.74
	AFTER 6 WEEKS	1.46	0.018	149	0.620	0.330	0.050	3.98
	AFTER 13 WEEKS	1.54	0.021	177	0.736	0.244	0.020	4.24
138	AFTER 2 WEEKS	1.26	0.027	208	0.506	0.391	0.104	3.43
	AFTER 6 WEEKS	1.51	0.018	154	0.531	0.409	0.060	4.32
	AFTER 13 WEEKS	1.60	0.026	226	0.678	0.300	0.022	3.49
139	AFTER 2 WEEKS	1.31	0.041	281	0.427	0.386	0.187	5.51
	AFTER 6 WEEKS	1.45	0.025	185	0.482	0.413	0.105	4.70
	AFTER 13 WEEKS	1.52	0.030	231	0.572	0.364	0.064	5.12
140	AFTER 2 WEEKS	1.20	0.028	216	0.485	0.421	0.094	4.46
	AFTER 6 WEEKS	1.44	0.015	121	0.631	0.306	0.064	4.73
	AFTER 13 WEEKS	1.49	0.023	190	0.770	0.203	0.027	4.34
141	AFTER 2 WEEKS	1.24	0.019	155	0.636	0.311	0.054	3.69
	AFTER 6 WEEKS	1.40	0.014	121	0.757	0.224	0.019	3.15

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 1 (0 MG/KG/DAY)								
141	AFTER 13 WEEKS	1.37	0.018	160	0.724	0.264	0.012	2.65
142	AFTER 2 WEEKS	1.22	0.026	220	0.582	0.362	0.057	6.83
	AFTER 6 WEEKS	1.34	0.019	160	0.611	0.345	0.044	5.04
	AFTER 13 WEEKS	1.43	0.017	151	0.796	0.185	0.019	5.35
143	AFTER 2 WEEKS	1.27	0.018	142	0.611	0.315	0.073	4.65
	AFTER 6 WEEKS	1.47	0.013	111	0.722	0.247	0.031	3.82
	AFTER 13 WEEKS	1.59	0.023	188	0.684	0.290	0.027	3.35
144	AFTER 2 WEEKS	1.36	0.030	220	0.458	0.406	0.135	3.65
	AFTER 6 WEEKS	1.48	0.013	98	0.590	0.338	0.072	3.67
	AFTER 13 WEEKS	1.43	0.017	138	0.726	0.247	0.027	4.13
145	AFTER 2 WEEKS	1.20	0.018	148	0.674	0.299	0.028	4.15
	AFTER 6 WEEKS	1.44	0.013	104	0.631	0.343	0.027	3.05
	AFTER 13 WEEKS	1.47	0.019	156	0.730	0.253	0.017	3.51
	AFTER 17 WEEKS	1.35	0.013	108	0.780	0.200	0.020	3.10
146	AFTER 2 WEEKS	1.28	0.024	185	0.628	0.329	0.043	6.28
	AFTER 6 WEEKS	1.47	0.016	133	0.712	0.251	0.038	5.32
	AFTER 13 WEEKS	1.58	0.022	193	0.678	0.300	0.022	5.38
	AFTER 17 WEEKS	1.36	0.015	125	0.662	0.310	0.028	4.00
147	AFTER 2 WEEKS	1.32	0.022	169	0.566	0.340	0.094	4.69
	AFTER 6 WEEKS	1.51	0.014	119	0.646	0.302	0.052	5.03
	AFTER 13 WEEKS	1.54	0.018	156	0.605	0.370	0.025	5.02
	AFTER 17 WEEKS	1.45	0.019	150	0.610	0.343	0.047	4.54
148	AFTER 2 WEEKS	1.26	0.028	193	0.562	0.343	0.095	4.20
	AFTER 6 WEEKS	1.33	0.017	118	0.707	0.268	0.025	3.72
	AFTER 13 WEEKS	1.35	0.020	164	0.744	0.241	0.015	3.74
	AFTER 17 WEEKS	1.31	0.014	111	0.829	0.156	0.015	4.04
149	AFTER 2 WEEKS	1.29	0.028	215	0.508	0.396	0.095	5.68
	AFTER 6 WEEKS	1.49	0.015	117	0.714	0.249	0.037	4.43
	AFTER 13 WEEKS	1.60	0.019	161	0.658	0.318	0.023	4.06
	AFTER 17 WEEKS	1.48	0.011	93	0.706	0.254	0.040	4.46
150	AFTER 2 WEEKS	1.35	0.035	256	0.473	0.408	0.119	3.95
	AFTER 6 WEEKS	1.50	0.015	125	0.676	0.274	0.049	5.75
	AFTER 13 WEEKS	1.50	0.019	157	0.782	0.195	0.023	4.52
	AFTER 17 WEEKS	1.43	0.014	117	0.752	0.220	0.028	3.58
151	AFTER 2 WEEKS	1.29	0.030	215	0.468	0.406	0.127	3.15
	AFTER 6 WEEKS	1.42	0.018	146	0.597	0.319	0.084	3.65
	AFTER 13 WEEKS	1.38	0.024	198	0.714	0.264	0.022	3.27
	AFTER 17 WEEKS	1.37	0.020	163	0.597	0.351	0.052	2.53
152	AFTER 2 WEEKS	1.32	0.023	176	0.553	0.353	0.094	4.79
	AFTER 6 WEEKS	1.57	0.020	167	0.716	0.248	0.036	4.73
	AFTER 13 WEEKS	1.66	0.027	227	0.597	0.360	0.043	4.06
	AFTER 17 WEEKS	1.46	0.013	108	0.791	0.192	0.017	3.61
153	AFTER 2 WEEKS	1.29	0.027	206	0.545	0.368	0.087	3.65
	AFTER 6 WEEKS	1.48	0.015	124	0.724	0.245	0.031	4.62
	AFTER 13 WEEKS	1.45	0.016	138	0.730	0.244	0.026	3.39
	AFTER 17 WEEKS	1.43	0.018	144	0.746	0.223	0.030	3.47
154	AFTER 2 WEEKS	1.36	0.029	208	0.471	0.427	0.102	4.85
	AFTER 6 WEEKS	1.49	0.017	135	0.685	0.264	0.051	5.46
	AFTER 13 WEEKS	1.48	0.022	182	0.693	0.277	0.030	4.40
	AFTER 17 WEEKS	1.40	0.021	168	0.592	0.372	0.037	4.38

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 2 (500 MG/KG/DAY)								
161	AFTER 2 WEEKS	1.35	0.030	231	0.571	0.359	0.070	5.56
	AFTER 6 WEEKS	1.54	0.026	199	0.548	0.373	0.079	3.28
	AFTER 13 WEEKS	1.51	0.023	197	0.616	0.328	0.056	5.03
162	AFTER 2 WEEKS	1.31	0.030	232	0.515	0.412	0.073	3.83
	AFTER 6 WEEKS	1.42	0.018	151	0.612	0.329	0.059	4.42
	AFTER 13 WEEKS	1.34	0.018	153	0.701	0.273	0.025	3.06
163	AFTER 2 WEEKS	1.32	0.026	208	0.462	0.424	0.114	5.22
	AFTER 6 WEEKS	1.44	0.015	120	0.600	0.336	0.064	6.19
	AFTER 13 WEEKS	1.41	0.019	161	0.683	0.277	0.040	4.67
164	AFTER 2 WEEKS	1.36	0.030	229	0.554	0.372	0.075	4.90
	AFTER 6 WEEKS	1.50	0.018	135	0.621	0.332	0.047	3.93
	AFTER 13 WEEKS	1.43	0.016	137	0.746	0.234	0.020	3.18
165	AFTER 2 WEEKS	1.38	0.028	207	0.584	0.357	0.058	5.36
	AFTER 6 WEEKS	1.52	0.014	113	0.711	0.255	0.033	5.34
	AFTER 13 WEEKS	1.56	0.020	169	0.729	0.250	0.021	3.44
166	AFTER 2 WEEKS	1.26	0.027	204	0.570	0.352	0.078	4.86
	AFTER 6 WEEKS	1.38	0.016	134	0.660	0.304	0.036	5.30
	AFTER 13 WEEKS	1.36	0.018	158	0.636	0.344	0.020	3.85
167	AFTER 2 WEEKS	1.31	0.029	225	0.556	0.378	0.066	4.63
	AFTER 6 WEEKS	1.48	0.018	149	0.543	0.397	0.060	4.49
	AFTER 13 WEEKS	1.51	0.021	185	0.638	0.339	0.023	2.77
168	AFTER 2 WEEKS	1.29	0.031	244	0.595	0.341	0.064	6.26
	AFTER 6 WEEKS	1.38	0.017	146	0.650	0.310	0.040	4.76
	AFTER 13 WEEKS	1.32	0.016	145	0.816	0.179	0.005	4.50
169	AFTER 2 WEEKS	1.32	0.028	222	0.580	0.338	0.082	5.12
	AFTER 6 WEEKS	1.47	0.016	133	0.755	0.212	0.033	7.10
	AFTER 13 WEEKS	1.38	0.017	157	0.599	0.366	0.035	5.39
170	AFTER 2 WEEKS	1.40	0.029	225	0.556	0.372	0.072	4.59
	AFTER 6 WEEKS	1.49	0.018	146	0.658	0.317	0.025	4.84
	AFTER 13 WEEKS	1.44	0.014	128	0.704	0.274	0.022	3.56
171	AFTER 2 WEEKS	1.30	0.027	203	0.619	0.337	0.043	3.71
	AFTER 6 WEEKS	1.48	0.020	152	0.627	0.314	0.059	4.45
	AFTER 13 WEEKS	1.49	0.021	147	0.575	0.380	0.045	3.98
172	AFTER 2 WEEKS	1.27	0.024	178	0.615	0.332	0.054	2.14
	AFTER 6 WEEKS	1.42	0.013	105	0.737	0.238	0.025	2.41
	AFTER 13 WEEKS	1.46	0.017	134	0.709	0.260	0.032	2.60
173	AFTER 2 WEEKS	1.36	0.019	145	0.640	0.303	0.058	4.74
	AFTER 6 WEEKS	1.47	0.016	130	0.710	0.260	0.031	5.39
	AFTER 13 WEEKS	1.70	0.029	228	0.658	0.303	0.040	3.05
174	AFTER 2 WEEKS	1.29	0.026	203	0.560	0.367	0.073	3.29
	AFTER 6 WEEKS	1.62	0.014	114	0.644	0.296	0.060	4.48
	AFTER 13 WEEKS	1.62	0.013	110	0.741	0.224	0.035	3.70
175	AFTER 2 WEEKS	1.62	0.021	146	0.613	0.334	0.053	5.56
	AFTER 6 WEEKS	1.73	0.014	102	0.651	0.312	0.037	6.27
	AFTER 13 WEEKS	1.70	0.027	189	0.687	0.270	0.043	4.02
176	AFTER 2 WEEKS	1.27	0.021	169	0.594	0.350	0.056	4.54
	AFTER 6 WEEKS	1.40	0.016	128	0.667	0.290	0.043	4.73
	AFTER 13 WEEKS	1.54	0.015	142	0.719	0.249	0.032	5.48
177	AFTER 2 WEEKS	1.46	0.020	149	0.610	0.318	0.071	4.17
	AFTER 6 WEEKS	1.54	0.014	109	0.694	0.276	0.030	4.02

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

ANIMAL NUMBER		HDW mmol/l	RETICULOCYTE COUNT					WBC G/l
			RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	
GROUP 2 (500 MG/KG/DAY)								
177	AFTER 13 WEEKS	1.62	0.029	223	0.623	0.336	0.040	3.04
178	AFTER 2 WEEKS	1.37	0.024	178	0.672	0.297	0.031	4.99
	AFTER 6 WEEKS	1.52	0.017	136	0.599	0.352	0.049	3.93
	AFTER 13 WEEKS	1.47	0.017	145	0.654	0.316	0.031	4.19
179	AFTER 2 WEEKS	1.44	0.033	254	0.386	0.412	0.202	3.63
	AFTER 6 WEEKS	1.64	0.023	180	0.579	0.332	0.088	3.94
	AFTER 13 WEEKS	1.55	0.023	187	0.662	0.314	0.024	3.19
180	AFTER 2 WEEKS	1.40	0.026	191	0.586	0.354	0.060	6.10
	AFTER 6 WEEKS	1.55	0.020	153	0.569	0.386	0.045	4.86
	AFTER 13 WEEKS	1.58	0.027	214	0.649	0.328	0.023	5.16
GROUP 3 (1000 MG/KG/DAY)								
187	AFTER 2 WEEKS	1.49	0.023	169	0.556	0.380	0.065	4.59
	AFTER 6 WEEKS	1.65	0.016	123	0.646	0.285	0.070	4.72
	AFTER 13 WEEKS	1.55	0.023	171	0.651	0.318	0.031	2.95
188	AFTER 2 WEEKS	1.26	0.026	201	0.555	0.341	0.104	5.84
	AFTER 6 WEEKS	1.36	0.018	135	0.595	0.337	0.068	4.12
	AFTER 13 WEEKS	1.38	0.018	154	0.578	0.373	0.048	3.58
189	AFTER 2 WEEKS	1.33	0.028	227	0.671	0.290	0.039	4.59
	AFTER 6 WEEKS	1.47	0.017	142	0.674	0.294	0.031	4.62
	AFTER 13 WEEKS	1.48	0.016	146	0.783	0.200	0.017	3.10
190	AFTER 2 WEEKS	1.27	0.025	202	0.583	0.344	0.073	4.36
	AFTER 6 WEEKS	1.40	0.014	120	0.726	0.253	0.021	4.14
	AFTER 13 WEEKS	1.44	0.015	135	0.734	0.246	0.020	2.87
191	AFTER 2 WEEKS	1.39	0.035	255	0.544	0.372	0.084	5.28
	AFTER 6 WEEKS	1.46	0.016	122	0.606	0.336	0.058	3.92
	AFTER 13 WEEKS	1.54	0.018	145	0.681	0.278	0.041	2.83
192	AFTER 2 WEEKS	1.28	0.029	221	0.554	0.374	0.073	5.79
	AFTER 6 WEEKS	1.48	0.018	139	0.552	0.360	0.088	4.66
	AFTER 13 WEEKS	1.52	0.016	134	0.791	0.179	0.030	2.43
193	AFTER 2 WEEKS	1.44	0.027	197	0.596	0.330	0.074	5.46
	AFTER 6 WEEKS	1.56	0.015	114	0.698	0.283	0.019	5.38
	AFTER 13 WEEKS	1.59	0.016	134	0.733	0.249	0.017	3.78
194	AFTER 2 WEEKS	1.23	0.014	111	0.662	0.285	0.053	5.77
	AFTER 6 WEEKS	1.37	0.010	88	0.817	0.163	0.020	4.11
	AFTER 13 WEEKS	1.43	0.018	162	0.662	0.323	0.016	3.93
195	AFTER 2 WEEKS	1.23	0.028	220	0.544	0.375	0.081	6.99
	AFTER 6 WEEKS	1.38	0.016	133	0.625	0.327	0.048	4.70
	AFTER 13 WEEKS	1.51	0.020	177	0.674	0.290	0.036	4.13
196	AFTER 2 WEEKS	1.37	0.034	261	0.418	0.443	0.139	6.92
	AFTER 6 WEEKS	1.44	0.018	154	0.529	0.394	0.077	4.82
	AFTER 13 WEEKS	1.48	0.025	215	0.672	0.305	0.023	4.18
197	AFTER 2 WEEKS	1.23	0.025	194	0.564	0.369	0.068	3.31
	AFTER 6 WEEKS	1.46	0.020	164	0.662	0.295	0.043	3.96
	AFTER 13 WEEKS	1.52	0.020	179	0.684	0.306	0.011	3.91
198	AFTER 2 WEEKS	1.37	0.030	237	0.586	0.317	0.098	5.00
	AFTER 6 WEEKS	1.40	0.016	134	0.689	0.273	0.038	5.54
	AFTER 13 WEEKS	1.51	0.023	182	0.706	0.273	0.021	3.62

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 3 (1000 MG/KG/DAY)								
199	AFTER 2 WEEKS	1.41	0.032	243	0.570	0.372	0.059	6.37
	AFTER 6 WEEKS	1.58	0.019	143	0.676	0.291	0.032	5.56
	AFTER 13 WEEKS	1.61	0.031	241	0.646	0.332	0.022	5.07
200	AFTER 2 WEEKS	1.48	0.026	199	0.627	0.331	0.042	4.05
	AFTER 6 WEEKS	1.69	0.016	130	0.617	0.323	0.061	4.11
	AFTER 13 WEEKS	1.67	0.016	129	0.795	0.158	0.047	2.66
201	AFTER 2 WEEKS	1.29	0.020	165	0.651	0.296	0.053	5.46
	AFTER 6 WEEKS	1.55	0.018	146	0.690	0.269	0.040	3.87
	AFTER 13 WEEKS	1.67	0.019	160	0.695	0.282	0.023	4.07
202	AFTER 2 WEEKS	1.26	0.021	172	0.611	0.332	0.056	6.50
	AFTER 6 WEEKS	1.41	0.020	166	0.495	0.402	0.103	4.32
	AFTER 13 WEEKS	1.32	0.015	135	0.767	0.217	0.016	4.63
203	AFTER 2 WEEKS	1.41	0.038	277	0.489	0.388	0.123	4.72
	AFTER 6 WEEKS	1.53	0.025	192	0.528	0.389	0.083	2.72
	AFTER 13 WEEKS	1.37	0.014	118	0.694	0.269	0.036	3.20
204	AFTER 2 WEEKS	1.35	0.032	244	0.503	0.380	0.117	4.62
	AFTER 6 WEEKS	1.55	0.022	167	0.608	0.333	0.059	2.82
	AFTER 13 WEEKS	1.47	0.014	124	0.757	0.225	0.018	4.14
205	AFTER 2 WEEKS	1.29	0.029	218	0.510	0.416	0.075	3.40
	AFTER 6 WEEKS	1.49	0.013	102	0.711	0.244	0.045	2.91
	AFTER 13 WEEKS	1.44	0.020	178	0.660	0.320	0.020	3.04
206	AFTER 2 WEEKS	1.44	0.028	210	0.556	0.357	0.087	4.62
	AFTER 6 WEEKS	1.53	0.017	133	0.709	0.271	0.020	3.67
	AFTER 13 WEEKS	1.51	0.018	142	0.800	0.187	0.013	4.04
GROUP 4 (2000 MG/KG/DAY)								
213	AFTER 2 WEEKS	1.28	0.023	173	0.598	0.344	0.058	6.09
	AFTER 6 WEEKS	1.46	0.013	105	0.639	0.296	0.065	7.94
	AFTER 13 WEEKS	1.52	0.015	119	0.742	0.230	0.028	4.12
214	AFTER 2 WEEKS	1.26	0.025	200	0.547	0.366	0.087	4.53
	AFTER 6 WEEKS	1.42	0.014	117	0.609	0.323	0.067	6.03
	AFTER 13 WEEKS	1.47	0.016	137	0.717	0.257	0.026	2.22
215	AFTER 2 WEEKS	1.34	0.025	198	0.580	0.342	0.078	6.56
	AFTER 6 WEEKS	1.47	0.025	199	0.544	0.387	0.069	4.67
	AFTER 13 WEEKS	1.47	0.017	135	0.779	0.206	0.015	3.14
216	AFTER 2 WEEKS	1.43	0.031	232	0.593	0.327	0.079	5.42
	AFTER 6 WEEKS	1.52	0.023	185	0.558	0.371	0.071	5.30
	AFTER 13 WEEKS	1.59	0.020	173	0.700	0.273	0.028	3.59
217	AFTER 2 WEEKS	1.43	0.032	245	0.536	0.363	0.101	6.26
	AFTER 6 WEEKS	1.34	0.017	150	0.537	0.382	0.081	4.66
	AFTER 13 WEEKS	1.54	0.016	139	0.807	0.169	0.024	3.22
218	AFTER 2 WEEKS	1.25	0.025	203	0.563	0.340	0.097	4.46
	AFTER 6 WEEKS	1.49	0.019	154	0.535	0.377	0.087	5.48
	AFTER 13 WEEKS	1.36	0.017	148	0.674	0.310	0.016	3.01
219	AFTER 2 WEEKS	1.26	0.028	224	0.629	0.327	0.044	5.52
	AFTER 6 WEEKS	1.39	0.011	94	0.658	0.292	0.049	6.53
	AFTER 13 WEEKS	1.54	0.032	239	0.416	0.418	0.166	4.56
220	AFTER 2 WEEKS	1.35	0.022	171	0.630	0.315	0.055	5.96
	AFTER 6 WEEKS	1.47	0.016	134	0.599	0.312	0.089	4.97
	AFTER 13 WEEKS	1.49	0.015	136	0.763	0.218	0.019	3.93

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 4 (2000 MG/KG/DAY)								
221	AFTER 2 WEEKS	1.34	0.030	237	0.598	0.333	0.069	4.26
	AFTER 6 WEEKS	1.37	0.012	91	0.570	0.346	0.084	5.12
	AFTER 13 WEEKS	1.38	0.018	158	0.709	0.243	0.048	3.17
222	AFTER 2 WEEKS	1.42	0.023	182	0.686	0.263	0.051	4.07
	AFTER 6 WEEKS	1.56	0.017	145	0.700	0.248	0.052	4.55
	AFTER 13 WEEKS	1.59	0.012	110	0.798	0.189	0.013	2.22
223	AFTER 2 WEEKS	1.35	0.034	262	0.528	0.369	0.104	3.93
	AFTER 6 WEEKS	1.42	0.028	214	0.481	0.390	0.129	5.61
	AFTER 13 WEEKS	1.51	0.032	262	0.646	0.331	0.024	5.59
224	AFTER 2 WEEKS	1.40	0.023	180	0.660	0.301	0.039	5.37
	AFTER 6 WEEKS	1.50	0.016	130	0.663	0.288	0.049	7.08
	AFTER 13 WEEKS	1.55	0.020	172	0.811	0.174	0.016	7.48
225	AFTER 2 WEEKS	1.36	0.032	260	0.547	0.366	0.087	3.85
	AFTER 6 WEEKS	1.46	0.020	165	0.492	0.409	0.099	4.41
	AFTER 13 WEEKS	1.54	0.025	229	0.662	0.304	0.034	4.86
226	AFTER 2 WEEKS	1.36	0.023	195	0.663	0.304	0.032	3.21
	AFTER 6 WEEKS	1.48	0.022	182	0.602	0.350	0.048	4.47
	AFTER 13 WEEKS	1.54	0.019	164	0.803	0.171	0.026	4.01
227	AFTER 2 WEEKS	1.36	0.024	203	0.612	0.319	0.069	3.90
	AFTER 6 WEEKS	1.39	0.016	135	0.678	0.292	0.031	4.02
	AFTER 13 WEEKS	1.39	0.028	243	0.733	0.254	0.014	4.28
228	AFTER 2 WEEKS	1.22	0.026	204	0.530	0.393	0.077	6.22
	AFTER 6 WEEKS	1.38	0.017	144	0.567	0.363	0.070	5.14
	AFTER 13 WEEKS	1.36	0.017	149	0.777	0.210	0.013	3.66
229	AFTER 2 WEEKS	1.29	0.026	203	0.552	0.386	0.062	4.69
	AFTER 6 WEEKS	1.39	0.020	166	0.545	0.372	0.083	4.95
	AFTER 13 WEEKS	1.36	0.017	155	0.692	0.279	0.029	3.45
230	AFTER 2 WEEKS	1.29	0.028	221	0.597	0.333	0.070	5.03
	AFTER 6 WEEKS	1.34	0.014	112	0.717	0.260	0.023	4.72
	AFTER 13 WEEKS	1.46	0.016	140	0.724	0.248	0.028	5.29
231	AFTER 2 WEEKS	1.31	0.028	210	0.581	0.334	0.085	2.43
	AFTER 6 WEEKS	1.43	0.017	134	0.504	0.327	0.169	2.58
	AFTER 13 WEEKS	1.47	0.020	155	0.688	0.272	0.040	2.19
232	AFTER 2 WEEKS	1.44	0.032	225	0.465	0.373	0.162	6.59
	AFTER 6 WEEKS	1.42	0.021	156	0.480	0.352	0.167	5.54
	AFTER 13 WEEKS	1.47	0.026	204	0.583	0.354	0.063	6.65
233	AFTER 2 WEEKS	1.32	0.026	202	0.498	0.395	0.107	3.88
	AFTER 6 WEEKS	1.42	0.016	129	0.644	0.294	0.062	4.83
	AFTER 13 WEEKS	1.49	0.027	214	0.661	0.312	0.027	1.87
	AFTER 17 WEEKS	1.39	0.014	120	0.602	0.360	0.038	3.22
234	AFTER 2 WEEKS	1.28	0.025	190	0.605	0.329	0.067	5.69
	AFTER 6 WEEKS	1.42	0.020	158	0.539	0.382	0.079	4.70
	AFTER 13 WEEKS	1.41	0.019	159	0.694	0.269	0.037	2.31
	AFTER 17 WEEKS	1.31	0.017	137	0.585	0.376	0.039	3.61
235	AFTER 2 WEEKS	1.41	0.026	214	0.627	0.318	0.055	8.30
	AFTER 6 WEEKS	1.41	0.018	143	0.578	0.346	0.076	5.62
	AFTER 13 WEEKS	1.51	0.015	126	0.662	0.290	0.049	4.50
	AFTER 17 WEEKS	1.35	0.010	89	0.670	0.276	0.055	5.06
236	AFTER 2 WEEKS	1.29	0.024	199	0.617	0.343	0.040	4.16
	AFTER 6 WEEKS	1.43	0.017	146	0.673	0.286	0.041	2.87
	AFTER 13 WEEKS	1.51	0.017	146	0.727	0.240	0.033	2.15

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

		RETICULOCYTE COUNT						
ANIMAL NUMBER		HDW mmol/l	RETI rel. 1	RETI G/l	L RETI rel. 1	M RETI rel. 1	H RETI rel. 1	WBC G/l
GROUP 4 (2000 MG/KG/DAY)								
236	AFTER 17 WEEKS	1.43	0.017	141	0.724	0.232	0.044	2.09
237	AFTER 2 WEEKS	1.30	0.031	224	0.501	0.412	0.087	5.94
	AFTER 6 WEEKS	1.49	0.023	176	0.510	0.381	0.109	3.52
	AFTER 13 WEEKS	1.51	0.024	192	0.730	0.254	0.016	2.69
	AFTER 17 WEEKS	1.40	0.020	157	0.732	0.245	0.023	1.89
238	AFTER 2 WEEKS	1.36	0.029	220	0.501	0.402	0.097	8.17
	AFTER 6 WEEKS	1.44	0.019	157	0.625	0.329	0.046	7.30
	AFTER 13 WEEKS	1.64	0.030	253	0.671	0.303	0.026	5.92
	AFTER 17 WEEKS	1.48	0.018	150	0.687	0.267	0.046	4.74
239	AFTER 2 WEEKS	1.32	0.023	196	0.623	0.334	0.043	4.63
	AFTER 6 WEEKS	1.38	0.012	109	0.702	0.257	0.041	4.94
	AFTER 13 WEEKS	1.43	0.020	180	0.726	0.259	0.014	4.61
	AFTER 17 WEEKS	1.47	0.012	113	0.820	0.153	0.027	4.17
240	AFTER 2 WEEKS	1.51	0.042	328	0.549	0.382	0.068	6.12
	AFTER 6 WEEKS	1.56	0.017	146	0.650	0.289	0.061	6.16
	AFTER 13 WEEKS	1.66	0.024	206	0.726	0.253	0.020	5.61
	AFTER 17 WEEKS	1.48	0.015	131	0.754	0.217	0.030	4.96
241	AFTER 2 WEEKS	1.24	0.027	213	0.590	0.343	0.067	2.10
	AFTER 6 WEEKS	1.42	0.015	130	0.641	0.309	0.050	2.10
	AFTER 13 WEEKS	1.44	0.016	138	0.738	0.239	0.023	1.98
	AFTER 17 WEEKS	1.41	0.014	118	0.678	0.289	0.033	1.52
242	AFTER 2 WEEKS	1.30	0.025	198	0.537	0.358	0.105	7.31
	AFTER 6 WEEKS	1.46	0.016	138	0.617	0.323	0.059	5.66
	AFTER 13 WEEKS	1.63	0.027	228	0.684	0.289	0.026	4.35
	AFTER 17 WEEKS	1.45	0.015	126	0.720	0.237	0.042	4.75

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

		DIFF.WBC COUNT (REL)					
ANIMAL NUMBER		NEUT	EOS	BASO	LYMPH	MONO	LUC
		rel. 1	rel. 1	rel. 1	rel. 1	rel. 1	rel. 1
GROUP 1 (0 MG/KG/DAY)							
125	AFTER 2 WEEKS	0.254	0.022	0.002	0.700	0.014	0.009
	AFTER 6 WEEKS	0.128	0.012	0.004	0.826	0.018	0.013
	AFTER 13 WEEKS	0.131	0.023	0.002	0.823	0.015	0.005
126	AFTER 2 WEEKS	0.116	0.007	0.006	0.827	0.025	0.019
	AFTER 6 WEEKS	0.193	0.010	0.004	0.754	0.028	0.011
	AFTER 13 WEEKS	0.084	0.014	0.001	0.877	0.015	0.008
127	AFTER 2 WEEKS	0.102	0.011	0.002	0.857	0.014	0.014
	AFTER 6 WEEKS	0.173	0.011	0.004	0.779	0.022	0.012
	AFTER 13 WEEKS	0.122	0.010	0.002	0.838	0.019	0.009
128	AFTER 2 WEEKS	0.084	0.008	0.003	0.883	0.014	0.009
	AFTER 6 WEEKS	0.107	0.017	0.002	0.842	0.015	0.016
	AFTER 13 WEEKS	0.156	0.022	0.002	0.799	0.019	0.002
129	AFTER 2 WEEKS	0.296	0.046	0.003	0.622	0.025	0.008
	AFTER 6 WEEKS	0.362	0.037	0.001	0.553	0.037	0.010
	AFTER 13 WEEKS	0.389	0.060	0.006	0.496	0.046	0.005
130	AFTER 2 WEEKS	0.111	0.011	0.003	0.835	0.027	0.013
	AFTER 6 WEEKS	0.169	0.021	0.002	0.772	0.024	0.011
	AFTER 13 WEEKS	0.205	0.011	0.002	0.768	0.010	0.005
131	AFTER 2 WEEKS	0.101	0.014	0.009	0.850	0.012	0.013
	AFTER 6 WEEKS	0.105	0.017	0.004	0.854	0.011	0.010
	AFTER 13 WEEKS	0.148	0.011	0.004	0.806	0.022	0.009
132	AFTER 2 WEEKS	0.077	0.010	0.002	0.881	0.020	0.011
	AFTER 6 WEEKS	0.158	0.011	0.002	0.808	0.011	0.009
	AFTER 13 WEEKS	0.083	0.013	0.003	0.877	0.016	0.007
133	AFTER 2 WEEKS	0.104	0.009	0.003	0.857	0.017	0.010
	AFTER 6 WEEKS	0.177	0.012	0.003	0.785	0.014	0.008
	AFTER 13 WEEKS	0.151	0.013	0.004	0.811	0.017	0.004
134	AFTER 2 WEEKS	0.083	0.007	0.003	0.881	0.015	0.010
	AFTER 6 WEEKS	0.111	0.013	0.003	0.848	0.015	0.009
	AFTER 13 WEEKS	0.164	0.014	0.005	0.775	0.031	0.012
135	AFTER 2 WEEKS	0.078	0.009	0.001	0.886	0.015	0.011
	AFTER 6 WEEKS	0.154	0.013	0.003	0.803	0.017	0.011
	AFTER 13 WEEKS	0.129	0.014	0.003	0.832	0.016	0.005
136	AFTER 2 WEEKS	0.069	0.011	0.001	0.887	0.019	0.013
	AFTER 6 WEEKS	0.204	0.041	0.003	0.722	0.014	0.016
	AFTER 13 WEEKS	0.068	0.015	0.007	0.884	0.017	0.010
137	AFTER 2 WEEKS	0.219	0.019	0.005	0.734	0.014	0.009
	AFTER 6 WEEKS	0.129	0.021	0.003	0.816	0.023	0.009
	AFTER 13 WEEKS	0.118	0.016	0.005	0.818	0.030	0.012
138	AFTER 2 WEEKS	0.229	0.013	0.002	0.724	0.021	0.010
	AFTER 6 WEEKS	0.155	0.013	0.002	0.802	0.021	0.007
	AFTER 13 WEEKS	0.345	0.030	0.004	0.603	0.014	0.003
139	AFTER 2 WEEKS	0.189	0.006	0.003	0.777	0.017	0.008
	AFTER 6 WEEKS	0.121	0.012	0.003	0.835	0.018	0.011
	AFTER 13 WEEKS	0.130	0.015	0.005	0.824	0.020	0.006
140	AFTER 2 WEEKS	0.146	0.012	0.006	0.808	0.015	0.014
	AFTER 6 WEEKS	0.169	0.021	0.002	0.778	0.018	0.013
	AFTER 13 WEEKS	0.163	0.018	0.005	0.786	0.017	0.012
141	AFTER 2 WEEKS	0.119	0.016	0.004	0.816	0.026	0.019
	AFTER 6 WEEKS	0.239	0.027	0.004	0.701	0.022	0.008

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

		DIFF. WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 1 (0 MG/KG/DAY)							
141	AFTER 13 WEEKS	0.197	0.011	0.004	0.759	0.019	0.009
142	AFTER 2 WEEKS	0.151	0.011	0.004	0.801	0.018	0.015
	AFTER 6 WEEKS	0.104	0.022	0.003	0.842	0.019	0.010
	AFTER 13 WEEKS	0.105	0.018	0.009	0.847	0.012	0.008
143	AFTER 2 WEEKS	0.092	0.014	0.005	0.855	0.017	0.017
	AFTER 6 WEEKS	0.170	0.026	0.003	0.757	0.033	0.011
	AFTER 13 WEEKS	0.188	0.021	0.012	0.744	0.030	0.018
144	AFTER 2 WEEKS	0.095	0.012	0.005	0.857	0.016	0.015
	AFTER 6 WEEKS	0.137	0.014	0.004	0.805	0.022	0.018
	AFTER 13 WEEKS	0.156	0.020	0.008	0.778	0.021	0.018
145	AFTER 2 WEEKS	0.077	0.011	0.004	0.884	0.012	0.010
	AFTER 6 WEEKS	0.083	0.012	0.002	0.876	0.011	0.016
	AFTER 13 WEEKS	0.084	0.021	0.002	0.874	0.015	0.004
	AFTER 17 WEEKS	0.113	0.017	0.008	0.824	0.018	0.019
146	AFTER 2 WEEKS	0.085	0.011	0.004	0.879	0.012	0.010
	AFTER 6 WEEKS	0.123	0.013	0.003	0.835	0.012	0.014
	AFTER 13 WEEKS	0.122	0.009	0.005	0.842	0.015	0.007
	AFTER 17 WEEKS	0.108	0.013	0.010	0.851	0.009	0.009
147	AFTER 2 WEEKS	0.167	0.032	0.002	0.767	0.022	0.010
	AFTER 6 WEEKS	0.163	0.014	0.002	0.787	0.022	0.012
	AFTER 13 WEEKS	0.221	0.012	0.004	0.728	0.032	0.004
	AFTER 17 WEEKS	0.216	0.019	0.011	0.727	0.020	0.007
148	AFTER 2 WEEKS	0.085	0.010	0.004	0.882	0.012	0.008
	AFTER 6 WEEKS	0.130	0.016	0.002	0.830	0.013	0.009
	AFTER 13 WEEKS	0.123	0.008	0.003	0.842	0.016	0.008
	AFTER 17 WEEKS	0.135	0.015	0.010	0.799	0.030	0.011
149	AFTER 2 WEEKS	0.067	0.007	0.004	0.900	0.012	0.010
	AFTER 6 WEEKS	0.130	0.013	0.004	0.825	0.013	0.015
	AFTER 13 WEEKS	0.151	0.013	0.005	0.805	0.018	0.010
	AFTER 17 WEEKS	0.144	0.018	0.008	0.807	0.017	0.007
150	AFTER 2 WEEKS	0.245	0.018	0.006	0.706	0.016	0.009
	AFTER 6 WEEKS	0.235	0.019	0.003	0.708	0.026	0.010
	AFTER 13 WEEKS	0.200	0.023	0.003	0.751	0.020	0.003
	AFTER 17 WEEKS	0.212	0.026	0.009	0.731	0.017	0.005
151	AFTER 2 WEEKS	0.175	0.019	0.003	0.771	0.022	0.011
	AFTER 6 WEEKS	0.161	0.027	0.002	0.770	0.028	0.012
	AFTER 13 WEEKS	0.187	0.022	0.007	0.742	0.033	0.007
	AFTER 17 WEEKS	0.244	0.040	0.005	0.679	0.027	0.007
152	AFTER 2 WEEKS	0.116	0.015	0.003	0.845	0.013	0.008
	AFTER 6 WEEKS	0.166	0.028	0.003	0.764	0.024	0.014
	AFTER 13 WEEKS	0.108	0.014	0.003	0.845	0.023	0.006
	AFTER 17 WEEKS	0.189	0.018	0.010	0.758	0.019	0.005
153	AFTER 2 WEEKS	0.124	0.020	0.005	0.816	0.020	0.014
	AFTER 6 WEEKS	0.137	0.017	0.003	0.808	0.018	0.016
	AFTER 13 WEEKS	0.131	0.019	0.007	0.819	0.016	0.008
	AFTER 17 WEEKS	0.143	0.028	0.008	0.796	0.018	0.006
154	AFTER 2 WEEKS	0.127	0.015	0.004	0.829	0.018	0.008
	AFTER 6 WEEKS	0.142	0.016	0.003	0.806	0.021	0.012
	AFTER 13 WEEKS	0.147	0.024	0.004	0.799	0.021	0.006
	AFTER 17 WEEKS	0.185	0.026	0.009	0.757	0.017	0.006

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

		DIFF. WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 2 (500 MG/KG/DAY)							
161	AFTER 2 WEEKS	0.081	0.010	0.003	0.877	0.016	0.012
	AFTER 6 WEEKS	0.247	0.014	0.003	0.711	0.016	0.009
	AFTER 13 WEEKS	0.135	0.018	0.004	0.823	0.013	0.007
162	AFTER 2 WEEKS	0.135	0.013	0.005	0.815	0.021	0.011
	AFTER 6 WEEKS	0.115	0.020	0.004	0.814	0.029	0.019
	AFTER 13 WEEKS	0.259	0.014	0.004	0.696	0.022	0.005
163	AFTER 2 WEEKS	0.080	0.007	0.003	0.879	0.021	0.009
	AFTER 6 WEEKS	0.073	0.005	0.003	0.883	0.020	0.016
	AFTER 13 WEEKS	0.086	0.010	0.005	0.878	0.016	0.005
164	AFTER 2 WEEKS	0.118	0.009	0.003	0.849	0.012	0.008
	AFTER 6 WEEKS	0.253	0.014	0.002	0.707	0.014	0.009
	AFTER 13 WEEKS	0.161	0.025	0.007	0.788	0.015	0.004
165	AFTER 2 WEEKS	0.107	0.006	0.003	0.844	0.026	0.014
	AFTER 6 WEEKS	0.102	0.015	0.003	0.855	0.017	0.009
	AFTER 13 WEEKS	0.159	0.024	0.005	0.792	0.011	0.008
166	AFTER 2 WEEKS	0.113	0.018	0.002	0.832	0.023	0.013
	AFTER 6 WEEKS	0.161	0.025	0.002	0.779	0.022	0.012
	AFTER 13 WEEKS	0.135	0.010	0.005	0.818	0.025	0.007
167	AFTER 2 WEEKS	0.229	0.016	0.002	0.729	0.017	0.006
	AFTER 6 WEEKS	0.137	0.017	0.004	0.811	0.020	0.010
	AFTER 13 WEEKS	0.227	0.024	0.005	0.723	0.014	0.007
168	AFTER 2 WEEKS	0.150	0.010	0.004	0.806	0.022	0.009
	AFTER 6 WEEKS	0.142	0.010	0.004	0.815	0.019	0.011
	AFTER 13 WEEKS	0.128	0.014	0.005	0.825	0.023	0.004
169	AFTER 2 WEEKS	0.101	0.014	0.003	0.861	0.013	0.009
	AFTER 6 WEEKS	0.144	0.017	0.003	0.808	0.020	0.007
	AFTER 13 WEEKS	0.105	0.015	0.003	0.848	0.017	0.012
170	AFTER 2 WEEKS	0.088	0.017	0.006	0.864	0.015	0.010
	AFTER 6 WEEKS	0.107	0.017	0.002	0.841	0.022	0.011
	AFTER 13 WEEKS	0.127	0.016	0.005	0.824	0.023	0.005
171	AFTER 2 WEEKS	0.230	0.021	0.005	0.712	0.018	0.014
	AFTER 6 WEEKS	0.334	0.015	0.003	0.626	0.015	0.007
	AFTER 13 WEEKS	0.204	0.019	0.003	0.751	0.018	0.005
172	AFTER 2 WEEKS	0.298	0.030	0.005	0.602	0.047	0.017
	AFTER 6 WEEKS	0.318	0.020	0.005	0.601	0.040	0.016
	AFTER 13 WEEKS	0.500	0.051	0.008	0.404	0.034	0.003
173	AFTER 2 WEEKS	0.165	0.025	0.005	0.770	0.022	0.013
	AFTER 6 WEEKS	0.171	0.020	0.004	0.768	0.022	0.015
	AFTER 13 WEEKS	0.357	0.015	0.005	0.577	0.033	0.013
174	AFTER 2 WEEKS	0.306	0.030	0.005	0.639	0.016	0.005
	AFTER 6 WEEKS	0.173	0.014	0.003	0.757	0.032	0.021
	AFTER 13 WEEKS	0.154	0.021	0.005	0.799	0.018	0.004
175	AFTER 2 WEEKS	0.067	0.010	0.003	0.892	0.015	0.013
	AFTER 6 WEEKS	0.062	0.007	0.003	0.901	0.014	0.012
	AFTER 13 WEEKS	0.195	0.008	0.005	0.770	0.013	0.009
176	AFTER 2 WEEKS	0.076	0.017	0.003	0.881	0.009	0.014
	AFTER 6 WEEKS	0.094	0.020	0.004	0.855	0.013	0.015
	AFTER 13 WEEKS	0.099	0.022	0.006	0.835	0.023	0.015
177	AFTER 2 WEEKS	0.091	0.012	0.003	0.868	0.017	0.009
	AFTER 6 WEEKS	0.100	0.013	0.001	0.860	0.018	0.008

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

		DIFF.WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 2 (500 MG/KG/DAY)							
177	AFTER 13 WEEKS	0.189	0.018	0.008	0.756	0.025	0.005
178	AFTER 2 WEEKS	0.258	0.013	0.004	0.696	0.020	0.009
	AFTER 6 WEEKS	0.105	0.014	0.003	0.854	0.015	0.009
	AFTER 13 WEEKS	0.122	0.031	0.005	0.814	0.022	0.005
179	AFTER 2 WEEKS	0.182	0.010	0.004	0.780	0.015	0.008
	AFTER 6 WEEKS	0.175	0.021	0.003	0.778	0.015	0.008
	AFTER 13 WEEKS	0.189	0.017	0.006	0.760	0.021	0.007
180	AFTER 2 WEEKS	0.143	0.010	0.003	0.820	0.013	0.011
	AFTER 6 WEEKS	0.107	0.008	0.003	0.858	0.014	0.010
	AFTER 13 WEEKS	0.187	0.010	0.007	0.778	0.010	0.009
GROUP 3 (1000 MG/KG/DAY)							
187	AFTER 2 WEEKS	0.064	0.006	0.002	0.900	0.013	0.015
	AFTER 6 WEEKS	0.065	0.009	0.006	0.901	0.012	0.007
	AFTER 13 WEEKS	0.134	0.011	0.004	0.828	0.017	0.007
188	AFTER 2 WEEKS	0.090	0.011	0.004	0.842	0.034	0.020
	AFTER 6 WEEKS	0.189	0.020	0.004	0.741	0.029	0.017
	AFTER 13 WEEKS	0.184	0.022	0.006	0.748	0.034	0.006
189	AFTER 2 WEEKS	0.095	0.013	0.004	0.859	0.022	0.008
	AFTER 6 WEEKS	0.133	0.009	0.002	0.830	0.019	0.007
	AFTER 13 WEEKS	0.093	0.014	0.005	0.838	0.032	0.019
190	AFTER 2 WEEKS	0.128	0.018	0.004	0.831	0.012	0.007
	AFTER 6 WEEKS	0.135	0.019	0.002	0.816	0.019	0.010
	AFTER 13 WEEKS	0.136	0.021	0.004	0.817	0.016	0.006
191	AFTER 2 WEEKS	0.208	0.020	0.003	0.743	0.017	0.009
	AFTER 6 WEEKS	0.178	0.016	0.005	0.771	0.018	0.013
	AFTER 13 WEEKS	0.214	0.023	0.005	0.726	0.027	0.004
192	AFTER 2 WEEKS	0.183	0.014	0.003	0.779	0.014	0.007
	AFTER 6 WEEKS	0.176	0.011	0.003	0.786	0.014	0.010
	AFTER 13 WEEKS	0.194	0.015	0.004	0.773	0.009	0.005
193	AFTER 2 WEEKS	0.101	0.011	0.003	0.858	0.016	0.012
	AFTER 6 WEEKS	0.101	0.010	0.003	0.864	0.012	0.010
	AFTER 13 WEEKS	0.117	0.017	0.004	0.842	0.015	0.005
194	AFTER 2 WEEKS	0.081	0.009	0.004	0.880	0.014	0.013
	AFTER 6 WEEKS	0.123	0.010	0.002	0.836	0.014	0.016
	AFTER 13 WEEKS	0.133	0.023	0.003	0.822	0.014	0.004
195	AFTER 2 WEEKS	0.113	0.011	0.002	0.843	0.015	0.016
	AFTER 6 WEEKS	0.179	0.011	0.003	0.778	0.015	0.015
	AFTER 13 WEEKS	0.241	0.014	0.005	0.719	0.018	0.003
196	AFTER 2 WEEKS	0.106	0.008	0.004	0.864	0.008	0.009
	AFTER 6 WEEKS	0.191	0.024	0.003	0.760	0.014	0.009
	AFTER 13 WEEKS	0.244	0.012	0.004	0.726	0.010	0.004
197	AFTER 2 WEEKS	0.230	0.016	0.003	0.728	0.015	0.007
	AFTER 6 WEEKS	0.239	0.009	0.002	0.725	0.015	0.010
	AFTER 13 WEEKS	0.160	0.012	0.007	0.797	0.018	0.005
198	AFTER 2 WEEKS	0.118	0.018	0.003	0.838	0.014	0.009
	AFTER 6 WEEKS	0.119	0.012	0.001	0.847	0.009	0.010
	AFTER 13 WEEKS	0.187	0.019	0.007	0.768	0.011	0.007

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

		DIFF. WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 3 (1000 MG/KG/DAY)							
199	AFTER 2 WEEKS	0.106	0.012	0.005	0.854	0.013	0.009
	AFTER 6 WEEKS	0.139	0.012	0.001	0.815	0.021	0.012
	AFTER 13 WEEKS	0.137	0.017	0.005	0.810	0.019	0.011
200	AFTER 2 WEEKS	0.299	0.034	0.003	0.646	0.014	0.004
	AFTER 6 WEEKS	0.146	0.014	0.005	0.809	0.018	0.008
	AFTER 13 WEEKS	0.181	0.022	0.004	0.773	0.014	0.006
201	AFTER 2 WEEKS	0.127	0.015	0.002	0.836	0.013	0.008
	AFTER 6 WEEKS	0.266	0.014	0.001	0.697	0.014	0.009
	AFTER 13 WEEKS	0.161	0.018	0.003	0.779	0.033	0.005
202	AFTER 2 WEEKS	0.083	0.016	0.002	0.877	0.011	0.012
	AFTER 6 WEEKS	0.063	0.006	0.004	0.908	0.010	0.008
	AFTER 13 WEEKS	0.082	0.007	0.007	0.881	0.016	0.008
203	AFTER 2 WEEKS	0.291	0.025	0.005	0.650	0.020	0.009
	AFTER 6 WEEKS	0.151	0.016	0.003	0.797	0.023	0.010
	AFTER 13 WEEKS	0.148	0.026	0.006	0.768	0.037	0.015
204	AFTER 2 WEEKS	0.138	0.020	0.002	0.816	0.014	0.011
	AFTER 6 WEEKS	0.253	0.009	0.003	0.713	0.012	0.009
	AFTER 13 WEEKS	0.131	0.022	0.005	0.826	0.012	0.005
205	AFTER 2 WEEKS	0.165	0.034	0.002	0.773	0.019	0.007
	AFTER 6 WEEKS	0.127	0.022	0.003	0.819	0.019	0.009
	AFTER 13 WEEKS	0.166	0.029	0.007	0.770	0.025	0.003
206	AFTER 2 WEEKS	0.085	0.005	0.003	0.880	0.016	0.011
	AFTER 6 WEEKS	0.107	0.011	0.003	0.845	0.024	0.010
	AFTER 13 WEEKS	0.119	0.016	0.004	0.825	0.029	0.007
GROUP 4 (2000 MG/KG/DAY)							
213	AFTER 2 WEEKS	0.115	0.005	0.005	0.848	0.014	0.013
	AFTER 6 WEEKS	0.081	0.006	0.003	0.886	0.012	0.012
	AFTER 13 WEEKS	0.166	0.007	0.007	0.803	0.012	0.004
214	AFTER 2 WEEKS	0.092	0.012	0.003	0.852	0.026	0.014
	AFTER 6 WEEKS	0.110	0.011	0.004	0.841	0.022	0.013
	AFTER 13 WEEKS	0.128	0.007	0.009	0.819	0.027	0.009
215	AFTER 2 WEEKS	0.133	0.018	0.004	0.826	0.009	0.011
	AFTER 6 WEEKS	0.171	0.012	0.002	0.793	0.014	0.008
	AFTER 13 WEEKS	0.101	0.012	0.002	0.872	0.009	0.003
216	AFTER 2 WEEKS	0.091	0.013	0.002	0.856	0.021	0.018
	AFTER 6 WEEKS	0.167	0.010	0.003	0.783	0.023	0.015
	AFTER 13 WEEKS	0.178	0.022	0.011	0.762	0.022	0.018
217	AFTER 2 WEEKS	0.130	0.013	0.004	0.819	0.023	0.010
	AFTER 6 WEEKS	0.128	0.013	0.002	0.806	0.031	0.020
	AFTER 13 WEEKS	0.156	0.018	0.006	0.796	0.019	0.006
218	AFTER 2 WEEKS	0.124	0.014	0.003	0.820	0.027	0.012
	AFTER 6 WEEKS	0.101	0.014	0.004	0.835	0.023	0.023
	AFTER 13 WEEKS	0.166	0.027	0.003	0.774	0.022	0.009
219	AFTER 2 WEEKS	0.135	0.020	0.006	0.813	0.014	0.013
	AFTER 6 WEEKS	0.112	0.015	0.007	0.817	0.025	0.023
	AFTER 13 WEEKS	0.379	0.026	0.004	0.559	0.022	0.009
220	AFTER 2 WEEKS	0.164	0.005	0.004	0.793	0.019	0.015
	AFTER 6 WEEKS	0.100	0.006	0.004	0.862	0.013	0.015
	AFTER 13 WEEKS	0.217	0.012	0.005	0.740	0.022	0.004

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

		DIFF.WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 4 (2000 MG/KG/DAY)							
221	AFTER 2 WEEKS	0.143	0.010	0.003	0.823	0.013	0.008
	AFTER 6 WEEKS	0.174	0.003	0.004	0.774	0.025	0.020
	AFTER 13 WEEKS	0.161	0.012	0.007	0.795	0.020	0.004
222	AFTER 2 WEEKS	0.071	0.011	0.006	0.884	0.020	0.009
	AFTER 6 WEEKS	0.129	0.017	0.003	0.821	0.018	0.012
	AFTER 13 WEEKS	0.084	0.018	0.006	0.857	0.030	0.006
223	AFTER 2 WEEKS	0.122	0.018	0.002	0.838	0.011	0.009
	AFTER 6 WEEKS	0.182	0.010	0.003	0.782	0.017	0.006
	AFTER 13 WEEKS	0.137	0.015	0.007	0.819	0.015	0.007
224	AFTER 2 WEEKS	0.080	0.010	0.003	0.891	0.010	0.007
	AFTER 6 WEEKS	0.091	0.010	0.003	0.871	0.012	0.013
	AFTER 13 WEEKS	0.099	0.013	0.004	0.860	0.014	0.010
225	AFTER 2 WEEKS	0.080	0.004	0.002	0.888	0.014	0.012
	AFTER 6 WEEKS	0.108	0.010	0.003	0.833	0.027	0.019
	AFTER 13 WEEKS	0.130	0.017	0.006	0.819	0.021	0.007
226	AFTER 2 WEEKS	0.171	0.013	0.005	0.789	0.016	0.005
	AFTER 6 WEEKS	0.206	0.008	0.005	0.744	0.024	0.014
	AFTER 13 WEEKS	0.130	0.015	0.007	0.821	0.017	0.010
227	AFTER 2 WEEKS	0.153	0.012	0.004	0.804	0.014	0.013
	AFTER 6 WEEKS	0.125	0.015	0.001	0.828	0.019	0.011
	AFTER 13 WEEKS	0.207	0.014	0.005	0.747	0.020	0.007
228	AFTER 2 WEEKS	0.081	0.009	0.003	0.875	0.018	0.014
	AFTER 6 WEEKS	0.112	0.011	0.002	0.845	0.019	0.011
	AFTER 13 WEEKS	0.082	0.017	0.007	0.873	0.014	0.007
229	AFTER 2 WEEKS	0.081	0.012	0.004	0.878	0.014	0.012
	AFTER 6 WEEKS	0.298	0.020	0.002	0.652	0.016	0.012
	AFTER 13 WEEKS	0.187	0.018	0.009	0.746	0.029	0.010
230	AFTER 2 WEEKS	0.085	0.020	0.003	0.868	0.015	0.009
	AFTER 6 WEEKS	0.149	0.014	0.003	0.800	0.024	0.011
	AFTER 13 WEEKS	0.110	0.008	0.006	0.854	0.016	0.005
231	AFTER 2 WEEKS	0.283	0.033	0.004	0.617	0.051	0.013
	AFTER 6 WEEKS	0.327	0.039	0.007	0.552	0.053	0.022
	AFTER 13 WEEKS	0.351	0.041	0.008	0.537	0.058	0.005
232	AFTER 2 WEEKS	0.116	0.010	0.003	0.846	0.014	0.010
	AFTER 6 WEEKS	0.137	0.014	0.004	0.813	0.021	0.011
	AFTER 13 WEEKS	0.217	0.011	0.004	0.748	0.014	0.006
233	AFTER 2 WEEKS	0.105	0.006	0.003	0.866	0.014	0.007
	AFTER 6 WEEKS	0.112	0.016	0.002	0.838	0.018	0.014
	AFTER 13 WEEKS	0.270	0.023	0.002	0.686	0.011	0.007
	AFTER 17 WEEKS	0.124	0.012	0.007	0.838	0.014	0.005
234	AFTER 2 WEEKS	0.164	0.017	0.006	0.788	0.017	0.009
	AFTER 6 WEEKS	0.228	0.018	0.003	0.721	0.020	0.011
	AFTER 13 WEEKS	0.204	0.029	0.003	0.731	0.025	0.007
	AFTER 17 WEEKS	0.196	0.025	0.007	0.738	0.027	0.007
235	AFTER 2 WEEKS	0.242	0.010	0.005	0.710	0.020	0.013
	AFTER 6 WEEKS	0.151	0.012	0.003	0.806	0.018	0.010
	AFTER 13 WEEKS	0.140	0.023	0.006	0.807	0.020	0.004
	AFTER 17 WEEKS	0.103	0.019	0.007	0.843	0.018	0.010
236	AFTER 2 WEEKS	0.101	0.018	0.004	0.855	0.013	0.008
	AFTER 6 WEEKS	0.207	0.010	0.004	0.749	0.017	0.013
	AFTER 13 WEEKS	0.173	0.022	0.005	0.769	0.026	0.005

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

		DIFF.WBC COUNT (REL)					
ANIMAL NUMBER		NEUT rel. 1	EOS rel. 1	BASO rel. 1	LYMPH rel. 1	MONO rel. 1	LUC rel. 1
GROUP 4 (2000 MG/KG/DAY)							
236	AFTER 17 WEEKS	0.260	0.012	0.006	0.686	0.027	0.009
237	AFTER 2 WEEKS	0.119	0.011	0.004	0.842	0.016	0.009
	AFTER 6 WEEKS	0.128	0.015	0.003	0.818	0.025	0.012
	AFTER 13 WEEKS	0.167	0.022	0.004	0.780	0.023	0.005
	AFTER 17 WEEKS	0.243	0.017	0.009	0.708	0.020	0.004
238	AFTER 2 WEEKS	0.094	0.012	0.003	0.868	0.015	0.009
	AFTER 6 WEEKS	0.118	0.008	0.003	0.840	0.019	0.012
	AFTER 13 WEEKS	0.129	0.008	0.006	0.834	0.017	0.006
	AFTER 17 WEEKS	0.154	0.016	0.005	0.801	0.016	0.008
239	AFTER 2 WEEKS	0.199	0.017	0.003	0.751	0.021	0.010
	AFTER 6 WEEKS	0.098	0.017	0.004	0.862	0.011	0.009
	AFTER 13 WEEKS	0.219	0.018	0.004	0.739	0.017	0.004
	AFTER 17 WEEKS	0.120	0.021	0.007	0.828	0.016	0.008
240	AFTER 2 WEEKS	0.071	0.008	0.003	0.892	0.012	0.014
	AFTER 6 WEEKS	0.033	0.007	0.004	0.947	0.007	0.001
	AFTER 13 WEEKS	0.068	0.014	0.006	0.892	0.014	0.006
	AFTER 17 WEEKS	0.055	0.012	0.009	0.902	0.011	0.010
241	AFTER 2 WEEKS	0.338	0.030	0.003	0.571	0.048	0.010
	AFTER 6 WEEKS	0.431	0.025	0.003	0.495	0.036	0.010
	AFTER 13 WEEKS	0.438	0.041	0.009	0.465	0.044	0.002
	AFTER 17 WEEKS	0.449	0.046	0.009	0.464	0.028	0.003
242	AFTER 2 WEEKS	0.098	0.009	0.003	0.875	0.008	0.008
	AFTER 6 WEEKS	0.128	0.014	0.003	0.831	0.016	0.007
	AFTER 13 WEEKS	0.181	0.011	0.007	0.782	0.012	0.006
	AFTER 17 WEEKS	0.160	0.019	0.013	0.782	0.019	0.007

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)HEMATOLOGY
FEMALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 1 (0 MG/KG/DAY)								
125	AFTER 2 WEEKS	1.22	0.10	0.01	3.36	0.06	0.04	687
	AFTER 6 WEEKS	0.54	0.05	0.02	3.52	0.08	0.05	872
	AFTER 13 WEEKS	0.52	0.09	0.01	3.25	0.06	0.02	768
126	AFTER 2 WEEKS	0.81	0.05	0.04	5.76	0.17	0.13	1185
	AFTER 6 WEEKS	0.93	0.05	0.02	3.63	0.13	0.05	1068
	AFTER 13 WEEKS	0.42	0.07	0.01	4.39	0.08	0.04	974
127	AFTER 2 WEEKS	0.68	0.07	0.02	5.70	0.09	0.09	1084
	AFTER 6 WEEKS	0.53	0.03	0.01	2.41	0.07	0.04	972
	AFTER 13 WEEKS	0.52	0.04	0.01	3.60	0.08	0.04	992
128	AFTER 2 WEEKS	0.57	0.05	0.02	5.98	0.09	0.06	1067
	AFTER 6 WEEKS	0.67	0.10	0.01	5.25	0.09	0.10	911
	AFTER 13 WEEKS	0.54	0.08	0.01	2.77	0.07	0.01	1004
129	AFTER 2 WEEKS	0.64	0.10	0.01	1.34	0.06	0.02	1087
	AFTER 6 WEEKS	0.87	0.09	0.00	1.33	0.09	0.02	971
	AFTER 13 WEEKS	0.80	0.13	0.02	1.02	0.10	0.01	959
130	AFTER 2 WEEKS	0.48	0.05	0.02	3.65	0.12	0.06	1182
	AFTER 6 WEEKS	0.66	0.08	0.01	2.99	0.09	0.04	983
	AFTER 13 WEEKS	0.82	0.04	0.01	3.07	0.04	0.02	1028
131	AFTER 2 WEEKS	0.63	0.09	0.06	5.34	0.08	0.08	1293
	AFTER 6 WEEKS	0.52	0.08	0.02	4.22	0.05	0.05	1053
	AFTER 13 WEEKS	0.60	0.05	0.02	3.28	0.09	0.04	873
132	AFTER 2 WEEKS	0.59	0.07	0.02	6.81	0.15	0.08	1362
	AFTER 6 WEEKS	0.77	0.05	0.01	3.92	0.05	0.04	1135
	AFTER 13 WEEKS	0.49	0.08	0.02	5.14	0.09	0.04	1089
133	AFTER 2 WEEKS	0.74	0.06	0.02	6.12	0.12	0.07	1135
	AFTER 6 WEEKS	0.94	0.07	0.02	4.17	0.07	0.04	1172
	AFTER 13 WEEKS	0.95	0.08	0.02	5.09	0.11	0.03	1132
134	AFTER 2 WEEKS	0.50	0.04	0.02	5.33	0.09	0.06	1176
	AFTER 6 WEEKS	0.55	0.07	0.02	4.20	0.08	0.05	976
	AFTER 13 WEEKS	0.72	0.06	0.02	3.43	0.14	0.05	1009
135	AFTER 2 WEEKS	0.48	0.05	0.01	5.40	0.09	0.07	1203
	AFTER 6 WEEKS	0.77	0.06	0.02	4.04	0.09	0.05	1015
	AFTER 13 WEEKS	0.62	0.07	0.02	3.97	0.08	0.02	1067
136	AFTER 2 WEEKS	0.34	0.05	0.00	4.36	0.09	0.06	1064
	AFTER 6 WEEKS	0.44	0.09	0.01	1.54	0.03	0.04	813
	AFTER 13 WEEKS	0.26	0.06	0.03	3.40	0.07	0.04	1073
137	AFTER 2 WEEKS	1.04	0.09	0.02	3.48	0.06	0.04	943
	AFTER 6 WEEKS	0.52	0.08	0.01	3.25	0.09	0.03	878
	AFTER 13 WEEKS	0.50	0.07	0.02	3.47	0.13	0.05	1020
138	AFTER 2 WEEKS	0.79	0.05	0.01	2.48	0.07	0.03	862
	AFTER 6 WEEKS	0.67	0.06	0.01	3.46	0.09	0.03	931
	AFTER 13 WEEKS	1.21	0.11	0.02	2.10	0.05	0.01	718
139	AFTER 2 WEEKS	1.04	0.03	0.02	4.28	0.09	0.04	949
	AFTER 6 WEEKS	0.57	0.06	0.01	3.93	0.08	0.05	817
	AFTER 13 WEEKS	0.67	0.08	0.02	4.22	0.10	0.03	882
140	AFTER 2 WEEKS	0.65	0.05	0.03	3.60	0.07	0.06	909
	AFTER 6 WEEKS	0.80	0.10	0.01	3.68	0.08	0.06	912
	AFTER 13 WEEKS	0.71	0.08	0.02	3.41	0.07	0.05	951
141	AFTER 2 WEEKS	0.44	0.06	0.01	3.01	0.10	0.07	1307
	AFTER 6 WEEKS	0.75	0.08	0.01	2.21	0.07	0.03	804

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**HEMATOLOGY**
FEMALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 1 (0 MG/KG/DAY)								
141	AFTER 13 WEEKS	0.52	0.03	0.01	2.01	0.05	0.02	1111
142	AFTER 2 WEEKS	1.03	0.08	0.03	5.47	0.12	0.10	1148
	AFTER 6 WEEKS	0.53	0.11	0.02	4.24	0.09	0.05	943
	AFTER 13 WEEKS	0.56	0.10	0.05	4.53	0.06	0.04	981
143	AFTER 2 WEEKS	0.43	0.07	0.02	3.98	0.08	0.08	1197
	AFTER 6 WEEKS	0.65	0.10	0.01	2.89	0.13	0.04	813
	AFTER 13 WEEKS	0.63	0.07	0.04	2.49	0.10	0.06	996
144	AFTER 2 WEEKS	0.35	0.04	0.02	3.13	0.06	0.06	1120
	AFTER 6 WEEKS	0.50	0.05	0.02	2.96	0.08	0.07	896
	AFTER 13 WEEKS	0.64	0.08	0.03	3.22	0.09	0.07	938
145	AFTER 2 WEEKS	0.32	0.05	0.02	3.67	0.05	0.04	1117
	AFTER 6 WEEKS	0.25	0.04	0.01	2.67	0.03	0.05	870
	AFTER 13 WEEKS	0.29	0.07	0.01	3.07	0.05	0.01	915
	AFTER 17 WEEKS	0.35	0.05	0.03	2.55	0.06	0.06	883
146	AFTER 2 WEEKS	0.53	0.07	0.03	5.52	0.07	0.06	1250
	AFTER 6 WEEKS	0.66	0.07	0.02	4.45	0.06	0.08	814
	AFTER 13 WEEKS	0.66	0.05	0.03	4.53	0.08	0.04	1005
	AFTER 17 WEEKS	0.43	0.05	0.04	3.40	0.04	0.04	936
147	AFTER 2 WEEKS	0.78	0.15	0.01	3.60	0.11	0.05	1069
	AFTER 6 WEEKS	0.82	0.07	0.01	3.96	0.11	0.06	1001
	AFTER 13 WEEKS	1.11	0.06	0.02	3.65	0.16	0.02	1113
	AFTER 17 WEEKS	0.98	0.09	0.05	3.30	0.09	0.03	1048
148	AFTER 2 WEEKS	0.36	0.04	0.02	3.70	0.05	0.03	1328
	AFTER 6 WEEKS	0.48	0.06	0.01	3.09	0.05	0.03	832
	AFTER 13 WEEKS	0.46	0.03	0.01	3.15	0.06	0.03	984
	AFTER 17 WEEKS	0.54	0.06	0.04	3.23	0.12	0.04	1037
149	AFTER 2 WEEKS	0.38	0.04	0.02	5.11	0.07	0.06	1261
	AFTER 6 WEEKS	0.58	0.06	0.02	3.65	0.06	0.07	843
	AFTER 13 WEEKS	0.61	0.05	0.02	3.27	0.07	0.04	1027
	AFTER 17 WEEKS	0.64	0.08	0.03	3.60	0.08	0.03	1010
150	AFTER 2 WEEKS	0.97	0.07	0.02	2.79	0.06	0.04	719
	AFTER 6 WEEKS	1.35	0.11	0.02	4.07	0.15	0.06	782
	AFTER 13 WEEKS	0.90	0.11	0.02	3.39	0.09	0.01	904
	AFTER 17 WEEKS	0.76	0.09	0.03	2.62	0.06	0.02	970
151	AFTER 2 WEEKS	0.55	0.06	0.01	2.43	0.07	0.03	1209
	AFTER 6 WEEKS	0.59	0.10	0.01	2.81	0.10	0.04	918
	AFTER 13 WEEKS	0.61	0.07	0.02	2.43	0.11	0.02	1031
	AFTER 17 WEEKS	0.62	0.10	0.01	1.72	0.07	0.02	980
152	AFTER 2 WEEKS	0.56	0.07	0.01	4.05	0.06	0.04	1081
	AFTER 6 WEEKS	0.79	0.13	0.01	3.61	0.11	0.07	862
	AFTER 13 WEEKS	0.44	0.06	0.01	3.43	0.09	0.03	1127
	AFTER 17 WEEKS	0.68	0.06	0.04	2.73	0.07	0.02	966
153	AFTER 2 WEEKS	0.45	0.07	0.02	2.98	0.07	0.05	1144
	AFTER 6 WEEKS	0.63	0.08	0.01	3.73	0.09	0.07	876
	AFTER 13 WEEKS	0.44	0.07	0.02	2.78	0.05	0.03	919
	AFTER 17 WEEKS	0.50	0.10	0.03	2.76	0.06	0.02	925
154	AFTER 2 WEEKS	0.61	0.07	0.02	4.02	0.09	0.04	1087
	AFTER 6 WEEKS	0.78	0.09	0.01	4.40	0.11	0.06	807
	AFTER 13 WEEKS	0.65	0.10	0.02	3.51	0.09	0.03	1071
	AFTER 17 WEEKS	0.81	0.11	0.04	3.31	0.07	0.03	1113

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**HEMATOLOGY**
FEMALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 2 (500 MG/KG/DAY)								
161	AFTER 2 WEEKS	0.45	0.06	0.02	4.88	0.09	0.07	1294
	AFTER 6 WEEKS	0.81	0.05	0.01	2.33	0.05	0.03	934
	AFTER 13 WEEKS	0.68	0.09	0.02	4.14	0.07	0.03	1139
162	AFTER 2 WEEKS	0.52	0.05	0.02	3.12	0.08	0.04	1062
	AFTER 6 WEEKS	0.51	0.09	0.02	3.60	0.13	0.08	858
	AFTER 13 WEEKS	0.79	0.04	0.01	2.13	0.07	0.01	850
163	AFTER 2 WEEKS	0.42	0.04	0.02	4.59	0.11	0.04	1116
	AFTER 6 WEEKS	0.45	0.03	0.02	5.47	0.12	0.10	799
	AFTER 13 WEEKS	0.40	0.05	0.02	4.10	0.08	0.02	990
164	AFTER 2 WEEKS	0.58	0.05	0.01	4.16	0.06	0.04	1218
	AFTER 6 WEEKS	0.99	0.06	0.01	2.78	0.06	0.04	1030
	AFTER 13 WEEKS	0.51	0.08	0.02	2.51	0.05	0.01	1185
165	AFTER 2 WEEKS	0.58	0.03	0.01	4.53	0.14	0.07	1147
	AFTER 6 WEEKS	0.54	0.08	0.02	4.57	0.09	0.05	852
	AFTER 13 WEEKS	0.55	0.08	0.02	2.72	0.04	0.03	1002
166	AFTER 2 WEEKS	0.55	0.09	0.01	4.04	0.11	0.07	1100
	AFTER 6 WEEKS	0.85	0.13	0.01	4.13	0.12	0.06	513
	AFTER 13 WEEKS	0.52	0.04	0.02	3.15	0.10	0.03	980
167	AFTER 2 WEEKS	1.06	0.07	0.01	3.38	0.08	0.03	1457
	AFTER 6 WEEKS	0.62	0.08	0.02	3.64	0.09	0.05	1058
	AFTER 13 WEEKS	0.63	0.07	0.02	2.00	0.04	0.02	1262
168	AFTER 2 WEEKS	0.94	0.06	0.02	5.05	0.14	0.06	1365
	AFTER 6 WEEKS	0.68	0.05	0.02	3.88	0.09	0.05	1009
	AFTER 13 WEEKS	0.58	0.06	0.02	3.72	0.10	0.02	1091
169	AFTER 2 WEEKS	0.52	0.07	0.02	4.40	0.06	0.04	1158
	AFTER 6 WEEKS	1.03	0.12	0.02	5.73	0.14	0.05	936
	AFTER 13 WEEKS	0.57	0.08	0.02	4.57	0.09	0.06	917
170	AFTER 2 WEEKS	0.40	0.08	0.03	3.97	0.07	0.04	1004
	AFTER 6 WEEKS	0.52	0.08	0.01	4.07	0.10	0.05	898
	AFTER 13 WEEKS	0.45	0.06	0.02	2.93	0.08	0.02	1019
171	AFTER 2 WEEKS	0.86	0.08	0.02	2.64	0.07	0.05	1403
	AFTER 6 WEEKS	1.49	0.07	0.01	2.78	0.07	0.03	1102
	AFTER 13 WEEKS	0.81	0.08	0.01	2.99	0.07	0.02	1015
172	AFTER 2 WEEKS	0.64	0.06	0.01	1.29	0.10	0.04	1037
	AFTER 6 WEEKS	0.76	0.05	0.01	1.45	0.10	0.04	781
	AFTER 13 WEEKS	1.30	0.13	0.02	1.05	0.09	0.01	806
173	AFTER 2 WEEKS	0.78	0.12	0.03	3.65	0.10	0.06	1040
	AFTER 6 WEEKS	0.92	0.11	0.02	4.14	0.12	0.08	952
	AFTER 13 WEEKS	1.09	0.05	0.01	1.76	0.10	0.04	979
174	AFTER 2 WEEKS	1.01	0.10	0.02	2.10	0.05	0.02	677
	AFTER 6 WEEKS	0.78	0.06	0.01	3.39	0.14	0.10	1061
	AFTER 13 WEEKS	0.57	0.08	0.02	2.96	0.07	0.01	1050
175	AFTER 2 WEEKS	0.37	0.06	0.01	4.96	0.09	0.07	903
	AFTER 6 WEEKS	0.39	0.04	0.02	5.65	0.09	0.08	823
	AFTER 13 WEEKS	0.78	0.03	0.02	3.10	0.05	0.03	699
176	AFTER 2 WEEKS	0.35	0.08	0.01	4.00	0.04	0.06	1400
	AFTER 6 WEEKS	0.44	0.09	0.02	4.04	0.06	0.07	1111
	AFTER 13 WEEKS	0.54	0.12	0.03	4.58	0.12	0.08	1342
177	AFTER 2 WEEKS	0.38	0.05	0.01	3.62	0.07	0.04	1154
	AFTER 6 WEEKS	0.40	0.05	0.00	3.46	0.07	0.03	704

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**HEMATOLOGY**
FEMALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 2 (500 MG/KG/DAY)								
177	AFTER 13 WEEKS	0.57	0.06	0.02	2.30	0.07	0.01	990
178	AFTER 2 WEEKS	1.29	0.07	0.02	3.47	0.10	0.04	1109
	AFTER 6 WEEKS	0.41	0.05	0.01	3.36	0.06	0.03	813
	AFTER 13 WEEKS	0.51	0.13	0.02	3.41	0.09	0.02	979
179	AFTER 2 WEEKS	0.66	0.03	0.02	2.84	0.06	0.03	1037
	AFTER 6 WEEKS	0.69	0.08	0.01	3.06	0.06	0.03	872
	AFTER 13 WEEKS	0.60	0.06	0.02	2.42	0.07	0.02	883
180	AFTER 2 WEEKS	0.87	0.06	0.02	5.00	0.08	0.07	1059
	AFTER 6 WEEKS	0.52	0.04	0.02	4.17	0.07	0.05	874
	AFTER 13 WEEKS	0.97	0.05	0.03	4.01	0.05	0.04	1036
GROUP 3 (1000 MG/KG/DAY)								
187	AFTER 2 WEEKS	0.30	0.03	0.01	4.13	0.06	0.07	1142
	AFTER 6 WEEKS	0.31	0.04	0.03	4.25	0.06	0.03	1047
	AFTER 13 WEEKS	0.39	0.03	0.01	2.44	0.05	0.02	925
188	AFTER 2 WEEKS	0.52	0.06	0.02	4.92	0.20	0.12	1233
	AFTER 6 WEEKS	0.78	0.08	0.02	3.05	0.12	0.07	891
	AFTER 13 WEEKS	0.66	0.08	0.02	2.67	0.12	0.02	997
189	AFTER 2 WEEKS	0.44	0.06	0.02	3.95	0.10	0.04	1527
	AFTER 6 WEEKS	0.61	0.04	0.01	3.83	0.09	0.03	1238
	AFTER 13 WEEKS	0.29	0.04	0.02	2.60	0.10	0.06	1330
190	AFTER 2 WEEKS	0.56	0.08	0.02	3.62	0.05	0.03	1100
	AFTER 6 WEEKS	0.56	0.08	0.01	3.38	0.08	0.04	889
	AFTER 13 WEEKS	0.39	0.06	0.01	2.34	0.05	0.02	934
191	AFTER 2 WEEKS	1.10	0.10	0.01	3.93	0.09	0.05	1085
	AFTER 6 WEEKS	0.70	0.06	0.02	3.02	0.07	0.05	917
	AFTER 13 WEEKS	0.61	0.07	0.02	2.06	0.08	0.01	950
192	AFTER 2 WEEKS	1.06	0.08	0.02	4.50	0.08	0.04	1162
	AFTER 6 WEEKS	0.82	0.05	0.01	3.67	0.07	0.04	908
	AFTER 13 WEEKS	0.47	0.04	0.01	1.88	0.02	0.01	878
193	AFTER 2 WEEKS	0.55	0.06	0.02	4.68	0.09	0.07	1268
	AFTER 6 WEEKS	0.54	0.06	0.01	4.65	0.07	0.05	1088
	AFTER 13 WEEKS	0.44	0.06	0.01	3.18	0.06	0.02	1158
194	AFTER 2 WEEKS	0.47	0.05	0.02	5.08	0.08	0.07	1081
	AFTER 6 WEEKS	0.50	0.04	0.01	3.43	0.06	0.06	794
	AFTER 13 WEEKS	0.52	0.09	0.01	3.23	0.06	0.02	904
195	AFTER 2 WEEKS	0.79	0.08	0.02	5.90	0.10	0.11	1190
	AFTER 6 WEEKS	0.84	0.05	0.01	3.66	0.07	0.07	1005
	AFTER 13 WEEKS	0.99	0.06	0.02	2.97	0.07	0.01	1077
196	AFTER 2 WEEKS	0.74	0.06	0.03	5.98	0.06	0.06	1120
	AFTER 6 WEEKS	0.92	0.11	0.01	3.66	0.07	0.04	923
	AFTER 13 WEEKS	1.02	0.05	0.02	3.03	0.04	0.02	949
197	AFTER 2 WEEKS	0.76	0.05	0.01	2.41	0.05	0.02	1182
	AFTER 6 WEEKS	0.95	0.04	0.01	2.87	0.06	0.04	908
	AFTER 13 WEEKS	0.62	0.05	0.03	3.12	0.07	0.02	852
198	AFTER 2 WEEKS	0.59	0.09	0.01	4.19	0.07	0.05	1146
	AFTER 6 WEEKS	0.66	0.07	0.01	4.69	0.05	0.06	735
	AFTER 13 WEEKS	0.68	0.07	0.03	2.78	0.04	0.02	1011

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

HEMATOLOGY
FEMALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 3 (1000 MG/KG/DAY)								
199	AFTER 2 WEEKS	0.68	0.08	0.03	5.44	0.08	0.06	1095
	AFTER 6 WEEKS	0.77	0.07	0.00	4.53	0.11	0.07	880
	AFTER 13 WEEKS	0.70	0.09	0.03	4.11	0.10	0.06	1002
200	AFTER 2 WEEKS	1.21	0.14	0.01	2.61	0.06	0.02	740
	AFTER 6 WEEKS	0.60	0.06	0.02	3.32	0.07	0.03	870
	AFTER 13 WEEKS	0.48	0.06	0.01	2.06	0.04	0.01	828
201	AFTER 2 WEEKS	0.69	0.08	0.01	4.57	0.07	0.04	1166
	AFTER 6 WEEKS	1.03	0.05	0.00	2.70	0.05	0.04	906
	AFTER 13 WEEKS	0.66	0.07	0.01	3.17	0.13	0.02	1220
202	AFTER 2 WEEKS	0.54	0.10	0.01	5.70	0.07	0.07	812
	AFTER 6 WEEKS	0.27	0.03	0.02	3.92	0.05	0.04	857
	AFTER 13 WEEKS	0.38	0.03	0.03	4.08	0.07	0.04	915
203	AFTER 2 WEEKS	1.37	0.12	0.02	3.07	0.10	0.04	784
	AFTER 6 WEEKS	0.41	0.04	0.01	2.16	0.06	0.03	902
	AFTER 13 WEEKS	0.47	0.08	0.02	2.46	0.12	0.05	947
204	AFTER 2 WEEKS	0.64	0.09	0.01	3.77	0.06	0.05	1240
	AFTER 6 WEEKS	0.71	0.02	0.01	2.01	0.03	0.03	924
	AFTER 13 WEEKS	0.54	0.09	0.02	3.42	0.05	0.02	1078
205	AFTER 2 WEEKS	0.57	0.12	0.01	2.63	0.07	0.03	1085
	AFTER 6 WEEKS	0.37	0.07	0.01	2.39	0.06	0.03	812
	AFTER 13 WEEKS	0.51	0.09	0.02	2.34	0.07	0.01	985
206	AFTER 2 WEEKS	0.39	0.02	0.02	4.07	0.07	0.05	1148
	AFTER 6 WEEKS	0.39	0.04	0.01	3.11	0.09	0.04	836
	AFTER 13 WEEKS	0.48	0.07	0.02	3.33	0.12	0.03	1002
GROUP 4 (2000 MG/KG/DAY)								
213	AFTER 2 WEEKS	0.70	0.03	0.03	5.17	0.09	0.08	1157
	AFTER 6 WEEKS	0.64	0.05	0.02	7.03	0.09	0.10	931
	AFTER 13 WEEKS	0.68	0.03	0.03	3.31	0.05	0.02	930
214	AFTER 2 WEEKS	0.42	0.05	0.01	3.86	0.12	0.06	1202
	AFTER 6 WEEKS	0.66	0.06	0.02	5.07	0.13	0.08	1016
	AFTER 13 WEEKS	0.28	0.02	0.02	1.82	0.06	0.02	1037
215	AFTER 2 WEEKS	0.87	0.12	0.03	5.42	0.06	0.07	1111
	AFTER 6 WEEKS	0.80	0.06	0.01	3.70	0.07	0.04	951
	AFTER 13 WEEKS	0.32	0.04	0.01	2.74	0.03	0.01	1081
216	AFTER 2 WEEKS	0.49	0.07	0.01	4.64	0.11	0.10	1160
	AFTER 6 WEEKS	0.88	0.05	0.01	4.15	0.12	0.08	1000
	AFTER 13 WEEKS	0.64	0.08	0.04	2.73	0.08	0.07	1103
217	AFTER 2 WEEKS	0.82	0.08	0.03	5.12	0.15	0.06	1378
	AFTER 6 WEEKS	0.60	0.06	0.01	3.75	0.14	0.10	1038
	AFTER 13 WEEKS	0.51	0.06	0.02	2.56	0.06	0.02	1086
218	AFTER 2 WEEKS	0.55	0.06	0.01	3.66	0.12	0.05	1550
	AFTER 6 WEEKS	0.55	0.08	0.02	4.58	0.13	0.12	1170
	AFTER 13 WEEKS	0.50	0.08	0.01	2.33	0.07	0.03	1100
219	AFTER 2 WEEKS	0.74	0.11	0.03	4.49	0.08	0.07	744
	AFTER 6 WEEKS	0.73	0.10	0.04	5.33	0.17	0.15	877
	AFTER 13 WEEKS	1.73	0.12	0.02	2.55	0.10	0.04	627
220	AFTER 2 WEEKS	0.98	0.03	0.02	4.73	0.11	0.09	1139
	AFTER 6 WEEKS	0.50	0.03	0.02	4.29	0.07	0.07	1100
	AFTER 13 WEEKS	0.85	0.05	0.02	2.91	0.09	0.02	1156

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 4 (2000 MG/KG/DAY)								
221	AFTER 2 WEEKS	0.61	0.04	0.01	3.51	0.05	0.03	1508
	AFTER 6 WEEKS	0.89	0.02	0.02	3.96	0.13	0.10	961
	AFTER 13 WEEKS	0.51	0.04	0.02	2.52	0.06	0.01	1306
222	AFTER 2 WEEKS	0.29	0.04	0.02	3.60	0.08	0.04	1069
	AFTER 6 WEEKS	0.59	0.08	0.01	3.74	0.08	0.05	924
	AFTER 13 WEEKS	0.19	0.04	0.01	1.90	0.07	0.01	1023
223	AFTER 2 WEEKS	0.48	0.07	0.01	3.29	0.04	0.04	1140
	AFTER 6 WEEKS	1.02	0.06	0.02	4.39	0.09	0.03	976
	AFTER 13 WEEKS	0.76	0.08	0.04	4.58	0.08	0.04	1023
224	AFTER 2 WEEKS	0.43	0.05	0.02	4.78	0.05	0.04	1167
	AFTER 6 WEEKS	0.65	0.07	0.02	6.17	0.09	0.09	1022
	AFTER 13 WEEKS	0.74	0.10	0.03	6.43	0.10	0.07	1008
225	AFTER 2 WEEKS	0.31	0.02	0.01	3.41	0.05	0.05	1177
	AFTER 6 WEEKS	0.48	0.04	0.01	3.67	0.12	0.08	1045
	AFTER 13 WEEKS	0.63	0.08	0.03	3.98	0.10	0.04	1112
226	AFTER 2 WEEKS	0.55	0.04	0.02	2.54	0.05	0.02	1471
	AFTER 6 WEEKS	0.92	0.04	0.02	3.32	0.11	0.06	1065
	AFTER 13 WEEKS	0.52	0.06	0.03	3.30	0.07	0.04	1303
227	AFTER 2 WEEKS	0.60	0.05	0.02	3.14	0.05	0.05	1497
	AFTER 6 WEEKS	0.50	0.06	0.01	3.33	0.08	0.04	1042
	AFTER 13 WEEKS	0.89	0.06	0.02	3.19	0.09	0.03	1244
228	AFTER 2 WEEKS	0.50	0.06	0.02	5.45	0.11	0.09	1502
	AFTER 6 WEEKS	0.58	0.06	0.01	4.34	0.10	0.06	1199
	AFTER 13 WEEKS	0.30	0.06	0.03	3.20	0.05	0.02	1261
229	AFTER 2 WEEKS	0.38	0.06	0.02	4.12	0.07	0.06	1241
	AFTER 6 WEEKS	1.48	0.10	0.01	3.22	0.08	0.06	947
	AFTER 13 WEEKS	0.65	0.06	0.03	2.58	0.10	0.04	1165
230	AFTER 2 WEEKS	0.43	0.10	0.01	4.37	0.07	0.05	1340
	AFTER 6 WEEKS	0.70	0.06	0.01	3.78	0.11	0.05	1144
	AFTER 13 WEEKS	0.58	0.04	0.03	4.52	0.09	0.03	1065
231	AFTER 2 WEEKS	0.69	0.08	0.01	1.50	0.12	0.03	1281
	AFTER 6 WEEKS	0.85	0.10	0.02	1.43	0.14	0.06	1048
	AFTER 13 WEEKS	0.77	0.09	0.02	1.17	0.13	0.01	1025
232	AFTER 2 WEEKS	0.76	0.06	0.02	5.58	0.10	0.07	1149
	AFTER 6 WEEKS	0.76	0.08	0.02	4.51	0.11	0.06	997
	AFTER 13 WEEKS	1.44	0.07	0.03	4.97	0.10	0.04	1141
233	AFTER 2 WEEKS	0.41	0.02	0.01	3.36	0.05	0.03	1227
	AFTER 6 WEEKS	0.54	0.08	0.01	4.04	0.09	0.07	1003
	AFTER 13 WEEKS	0.50	0.04	0.00	1.28	0.02	0.01	1075
	AFTER 17 WEEKS	0.40	0.04	0.02	2.70	0.04	0.02	1194
234	AFTER 2 WEEKS	0.93	0.10	0.03	4.48	0.09	0.05	642
	AFTER 6 WEEKS	1.07	0.08	0.01	3.39	0.09	0.05	964
	AFTER 13 WEEKS	0.47	0.07	0.01	1.69	0.06	0.02	1174
	AFTER 17 WEEKS	0.71	0.09	0.03	2.66	0.10	0.03	1131
235	AFTER 2 WEEKS	2.00	0.09	0.04	5.89	0.17	0.11	1259
	AFTER 6 WEEKS	0.85	0.07	0.02	4.53	0.10	0.06	1106
	AFTER 13 WEEKS	0.63	0.10	0.03	3.63	0.09	0.02	1177
	AFTER 17 WEEKS	0.52	0.10	0.04	4.26	0.09	0.05	1199
236	AFTER 2 WEEKS	0.42	0.08	0.02	3.56	0.05	0.03	1070
	AFTER 6 WEEKS	0.60	0.03	0.01	2.15	0.05	0.04	885
	AFTER 13 WEEKS	0.37	0.05	0.01	1.65	0.06	0.01	955

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

		DIFF.WBC COUNT (ABS)						
ANIMAL NUMBER		NEUT G/l	EOS G/l	BASO G/l	LYMPH G/l	MONO G/l	LUC G/l	PLATELETS G/l
GROUP 4 (2000 MG/KG/DAY)								
236	AFTER 17 WEEKS	0.54	0.03	0.01	1.43	0.06	0.02	889
237	AFTER 2 WEEKS	0.71	0.06	0.02	5.00	0.10	0.05	1138
	AFTER 6 WEEKS	0.45	0.05	0.01	2.88	0.09	0.04	1030
	AFTER 13 WEEKS	0.45	0.06	0.01	2.10	0.06	0.01	964
	AFTER 17 WEEKS	0.46	0.03	0.02	1.33	0.04	0.01	991
238	AFTER 2 WEEKS	0.77	0.10	0.02	7.09	0.12	0.07	1261
	AFTER 6 WEEKS	0.86	0.06	0.02	6.13	0.14	0.09	972
	AFTER 13 WEEKS	0.77	0.05	0.04	4.94	0.10	0.04	1029
	AFTER 17 WEEKS	0.73	0.08	0.02	3.79	0.08	0.04	1066
239	AFTER 2 WEEKS	0.92	0.08	0.01	3.47	0.10	0.04	1220
	AFTER 6 WEEKS	0.49	0.08	0.02	4.26	0.05	0.04	998
	AFTER 13 WEEKS	1.01	0.08	0.02	3.41	0.08	0.02	891
	AFTER 17 WEEKS	0.50	0.09	0.03	3.45	0.07	0.03	1023
240	AFTER 2 WEEKS	0.43	0.05	0.02	5.46	0.08	0.08	1314
	AFTER 6 WEEKS	0.21	0.04	0.03	5.83	0.04	0.01	1237
	AFTER 13 WEEKS	0.38	0.08	0.03	5.01	0.08	0.03	1002
	AFTER 17 WEEKS	0.27	0.06	0.04	4.47	0.06	0.05	1105
241	AFTER 2 WEEKS	0.71	0.06	0.01	1.20	0.10	0.02	1522
	AFTER 6 WEEKS	0.90	0.05	0.01	1.04	0.08	0.02	1321
	AFTER 13 WEEKS	0.87	0.08	0.02	0.92	0.09	0.00	1353
	AFTER 17 WEEKS	0.68	0.07	0.01	0.71	0.04	0.01	1248
242	AFTER 2 WEEKS	0.71	0.06	0.02	6.40	0.06	0.06	1293
	AFTER 6 WEEKS	0.73	0.08	0.02	4.71	0.09	0.04	1167
	AFTER 13 WEEKS	0.79	0.05	0.03	3.40	0.05	0.03	1274
	AFTER 17 WEEKS	0.76	0.09	0.06	3.71	0.09	0.04	1123

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)HEMATOLOGY
FEMALES

		COAGULATION			
ANIMAL NUMBER		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 1 (0 MG/KG/DAY)					
125	AFTER 2 WEEKS	0.0100	0.000	---	---
	AFTER 6 WEEKS	0.0100	0.000	0.83	25.1
	AFTER 13 WEEKS	0.0110	0.000	0.93	26.4
126	AFTER 2 WEEKS	0.0120	0.000	0.79	22.8
	AFTER 6 WEEKS	0.0110	0.000	0.81	25.6
	AFTER 13 WEEKS	0.0090	0.000	0.82	25.8
127	AFTER 2 WEEKS	0.0110	0.000	0.99	26.2
	AFTER 6 WEEKS	0.0100	0.000	0.93	21.5
	AFTER 13 WEEKS	0.0100	0.000	0.93	25.0
128	AFTER 2 WEEKS	0.0130	0.000	0.86	26.2
	AFTER 6 WEEKS	0.0100	0.000	0.85	24.3
	AFTER 13 WEEKS	0.0090	0.000	0.97	30.7
129	AFTER 2 WEEKS	0.0110	0.000	0.85	23.0
	AFTER 6 WEEKS	0.0100	0.000	0.88	22.3
	AFTER 13 WEEKS	0.0090	0.000	1.02	20.9
130	AFTER 2 WEEKS	0.0100	0.000	0.85	27.5
	AFTER 6 WEEKS	0.0100	0.000	0.87	22.5
	AFTER 13 WEEKS	0.0090	0.000	0.88	28.0
131	AFTER 2 WEEKS	0.0100	0.000	0.76	27.3
	AFTER 6 WEEKS	0.0090	0.000	0.72	25.4
	AFTER 13 WEEKS	0.0090	0.000	0.87	32.2
132	AFTER 2 WEEKS	0.0110	0.000	0.83	24.2
	AFTER 6 WEEKS	0.0110	0.000	0.77	22.8
	AFTER 13 WEEKS	0.0090	0.000	0.88	25.5
133	AFTER 2 WEEKS	0.0120	0.000	0.84	29.0
	AFTER 6 WEEKS	0.0120	0.000	0.86	23.3
	AFTER 13 WEEKS	0.0110	0.000	0.84	36.2
134	AFTER 2 WEEKS	0.0090	0.000	0.94	21.2
	AFTER 6 WEEKS	0.0100	0.000	0.86	22.7
	AFTER 13 WEEKS	0.0110	0.000	0.84	24.6
135	AFTER 2 WEEKS	0.0120	0.000	0.89	22.2
	AFTER 6 WEEKS	0.0100	0.000	0.88	21.8
	AFTER 13 WEEKS	0.0100	0.000	0.91	26.2
136	AFTER 2 WEEKS	0.0110	0.000	0.93	23.2
	AFTER 6 WEEKS	0.0090	0.000	0.96	21.3
	AFTER 13 WEEKS	0.0100	0.000	0.85	29.4
137	AFTER 2 WEEKS	0.0120	0.000	0.96	30.5
	AFTER 6 WEEKS	0.0100	0.000	0.84	23.5
	AFTER 13 WEEKS	0.0110	0.000	0.86	31.6
138	AFTER 2 WEEKS	0.0110	0.000	0.91	24.8
	AFTER 6 WEEKS	0.0100	0.000	0.82	23.9
	AFTER 13 WEEKS	0.0110	0.000	0.91	39.5
139	AFTER 2 WEEKS	0.0110	0.000	0.95	22.2
	AFTER 6 WEEKS	0.0120	0.000	0.83	26.0
	AFTER 13 WEEKS	0.0120	0.000	0.79	35.5
140	AFTER 2 WEEKS	0.0120	0.000	0.88	23.2
	AFTER 6 WEEKS	0.0110	0.000	0.90	21.2
	AFTER 13 WEEKS	0.0110	0.000	0.87	24.0
141	AFTER 2 WEEKS	0.0090	0.000	0.88	24.6
	AFTER 6 WEEKS	0.0120	0.000	0.96	21.7

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

ANIMAL NUMBER		COAGULATION			
		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 1 (0 MG/KG/DAY)					
141	AFTER 13 WEEKS	0.0100	0.000	0.86	32.3
142	AFTER 2 WEEKS	0.0100	0.000	0.88	23.9
	AFTER 6 WEEKS	0.0090	0.000	0.73	26.0
	AFTER 13 WEEKS	0.0110	0.000	0.82	26.8
143	AFTER 2 WEEKS	0.0100	0.000	0.82	27.8
	AFTER 6 WEEKS	0.0100	0.000	0.91	20.9
	AFTER 13 WEEKS	0.0100	0.000	0.83	28.5
144	AFTER 2 WEEKS	0.0100	0.000	0.82	22.6
	AFTER 6 WEEKS	0.0090	0.000	0.85	24.5
	AFTER 13 WEEKS	0.0100	0.000	0.81	32.7
145	AFTER 2 WEEKS	0.0110	0.000	0.90	26.6
	AFTER 6 WEEKS	0.0090	0.000	0.98	26.4
	AFTER 13 WEEKS	0.0110	0.000	0.91	29.2
	AFTER 17 WEEKS	0.0120	0.000	0.82	30.9
146	AFTER 2 WEEKS	0.0110	0.000	0.86	30.2
	AFTER 6 WEEKS	0.0100	0.000	0.87	22.2
	AFTER 13 WEEKS	0.0100	0.000	0.82	25.7
	AFTER 17 WEEKS	0.0100	0.000	0.78	33.6
147	AFTER 2 WEEKS	0.0080	0.000	0.97	26.0
	AFTER 6 WEEKS	0.0120	0.000	0.91	22.2
	AFTER 13 WEEKS	0.0090	0.000	0.88	30.5
	AFTER 17 WEEKS	0.0100	0.000	0.93	30.4
148	AFTER 2 WEEKS	0.0100	0.000	0.86	30.8
	AFTER 6 WEEKS	0.0120	0.000	0.80	25.4
	AFTER 13 WEEKS	0.0110	0.000	0.82	37.5
	AFTER 17 WEEKS	0.0120	0.000	0.79	42.4
149	AFTER 2 WEEKS	0.0120	0.000	0.89	26.5
	AFTER 6 WEEKS	0.0100	0.000	0.90	24.1
	AFTER 13 WEEKS	0.0100	0.000	0.92	30.1
	AFTER 17 WEEKS	0.0110	0.000	0.87	32.8
150	AFTER 2 WEEKS	0.0110	0.000	1.01	25.1
	AFTER 6 WEEKS	0.0090	0.000	0.89	20.9
	AFTER 13 WEEKS	0.0100	0.000	0.81	32.2
	AFTER 17 WEEKS	0.0110	0.000	0.81	34.3
151	AFTER 2 WEEKS	0.0100	0.000	0.95	26.3
	AFTER 6 WEEKS	0.0090	0.000	0.89	26.2
	AFTER 13 WEEKS	0.0100	0.000	0.89	28.0
	AFTER 17 WEEKS	0.0100	0.000	0.88	28.6
152	AFTER 2 WEEKS	0.0100	0.000	0.89	24.8
	AFTER 6 WEEKS	0.0100	0.000	0.99	22.4
	AFTER 13 WEEKS	0.0110	0.000	0.83	26.6
	AFTER 17 WEEKS	0.0110	0.000	0.84	26.8
153	AFTER 2 WEEKS	0.0080	0.000	0.92	26.7
	AFTER 6 WEEKS	0.0090	0.000	0.89	21.6
	AFTER 13 WEEKS	0.0100	0.000	0.92	31.1
	AFTER 17 WEEKS	0.0090	0.000	0.78	32.6
154	AFTER 2 WEEKS	0.0120	0.000	0.96	24.1
	AFTER 6 WEEKS	0.0090	0.000	0.96	23.3
	AFTER 13 WEEKS	0.0100	0.000	0.89	30.7
	AFTER 17 WEEKS	0.0110	0.000	0.94	27.9

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**HEMATOLOGY**
FEMALES

		COAGULATION			
ANIMAL NUMBER		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 2 (500 MG/KG/DAY)					
161	AFTER 2 WEEKS	0.0110	0.000	0.86	24.7
	AFTER 6 WEEKS	0.0080	0.000	0.80	23.8
	AFTER 13 WEEKS	0.0110	0.000	0.90	25.0
162	AFTER 2 WEEKS	0.0120	0.000	0.77	24.4
	AFTER 6 WEEKS	0.0110	0.000	0.90	20.9
	AFTER 13 WEEKS	0.0110	0.000	0.81	29.1
163	AFTER 2 WEEKS	0.0120	0.000	0.96	25.4
	AFTER 6 WEEKS	0.0090	0.000	0.78	25.9
	AFTER 13 WEEKS	0.0110	0.000	0.80	30.9
164	AFTER 2 WEEKS	0.0110	0.000	0.86	24.7
	AFTER 6 WEEKS	0.0100	0.000	0.91	21.2
	AFTER 13 WEEKS	0.0110	0.000	0.88	29.2
165	AFTER 2 WEEKS	0.0090	0.000	0.94	18.8
	AFTER 6 WEEKS	0.0100	0.000	0.90	21.2
	AFTER 13 WEEKS	0.0100	0.000	0.92	24.8
166	AFTER 2 WEEKS	0.0090	0.000	0.87	20.2
	AFTER 6 WEEKS	0.0100	0.000	0.90	22.3
	AFTER 13 WEEKS	0.0110	0.000	0.84	24.9
167	AFTER 2 WEEKS	0.0110	0.000	0.94	23.9
	AFTER 6 WEEKS	0.0090	0.000	0.87	25.6
	AFTER 13 WEEKS	0.0090	0.000	0.92	25.6
168	AFTER 2 WEEKS	0.0090	0.000	0.90	23.4
	AFTER 6 WEEKS	0.0100	0.000	0.92	23.3
	AFTER 13 WEEKS	0.0110	0.000	0.98	19.4
169	AFTER 2 WEEKS	0.0100	0.000	0.92	24.8
	AFTER 6 WEEKS	0.0090	0.000	1.01	19.4
	AFTER 13 WEEKS	0.0110	0.000	0.88	27.2
170	AFTER 2 WEEKS	0.0090	0.000	0.96	22.6
	AFTER 6 WEEKS	0.0080	0.000	0.88	22.1
	AFTER 13 WEEKS	0.0100	0.000	0.86	27.6
171	AFTER 2 WEEKS	0.0100	0.000	0.93	23.2
	AFTER 6 WEEKS	0.0080	0.000	0.91	20.0
	AFTER 13 WEEKS	0.0090	0.000	0.82	29.7
172	AFTER 2 WEEKS	0.0100	0.000	0.94	21.4
	AFTER 6 WEEKS	0.0090	0.000	0.91	21.2
	AFTER 13 WEEKS	0.0110	0.000	0.85	38.7
173	AFTER 2 WEEKS	0.0090	0.000	0.85	25.2
	AFTER 6 WEEKS	0.0110	0.000	0.87	26.2
	AFTER 13 WEEKS	0.0100	0.000	0.80	26.6
174	AFTER 2 WEEKS	0.0110	0.000	0.96	36.3
	AFTER 6 WEEKS	0.0100	0.000	0.82	32.1
	AFTER 13 WEEKS	0.0100	0.000	0.90	24.6
175	AFTER 2 WEEKS	0.0100	0.000	0.96	26.2
	AFTER 6 WEEKS	0.0100	0.000	---	---
	AFTER 13 WEEKS	0.0100	0.000	---	---
176	AFTER 2 WEEKS	0.0100	0.000	0.83	27.0
	AFTER 6 WEEKS	0.0110	0.000	0.84	25.8
	AFTER 13 WEEKS	0.0100	0.000	0.92	30.3
177	AFTER 2 WEEKS	0.0080	0.000	0.92	30.5
	AFTER 6 WEEKS	0.0090	0.000	0.79	25.6

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

ANIMAL NUMBER		COAGULATION			
		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 2 (500 MG/KG/DAY)					
177	AFTER 13 WEEKS	0.0110	0.000	0.77	33.9
178	AFTER 2 WEEKS	0.0100	0.000	0.85	26.1
	AFTER 6 WEEKS	0.0110	0.000	0.85	31.4
	AFTER 13 WEEKS	0.0110	0.000	0.83	39.9
179	AFTER 2 WEEKS	0.0100	0.000	0.74	55.4
	AFTER 6 WEEKS	0.0100	0.000	0.97	25.2
	AFTER 13 WEEKS	0.0130	0.000	0.88	27.8
180	AFTER 2 WEEKS	0.0100	0.000	0.96	23.3
	AFTER 6 WEEKS	0.0110	0.000	0.90	27.6
	AFTER 13 WEEKS	0.0100	0.000	0.89	23.0
GROUP 3 (1000 MG/KG/DAY)					
187	AFTER 2 WEEKS	0.0080	0.000	0.94	23.6
	AFTER 6 WEEKS	0.0110	0.000	0.88	36.0
	AFTER 13 WEEKS	0.0110	0.000	0.89	27.4
188	AFTER 2 WEEKS	---	0.000	0.86	26.3
	AFTER 6 WEEKS	0.0100	0.000	---	---
	AFTER 13 WEEKS	0.0110	0.000	0.86	27.8
189	AFTER 2 WEEKS	---	0.000	0.93	27.1
	AFTER 6 WEEKS	0.0100	0.000	0.89	42.7
	AFTER 13 WEEKS	0.0110	0.000	1.00	31.3
190	AFTER 2 WEEKS	0.0120	0.000	0.89	23.1
	AFTER 6 WEEKS	0.0100	0.000	0.87	29.6
	AFTER 13 WEEKS	0.0100	0.000	1.00	27.5
191	AFTER 2 WEEKS	0.0100	0.000	1.04	29.1
	AFTER 6 WEEKS	0.0100	0.000	0.92	22.5
	AFTER 13 WEEKS	0.0110	0.000	0.87	29.3
192	AFTER 2 WEEKS	0.0120	0.000	0.89	22.0
	AFTER 6 WEEKS	0.0100	0.000	0.86	26.0
	AFTER 13 WEEKS	0.0100	0.000	0.96	19.9
193	AFTER 2 WEEKS	0.0070	0.000	0.89	24.7
	AFTER 6 WEEKS	0.0090	0.000	0.89	23.9
	AFTER 13 WEEKS	0.0110	0.000	0.90	23.9
194	AFTER 2 WEEKS	0.0110	0.000	0.88	27.0
	AFTER 6 WEEKS	0.0100	0.000	0.90	25.3
	AFTER 13 WEEKS	0.0090	0.000	0.83	31.4
195	AFTER 2 WEEKS	0.0100	0.000	0.87	23.4
	AFTER 6 WEEKS	0.0090	0.000	0.84	27.1
	AFTER 13 WEEKS	0.0100	0.000	0.94	24.9
196	AFTER 2 WEEKS	0.0100	0.000	0.93	26.5
	AFTER 6 WEEKS	0.0090	0.000	0.90	26.2
	AFTER 13 WEEKS	0.0100	0.000	0.89	30.0
197	AFTER 2 WEEKS	0.0110	0.000	0.91	23.0
	AFTER 6 WEEKS	0.0120	0.000	0.83	27.8
	AFTER 13 WEEKS	0.0110	0.000	0.87	32.5
198	AFTER 2 WEEKS	0.0110	0.000	0.86	25.3
	AFTER 6 WEEKS	0.0100	0.000	0.82	27.6
	AFTER 13 WEEKS	0.0100	0.000	0.80	34.4

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

ANIMAL NUMBER		COAGULATION			
		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 3 (1000 MG/KG/DAY)					
199	AFTER 2 WEEKS	0.0100	0.000	0.97	23.7
	AFTER 6 WEEKS	0.0100	0.000	0.87	26.1
	AFTER 13 WEEKS	0.0100	0.000	0.83	30.8
200	AFTER 2 WEEKS	0.0110	0.000	1.03	28.5
	AFTER 6 WEEKS	0.0100	0.000	0.95	20.2
	AFTER 13 WEEKS	0.0100	0.000	0.94	35.1
201	AFTER 2 WEEKS	0.0110	0.000	0.89	26.2
	AFTER 6 WEEKS	0.0120	0.000	0.94	26.5
	AFTER 13 WEEKS	0.0100	0.000	0.85	36.0
202	AFTER 2 WEEKS	0.0100	0.000	0.94	26.3
	AFTER 6 WEEKS	0.0100	0.000	0.82	23.6
	AFTER 13 WEEKS	0.0100	0.000	0.81	31.9
203	AFTER 2 WEEKS	0.0100	0.000	1.04	27.9
	AFTER 6 WEEKS	0.0110	0.000	0.88	23.8
	AFTER 13 WEEKS	0.0100	0.000	0.86	27.8
204	AFTER 2 WEEKS	0.0110	0.000	0.92	27.7
	AFTER 6 WEEKS	0.0120	0.000	0.82	25.3
	AFTER 13 WEEKS	0.0120	0.000	0.87	62.6
205	AFTER 2 WEEKS	0.0100	0.000	0.99	29.4
	AFTER 6 WEEKS	0.0110	0.000	0.83	25.1
	AFTER 13 WEEKS	0.0100	0.000	0.85	31.6
206	AFTER 2 WEEKS	0.0110	0.000	0.85	26.5
	AFTER 6 WEEKS	0.0100	0.000	0.88	20.1
	AFTER 13 WEEKS	0.0100	0.000	0.86	38.9
GROUP 4 (2000 MG/KG/DAY)					
213	AFTER 2 WEEKS	0.0090	0.000	0.97	26.0
	AFTER 6 WEEKS	0.0100	0.000	0.88	22.4
	AFTER 13 WEEKS	0.0110	0.000	0.79	33.3
214	AFTER 2 WEEKS	0.0110	0.000	0.91	24.4
	AFTER 6 WEEKS	0.0110	0.000	0.78	22.5
	AFTER 13 WEEKS	0.0110	0.000	0.92	29.2
215	AFTER 2 WEEKS	0.0100	0.000	1.00	22.4
	AFTER 6 WEEKS	0.0110	0.000	0.88	22.3
	AFTER 13 WEEKS	0.0100	0.000	0.83	26.0
216	AFTER 2 WEEKS	0.0120	0.000	1.00	23.2
	AFTER 6 WEEKS	0.0110	0.000	0.89	19.7
	AFTER 13 WEEKS	0.0110	0.000	0.88	28.2
217	AFTER 2 WEEKS	0.0100	0.000	0.86	27.0
	AFTER 6 WEEKS	0.0100	0.000	0.83	22.6
	AFTER 13 WEEKS	0.0110	0.000	0.86	29.3
218	AFTER 2 WEEKS	0.0110	0.000	0.90	26.4
	AFTER 6 WEEKS	0.0110	0.000	0.90	20.9
	AFTER 13 WEEKS	0.0100	0.000	0.89	44.8
219	AFTER 2 WEEKS	0.0100	0.000	0.96	---
	AFTER 6 WEEKS	0.0110	0.000	0.85	22.8
	AFTER 13 WEEKS	0.0090	0.000	0.76	20.5
220	AFTER 2 WEEKS	0.0100	0.000	0.83	25.8
	AFTER 6 WEEKS	0.0100	0.000	0.81	22.9
	AFTER 13 WEEKS	0.0110	0.000	0.96	29.5

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

		COAGULATION			
ANIMAL NUMBER		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 4 (2000 MG/KG/DAY)					
221	AFTER 2 WEEKS	0.0090	0.000	0.91	24.8
	AFTER 6 WEEKS	0.0100	0.000	0.80	23.3
	AFTER 13 WEEKS	0.0090	0.000	0.88	30.2
222	AFTER 2 WEEKS	0.0100	0.000	0.81	25.9
	AFTER 6 WEEKS	0.0090	0.000	0.92	26.4
	AFTER 13 WEEKS	0.0090	0.000	0.77	28.3
223	AFTER 2 WEEKS	0.0110	0.000	0.88	26.4
	AFTER 6 WEEKS	0.0110	0.000	0.93	20.9
	AFTER 13 WEEKS	0.0100	0.000	0.86	27.7
224	AFTER 2 WEEKS	0.0100	0.000	0.92	22.8
	AFTER 6 WEEKS	0.0100	0.000	0.88	21.7
	AFTER 13 WEEKS	0.0100	0.000	0.86	31.2
225	AFTER 2 WEEKS	0.0100	0.000	0.96	26.0
	AFTER 6 WEEKS	0.0110	0.000	0.84	23.7
	AFTER 13 WEEKS	0.0100	0.000	0.95	40.1
226	AFTER 2 WEEKS	0.0100	0.000	0.83	40.4
	AFTER 6 WEEKS	0.0110	0.000	0.86	25.2
	AFTER 13 WEEKS	0.0110	0.000	0.83	43.3
227	AFTER 2 WEEKS	0.0110	0.000	0.94	29.4
	AFTER 6 WEEKS	0.0120	0.000	0.88	23.9
	AFTER 13 WEEKS	0.0110	0.000	0.96	39.4
228	AFTER 2 WEEKS	0.0110	0.000	0.93	26.9
	AFTER 6 WEEKS	0.0100	0.000	0.90	21.2
	AFTER 13 WEEKS	0.0100	0.000	0.95	34.9
229	AFTER 2 WEEKS	0.0100	0.000	0.94	23.6
	AFTER 6 WEEKS	0.0100	0.000	0.94	19.3
	AFTER 13 WEEKS	0.0100	0.000	0.86	29.7
230	AFTER 2 WEEKS	0.0100	0.000	0.88	23.6
	AFTER 6 WEEKS	0.0110	0.000	0.83	22.9
	AFTER 13 WEEKS	0.0100	0.000	0.84	30.5
231	AFTER 2 WEEKS	0.0100	0.000	0.91	26.6
	AFTER 6 WEEKS	0.0110	0.000	0.85	20.4
	AFTER 13 WEEKS	0.0100	0.000	0.73	89.4
232	AFTER 2 WEEKS	0.0100	0.000	0.91	26.9
	AFTER 6 WEEKS	0.0100	0.000	0.80	23.5
	AFTER 13 WEEKS	0.0110	0.000	0.82	35.2
233	AFTER 2 WEEKS	0.0100	0.000	1.00	25.0
	AFTER 6 WEEKS	0.0110	0.000	0.88	25.1
	AFTER 13 WEEKS	0.0110	0.000	0.97	34.5
	AFTER 17 WEEKS	0.0110	0.000	0.96	30.5
234	AFTER 2 WEEKS	0.0090	0.000	1.02	21.8
	AFTER 6 WEEKS	0.0110	0.000	0.88	25.7
	AFTER 13 WEEKS	0.0090	0.000	0.89	34.6
	AFTER 17 WEEKS	0.0120	0.000	0.83	33.7
235	AFTER 2 WEEKS	0.0100	0.000	0.94	23.9
	AFTER 6 WEEKS	0.0100	0.000	0.91	24.5
	AFTER 13 WEEKS	0.0110	0.000	0.86	30.0
	AFTER 17 WEEKS	0.0100	0.000	0.83	35.2
236	AFTER 2 WEEKS	0.0100	0.000	0.81	28.4
	AFTER 6 WEEKS	0.0110	0.000	0.85	24.1
	AFTER 13 WEEKS	0.0110	0.000	0.91	33.4

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

HEMATOLOGY
FEMALES

ANIMAL NUMBER		COAGULATION			
		MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
GROUP 4 (2000 MG/KG/DAY)					
236	AFTER 17 WEEKS	0.0120	0.000	0.77	31.8
237	AFTER 2 WEEKS	0.0100	0.000	0.88	24.6
	AFTER 6 WEEKS	0.0120	0.000	0.86	23.9
	AFTER 13 WEEKS	0.0110	0.000	0.86	32.3
	AFTER 17 WEEKS	0.0120	0.000	0.77	36.6
238	AFTER 2 WEEKS	0.0110	0.000	0.94	29.3
	AFTER 6 WEEKS	0.0110	0.000	0.94	24.6
	AFTER 13 WEEKS	0.0100	0.000	0.80	40.4
	AFTER 17 WEEKS	0.0130	0.000	0.86	39.7
239	AFTER 2 WEEKS	0.0100	0.000	0.83	26.5
	AFTER 6 WEEKS	0.0100	0.000	0.76	24.9
	AFTER 13 WEEKS	0.0100	0.000	0.86	32.6
	AFTER 17 WEEKS	0.0110	0.000	0.72	32.4
240	AFTER 2 WEEKS	0.0100	0.000	1.01	18.9
	AFTER 6 WEEKS	0.0100	0.000	1.02	16.4
	AFTER 13 WEEKS	0.0100	0.000	0.92	27.8
	AFTER 17 WEEKS	0.0110	0.000	0.84	25.0
241	AFTER 2 WEEKS	0.0080	0.000	0.94	18.7
	AFTER 6 WEEKS	0.0100	0.000	0.90	21.8
	AFTER 13 WEEKS	0.0100	0.000	0.84	26.8
	AFTER 17 WEEKS	0.0120	0.000	0.82	24.4
242	AFTER 2 WEEKS	0.0100	0.000	0.84	24.4
	AFTER 6 WEEKS	0.0100	0.000	0.86	25.6
	AFTER 13 WEEKS	0.0110	0.000	0.82	30.3
	AFTER 17 WEEKS	0.0110	0.000	0.89	25.8

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RCC Study Number A29553

ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE):

13-Week Oral Toxicity (Feeding) Study
In the Wistar Rat

Report (Part III of IV)

Study Director: W. H. Braun
Sponsor: DSM Nutritional Products AG
Wurmisweg 576
CH-4303 Kaiseraugst / Switzerland
Test Facility: RCC Ltd
Toxicology
CH-4452 Itingen / Switzerland
Test Guidelines: "Subchronic Toxicity Studies with Rodents", US
Food and Drug Administration, USA.
"Repeated Dose 90-Day Oral Toxicity Study in
Rodents", OECD Guidelines for the Testing of
Chemicals.
Directive 96/54/EC, B. 26. "Subchronic Oral
Toxicity."
Date: 25 May 2007



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Total Number of Pages: 1095

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 1 (0 MG/KG/DAY)								
1	AFTER 2 WEEKS	3.50	4.60	9.20	21.9	1.81	1.69	0.23
	AFTER 6 WEEKS	4.64	4.08	8.16	25.8	0.92	1.62	0.44
	AFTER 13 WEEKS	5.98	4.73	9.46	27.5	1.05	1.54	0.32
2	AFTER 2 WEEKS	4.09	4.75	9.50	21.7	1.42	1.73	0.44
	AFTER 6 WEEKS	5.72	5.21	10.42	26.4	1.52	1.50	0.38
	AFTER 13 WEEKS	5.55	5.24	10.48	28.7	2.04	1.73	0.38
3	AFTER 2 WEEKS	3.79	4.56	9.12	19.5	1.05	2.51	0.55
	AFTER 6 WEEKS	5.35	4.52	9.04	24.9	0.96	2.02	0.87
	AFTER 13 WEEKS	5.13	6.03	12.06	26.8	1.52	2.18	0.56
4	AFTER 2 WEEKS	4.03	4.45	8.90	19.6	1.45	2.23	0.33
	AFTER 6 WEEKS	5.33	4.82	9.64	24.4	1.51	2.06	0.46
	AFTER 13 WEEKS	6.39	5.01	10.02	24.9	1.90	2.16	0.32
5	AFTER 2 WEEKS	3.18	5.36	10.72	22.0	1.26	2.28	0.45
	AFTER 6 WEEKS	4.44	4.65	9.30	26.0	1.46	2.19	0.76
	AFTER 13 WEEKS	5.24	6.38	12.76	28.0	1.54	2.01	0.35
6	AFTER 2 WEEKS	2.62	5.97	11.94	27.7	0.84	1.37	0.36
	AFTER 6 WEEKS	4.52	5.70	11.40	28.7	1.01	1.18	0.47
	AFTER 13 WEEKS	4.97	6.56	13.12	34.5	1.32	1.18	0.58
7	AFTER 2 WEEKS	2.88	3.64	7.28	19.1	1.04	1.52	0.29
	AFTER 6 WEEKS	3.72	4.82	9.64	24.3	1.49	1.39	0.43
	AFTER 13 WEEKS	4.71	4.39	8.78	27.3	1.72	1.49	0.29
8	AFTER 2 WEEKS	3.47	4.67	9.34	23.4	0.98	2.77	0.39
	AFTER 6 WEEKS	4.62	5.45	10.90	28.8	0.84	2.66	0.38
	AFTER 13 WEEKS	5.01	6.21	12.42	33.6	1.34	2.96	0.40
9	AFTER 2 WEEKS	2.77	5.23	10.46	22.2	0.93	2.14	0.44
	AFTER 6 WEEKS	5.00	6.42	12.84	28.8	1.13	1.89	0.37
	AFTER 13 WEEKS	4.96	5.44	10.88	27.0	1.08	2.11	0.43
10	AFTER 2 WEEKS	4.11	4.74	9.48	24.2	0.91	1.83	0.47
	AFTER 6 WEEKS	5.40	5.00	10.00	27.7	1.02	1.59	0.73
	AFTER 13 WEEKS	4.36	6.42	12.84	30.7	1.08	1.63	0.28
11	AFTER 2 WEEKS	4.17	4.30	8.60	22.9	1.13	1.67	0.43
	AFTER 6 WEEKS	4.76	4.37	8.74	25.4	1.34	1.40	0.36
	AFTER 13 WEEKS	4.12	4.43	8.86	28.1	1.96	1.47	0.37
12	AFTER 2 WEEKS	3.91	4.84	9.68	22.8	0.79	2.52	0.42
	AFTER 6 WEEKS	5.27	5.25	10.50	28.7	1.04	2.15	0.47
	AFTER 13 WEEKS	4.37	5.61	11.22	31.5	1.10	2.19	0.37
13	AFTER 2 WEEKS	3.75	4.48	8.96	19.2	1.06	1.20	0.48
	AFTER 6 WEEKS	5.84	5.56	11.12	24.6	1.23	1.22	0.63
	AFTER 13 WEEKS	5.40	6.02	12.04	26.6	1.33	1.39	0.52
14	AFTER 2 WEEKS	3.65	4.72	9.44	22.2	1.06	1.17	0.24
	AFTER 6 WEEKS	4.54	5.34	10.68	27.3	1.12	1.09	0.33
	AFTER 13 WEEKS	4.88	4.91	9.82	28.5	1.86	1.04	0.17
15	AFTER 2 WEEKS	4.87	5.90	11.80	22.0	1.21	2.22	0.27
	AFTER 6 WEEKS	6.27	4.89	9.78	24.2	1.08	1.92	0.29
	AFTER 13 WEEKS	5.06	4.48	8.96	27.8	1.44	2.48	0.37
16	AFTER 2 WEEKS	3.55	4.80	9.60	20.3	1.02	1.36	0.15
	AFTER 6 WEEKS	6.01	5.59	11.18	26.3	0.96	1.35	0.27
	AFTER 13 WEEKS	5.07	4.85	9.70	27.7	1.08	1.44	0.33
17	AFTER 2 WEEKS	3.12	4.63	9.26	24.1	0.89	1.53	0.56
	AFTER 6 WEEKS	4.98	4.79	9.58	27.3	1.05	1.27	0.47

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY

MALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 1 (0 MG/KG/DAY)								
17	AFTER 13 WEEKS	4.18	5.68	11.36	32.8	1.47	1.70	0.41
18	AFTER 2 WEEKS	4.20	4.15	8.30	20.3	0.90	1.38	0.32
	AFTER 6 WEEKS	5.54	4.33	8.66	24.9	1.12	1.49	0.38
	AFTER 13 WEEKS	5.28	4.35	8.70	28.9	1.45	1.52	0.26
19	AFTER 2 WEEKS	3.39	4.46	8.92	21.6	0.92	1.77	0.21
	AFTER 6 WEEKS	5.53	5.59	11.18	27.3	1.24	1.64	0.29
	AFTER 13 WEEKS	4.49	5.39	10.78	28.4	1.62	1.64	0.16
20	AFTER 2 WEEKS	3.95	4.72	9.44	20.7	0.64	1.30	0.76
	AFTER 6 WEEKS	3.79	3.91	7.82	27.1	0.83	1.30	0.73
	AFTER 13 WEEKS	3.94	4.45	8.90	28.7	1.40	1.37	0.46
21	AFTER 2 WEEKS	3.17	4.89	9.78	26.3	1.07	1.50	0.66
	AFTER 6 WEEKS	4.83	5.74	11.48	30.6	1.26	1.35	0.76
	AFTER 13 WEEKS	5.04	5.73	11.46	32.8	1.49	1.47	0.45
	AFTER 17 WEEKS	5.03	5.30	10.60	37.0	1.62	1.48	0.74
22	AFTER 2 WEEKS	3.44	4.86	9.72	20.4	0.95	2.00	0.49
	AFTER 6 WEEKS	6.29	5.38	10.76	23.6	1.14	1.56	0.56
	AFTER 13 WEEKS	5.89	4.54	9.08	23.6	1.06	1.59	0.34
	AFTER 17 WEEKS	5.76	4.57	9.14	25.3	1.61	1.77	0.36
23	AFTER 2 WEEKS	5.10	4.32	8.64	21.9	1.04	1.91	0.29
	AFTER 6 WEEKS	6.30	4.38	8.76	23.7	1.21	1.74	0.61
	AFTER 13 WEEKS	5.94	3.85	7.70	27.1	1.03	1.94	0.41
	AFTER 17 WEEKS	5.15	4.59	9.18	27.8	1.37	1.82	0.53
24	AFTER 2 WEEKS	3.58	3.61	7.22	21.2	0.95	1.12	0.47
	AFTER 6 WEEKS	6.72	5.71	11.42	28.6	0.96	1.03	0.53
	AFTER 13 WEEKS	6.59	5.25	10.50	28.8	1.29	1.33	0.35
	AFTER 17 WEEKS	5.02	5.20	10.40	30.5	1.64	1.37	0.57
25	AFTER 2 WEEKS	3.97	4.08	8.16	20.4	1.18	1.63	0.17
	AFTER 6 WEEKS	6.97	4.96	9.92	27.4	1.14	1.58	0.21
	AFTER 13 WEEKS	5.77	4.69	9.38	25.0	1.32	1.61	0.31
	AFTER 17 WEEKS	5.20	4.46	8.92	27.3	1.34	1.57	0.23
26	AFTER 2 WEEKS	3.55	4.81	9.62	17.2	1.32	1.94	0.38
	AFTER 6 WEEKS	5.80	6.21	12.42	24.8	1.06	1.79	0.26
	AFTER 13 WEEKS	4.30	5.73	11.46	24.8	1.51	2.13	0.37
	AFTER 17 WEEKS	5.36	5.84	11.68	28.2	1.55	2.12	0.49
27	AFTER 2 WEEKS	3.09	4.05	8.10	22.0	0.70	1.28	0.41
	AFTER 6 WEEKS	4.90	4.98	9.96	26.4	0.95	1.23	0.50
	AFTER 13 WEEKS	4.63	5.57	11.14	26.9	1.02	1.48	0.41
	AFTER 17 WEEKS	4.19	4.67	9.34	31.8	1.15	1.81	0.46
28	AFTER 2 WEEKS	3.31	3.94	7.88	24.2	0.77	2.12	0.67
	AFTER 6 WEEKS	5.26	5.68	11.36	28.7	1.05	1.90	0.46
	AFTER 13 WEEKS	4.50	5.66	11.32	29.9	1.37	1.84	0.40
	AFTER 17 WEEKS	5.32	5.21	10.42	35.2	1.27	1.75	0.41
29	AFTER 2 WEEKS	4.02	4.33	8.66	24.1	1.05	1.81	0.20
	AFTER 6 WEEKS	5.70	4.92	9.84	26.5	1.23	1.71	0.34
	AFTER 13 WEEKS	5.11	4.99	9.98	28.9	1.37	1.86	0.28
	AFTER 17 WEEKS	5.89	4.38	8.76	30.1	1.51	1.79	0.46
30	AFTER 2 WEEKS	4.35	6.04	12.08	21.8	0.85	1.55	0.29
	AFTER 6 WEEKS	5.14	5.58	11.16	25.9	1.12	1.40	0.38
	AFTER 13 WEEKS	4.62	5.67	11.34	30.7	1.30	1.48	0.23
	AFTER 17 WEEKS	6.06	5.03	10.06	29.9	1.19	1.64	0.30

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY

MALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 2 (500 MG/KG/DAY)								
37	AFTER 2 WEEKS	4.31	4.90	9.80	20.1	1.13	2.38	0.47
	AFTER 6 WEEKS	6.46	6.41	12.82	24.7	1.40	2.11	0.46
	AFTER 13 WEEKS	6.04	4.72	9.44	24.2	1.35	1.87	0.27
38	AFTER 2 WEEKS	3.24	4.80	9.60	22.6	1.17	1.91	0.26
	AFTER 6 WEEKS	5.19	4.19	8.38	27.2	1.28	1.53	0.42
	AFTER 13 WEEKS	5.83	4.89	9.78	28.3	1.83	1.59	0.24
39	AFTER 2 WEEKS	3.98	4.25	8.50	19.5	1.08	2.17	0.23
	AFTER 6 WEEKS	5.32	4.72	9.44	24.8	1.19	1.92	0.21
	AFTER 13 WEEKS	5.95	4.26	8.52	25.0	1.19	1.94	0.17
40	AFTER 2 WEEKS	4.41	3.78	7.56	21.7	0.74	1.98	0.60
	AFTER 6 WEEKS	6.13	4.97	9.94	24.9	0.90	1.52	0.51
	AFTER 13 WEEKS	5.59	4.45	8.90	27.9	0.76	1.53	0.56
41	AFTER 2 WEEKS	4.03	4.67	9.34	21.7	0.79	1.46	0.50
	AFTER 6 WEEKS	4.75	4.74	9.48	24.5	1.00	1.29	0.72
	AFTER 13 WEEKS	5.64	5.41	10.82	25.2	1.07	1.33	0.22
42	AFTER 2 WEEKS	4.46	3.59	7.18	19.0	1.04	2.48	0.37
	AFTER 6 WEEKS	5.94	5.20	10.40	24.3	1.16	2.28	0.43
	AFTER 13 WEEKS	6.87	4.66	9.32	25.7	0.77	2.22	0.38
43	AFTER 2 WEEKS	4.05	4.59	9.18	19.8	1.05	1.73	0.65
	AFTER 6 WEEKS	5.37	6.34	12.68	25.8	1.12	1.45	1.04
	AFTER 13 WEEKS	6.90	4.43	8.86	25.0	1.01	1.58	0.78
44	AFTER 2 WEEKS	3.86	16.23	32.46	50.6	1.02	2.35	0.40
	AFTER 6 WEEKS	---	---	---	---	---	---	---
	AFTER 13 WEEKS	---	---	---	---	---	---	---
45	AFTER 2 WEEKS	3.47	4.45	8.90	18.9	1.08	2.68	0.27
	AFTER 6 WEEKS	5.62	6.36	12.72	27.4	1.06	2.22	0.39
	AFTER 13 WEEKS	5.73	4.82	9.64	26.7	0.97	2.65	0.32
46	AFTER 2 WEEKS	4.09	4.32	8.64	18.2	1.01	2.29	0.25
	AFTER 6 WEEKS	5.38	5.87	11.74	25.3	1.03	2.20	0.29
	AFTER 13 WEEKS	6.57	5.52	11.04	24.5	1.14	2.02	0.21
47	AFTER 2 WEEKS	3.70	4.67	9.34	21.8	1.24	1.59	0.39
	AFTER 6 WEEKS	4.88	5.35	10.70	27.2	1.11	1.50	0.44
	AFTER 13 WEEKS	4.56	6.20	12.40	33.3	1.64	1.54	0.38
48	AFTER 2 WEEKS	3.88	5.34	10.68	19.9	1.12	1.85	0.23
	AFTER 6 WEEKS	5.04	5.82	11.64	24.3	1.27	1.60	0.28
	AFTER 13 WEEKS	5.75	6.60	13.20	33.0	1.49	1.73	0.21
49	AFTER 2 WEEKS	4.53	4.51	9.02	20.4	1.07	1.70	0.33
	AFTER 6 WEEKS	5.60	5.65	11.30	24.1	0.99	1.44	0.43
	AFTER 13 WEEKS	4.97	5.53	11.06	27.2	1.30	1.40	0.27
50	AFTER 2 WEEKS	3.95	4.55	9.10	18.7	0.84	2.14	0.21
	AFTER 6 WEEKS	5.50	4.75	9.50	22.7	1.01	1.96	0.23
	AFTER 13 WEEKS	4.29	4.20	8.40	24.0	1.64	1.99	0.25
51	AFTER 2 WEEKS	4.64	3.75	7.50	19.6	0.86	2.20	0.29
	AFTER 6 WEEKS	6.47	4.20	8.40	22.5	1.15	2.20	0.42
	AFTER 13 WEEKS	4.89	4.54	9.08	25.3	1.87	2.44	0.34
52	AFTER 2 WEEKS	3.90	4.97	9.94	21.1	0.93	2.10	0.53
	AFTER 6 WEEKS	5.38	5.91	11.82	26.3	1.07	1.83	0.45
	AFTER 13 WEEKS	5.33	5.69	11.38	27.9	1.60	1.94	0.49
53	AFTER 2 WEEKS	4.29	4.38	8.76	19.7	0.75	1.39	0.40
	AFTER 6 WEEKS	4.74	4.74	9.48	24.2	1.04	1.20	0.31

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 2 (500 MG/KG/DAY)								
53	AFTER 13 WEEKS	5.23	4.74	9.48	29.1	1.41	1.57	0.30
54	AFTER 2 WEEKS	4.76	6.89	13.78	22.9	1.08	2.04	0.26
	AFTER 6 WEEKS	5.20	7.02	14.04	25.5	1.04	1.96	0.23
	AFTER 13 WEEKS	4.91	5.17	10.34	24.6	1.17	1.73	0.22
55	AFTER 2 WEEKS	4.26	5.29	10.58	20.3	1.26	1.88	0.25
	AFTER 6 WEEKS	5.29	6.38	12.76	23.8	1.31	1.71	0.26
	AFTER 13 WEEKS	5.51	4.80	9.60	25.1	1.59	1.75	0.26
56	AFTER 2 WEEKS	4.53	5.50	11.00	24.0	0.81	1.91	0.28
	AFTER 6 WEEKS	4.45	4.94	9.88	27.2	0.90	1.79	0.29
	AFTER 13 WEEKS	4.40	5.91	11.82	31.1	1.32	1.78	0.26
GROUP 3 (1000 MG/KG/DAY)								
63	AFTER 2 WEEKS	4.68	5.67	11.34	22.3	0.68	1.72	0.43
	AFTER 6 WEEKS	5.55	6.75	13.50	32.0	1.12	1.53	0.53
	AFTER 13 WEEKS	5.76	4.54	9.08	31.4	1.07	1.64	0.33
64	AFTER 2 WEEKS	3.88	4.66	9.32	20.8	1.02	1.37	0.41
	AFTER 6 WEEKS	6.59	5.52	11.04	27.6	1.18	1.21	0.54
	AFTER 13 WEEKS	5.28	5.31	10.62	30.9	0.99	1.24	0.24
65	AFTER 2 WEEKS	4.41	5.01	10.02	20.3	0.79	2.08	0.42
	AFTER 6 WEEKS	5.82	5.15	10.30	24.2	0.83	1.93	0.35
	AFTER 13 WEEKS	5.78	4.74	9.48	27.6	0.91	2.21	0.30
66	AFTER 2 WEEKS	4.15	5.43	10.86	20.5	1.25	1.50	0.26
	AFTER 6 WEEKS	5.53	7.21	14.42	25.9	1.63	1.47	0.29
	AFTER 13 WEEKS	6.21	5.17	10.34	26.2	1.92	1.36	0.24
67	AFTER 2 WEEKS	3.31	4.86	9.72	18.5	0.73	2.62	0.27
	AFTER 6 WEEKS	5.05	6.00	12.00	24.4	1.13	2.25	0.26
	AFTER 13 WEEKS	4.86	5.63	11.26	26.3	1.35	2.14	0.23
68	AFTER 2 WEEKS	4.70	4.89	9.78	20.2	0.78	2.18	0.23
	AFTER 6 WEEKS	5.77	5.66	11.32	27.2	0.90	2.01	0.39
	AFTER 13 WEEKS	6.24	5.55	11.10	27.5	0.71	1.78	0.27
69	AFTER 2 WEEKS	4.20	5.85	11.70	22.5	1.10	2.35	0.25
	AFTER 6 WEEKS	5.24	5.80	11.60	26.3	1.13	1.95	0.29
	AFTER 13 WEEKS	5.64	5.20	10.40	26.1	1.02	2.10	0.31
70	AFTER 2 WEEKS	3.61	3.57	7.14	16.8	1.10	1.94	0.65
	AFTER 6 WEEKS	5.20	4.30	8.60	21.0	1.40	1.83	0.35
	AFTER 13 WEEKS	5.77	4.05	8.10	22.6	1.49	1.73	0.31
71	AFTER 2 WEEKS	3.93	4.81	9.62	18.8	0.97	3.08	0.56
	AFTER 6 WEEKS	5.17	5.58	11.16	28.7	1.24	2.70	0.54
	AFTER 13 WEEKS	5.72	6.76	13.52	37.2	1.26	2.73	0.44
72	AFTER 2 WEEKS	3.90	4.21	8.42	19.2	1.11	2.38	0.36
	AFTER 6 WEEKS	5.96	5.53	11.06	23.5	1.47	2.16	0.32
	AFTER 13 WEEKS	5.59	4.93	9.86	24.3	1.67	2.13	0.31
73	AFTER 2 WEEKS	3.95	5.85	11.70	20.6	1.30	2.34	0.28
	AFTER 6 WEEKS	5.97	6.12	12.24	26.0	1.37	1.88	0.32
	AFTER 13 WEEKS	5.21	6.06	12.12	25.9	1.98	2.10	0.39
74	AFTER 2 WEEKS	4.48	4.16	8.32	17.5	0.73	1.59	0.26
	AFTER 6 WEEKS	6.49	4.69	9.38	23.8	1.15	1.49	0.39
	AFTER 13 WEEKS	5.61	3.30	6.60	23.9	1.64	1.56	0.29

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 3 (1000 MG/KG/DAY)								
75	AFTER 2 WEEKS	3.22	4.90	9.80	22.0	0.82	1.99	0.50
	AFTER 6 WEEKS	4.67	5.73	11.46	29.9	1.05	1.83	0.50
	AFTER 13 WEEKS	3.56	7.71	15.42	34.0	1.13	1.68	0.36
76	AFTER 2 WEEKS	3.97	4.59	9.18	23.1	0.79	2.23	0.38
	AFTER 6 WEEKS	4.95	5.58	11.16	28.8	1.07	2.01	0.39
	AFTER 13 WEEKS	4.76	4.76	9.52	28.5	1.25	2.12	0.35
77	AFTER 2 WEEKS	4.09	5.08	10.16	21.1	1.02	2.09	0.35
	AFTER 6 WEEKS	5.50	4.81	9.62	26.8	1.00	2.00	0.40
	AFTER 13 WEEKS	4.10	5.68	11.36	28.3	1.27	2.23	0.36
78	AFTER 2 WEEKS	3.72	4.87	9.74	20.5	0.82	1.66	0.39
	AFTER 6 WEEKS	5.99	5.57	11.14	26.6	1.27	1.09	0.23
	AFTER 13 WEEKS	4.37	4.97	9.94	31.0	1.25	1.46	0.37
79	AFTER 2 WEEKS	3.80	4.57	9.14	20.1	0.80	2.80	0.38
	AFTER 6 WEEKS	5.65	5.17	10.34	24.8	1.23	2.39	0.39
	AFTER 13 WEEKS	4.89	4.84	9.68	27.9	1.49	2.57	0.36
80	AFTER 2 WEEKS	3.72	4.12	8.24	17.8	1.41	1.74	0.52
	AFTER 6 WEEKS	5.90	5.05	10.10	23.3	1.19	1.79	1.03
	AFTER 13 WEEKS	5.30	4.27	8.54	24.8	1.34	1.80	0.71
81	AFTER 2 WEEKS	3.22	3.80	7.60	16.8	0.83	2.24	0.59
	AFTER 6 WEEKS	4.32	4.63	9.26	23.2	1.38	2.03	0.33
	AFTER 13 WEEKS	3.94	4.81	9.62	24.1	1.10	2.14	0.27
82	AFTER 2 WEEKS	3.43	4.15	8.30	20.5	0.91	2.76	0.40
	AFTER 6 WEEKS	5.42	5.46	10.92	26.6	1.09	2.37	0.33
	AFTER 13 WEEKS	5.15	5.61	11.22	26.6	2.07	2.62	0.33
GROUP 4 (2000 MG/KG/DAY)								
89	AFTER 2 WEEKS	3.72	4.57	9.14	17.0	1.11	1.67	0.22
	AFTER 6 WEEKS	5.40	4.73	9.46	22.1	1.54	1.78	0.23
	AFTER 13 WEEKS	4.08	5.18	10.36	22.9	1.42	1.52	0.24
90	AFTER 2 WEEKS	3.93	3.07	6.14	15.1	0.83	1.79	0.79
	AFTER 6 WEEKS	6.24	5.25	10.50	22.9	1.35	1.72	0.81
	AFTER 13 WEEKS	5.38	4.86	9.72	27.2	1.40	1.76	0.62
91	AFTER 2 WEEKS	4.48	4.16	8.32	18.3	1.16	2.27	0.37
	AFTER 6 WEEKS	5.32	4.91	9.82	25.4	1.38	2.21	0.44
	AFTER 13 WEEKS	5.97	5.09	10.18	25.2	1.67	1.94	0.36
92	AFTER 2 WEEKS	3.93	4.19	8.38	17.4	1.12	2.31	0.28
	AFTER 6 WEEKS	4.87	5.00	10.00	22.7	1.72	2.36	0.32
	AFTER 13 WEEKS	5.51	5.35	10.70	25.3	1.70	2.07	0.30
93	AFTER 2 WEEKS	4.30	4.72	9.44	16.2	1.14	2.80	0.48
	AFTER 6 WEEKS	5.91	4.94	9.88	24.6	1.08	2.42	0.55
	AFTER 13 WEEKS	4.66	5.63	11.26	26.6	1.20	2.08	0.64
94	AFTER 2 WEEKS	3.92	5.98	11.96	22.5	0.85	2.76	0.65
	AFTER 6 WEEKS	4.39	5.11	10.22	27.6	1.28	2.68	0.44
	AFTER 13 WEEKS	4.77	7.27	14.53	32.6	1.24	2.36	0.31
95	AFTER 2 WEEKS	4.79	4.67	9.34	18.6	0.83	1.42	0.32
	AFTER 6 WEEKS	5.75	5.14	10.28	27.4	1.25	1.24	0.47
	AFTER 13 WEEKS	5.40	5.35	10.70	29.5	1.14	1.08	0.22
96	AFTER 2 WEEKS	4.43	4.41	8.82	20.4	1.12	2.39	0.42
	AFTER 6 WEEKS	5.72	6.62	13.24	28.7	1.19	2.17	0.35
	AFTER 13 WEEKS	5.47	5.82	11.64	27.8	1.76	2.25	0.40

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY

MALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 4 (2000 MG/KG/DAY)								
97	AFTER 2 WEEKS	3.88	4.30	8.60	21.1	0.92	1.02	0.41
	AFTER 6 WEEKS	3.79	4.52	9.04	29.7	1.18	1.27	0.41
	AFTER 13 WEEKS	4.81	5.64	11.28	31.1	1.27	1.20	0.36
98	AFTER 2 WEEKS	4.44	4.84	9.68	21.6	0.79	1.15	0.54
	AFTER 6 WEEKS	5.08	4.77	9.54	29.7	1.20	1.17	1.09
	AFTER 13 WEEKS	5.88	5.48	10.96	29.3	1.41	1.15	0.75
99	AFTER 2 WEEKS	4.06	3.74	7.48	18.2	0.97	1.25	0.29
	AFTER 6 WEEKS	5.25	3.82	7.64	27.1	1.15	1.35	0.44
	AFTER 13 WEEKS	4.91	5.19	10.38	28.4	1.29	1.43	0.45
100	AFTER 2 WEEKS	4.17	6.08	12.16	24.3	1.26	1.51	0.39
	AFTER 6 WEEKS	4.43	6.07	12.14	27.8	1.85	1.62	0.58
	AFTER 13 WEEKS	4.61	4.69	9.38	28.1	1.88	1.64	0.43
101	AFTER 2 WEEKS	3.95	4.40	8.80	17.8	1.36	2.06	0.47
	AFTER 6 WEEKS	3.68	4.42	8.84	22.1	1.14	2.21	0.44
	AFTER 13 WEEKS	5.71	4.88	9.76	25.3	1.96	1.95	0.24
102	AFTER 2 WEEKS	4.29	4.66	9.32	19.4	1.01	1.65	0.43
	AFTER 6 WEEKS	5.09	5.31	10.62	25.3	1.22	1.76	0.40
	AFTER 13 WEEKS	4.46	5.02	10.04	30.6	1.89	1.77	0.23
103	AFTER 2 WEEKS	3.59	5.01	10.02	18.7	0.99	1.51	0.48
	AFTER 6 WEEKS	3.52	5.15	10.30	26.6	1.17	1.50	0.39
	AFTER 13 WEEKS	4.33	5.19	10.38	26.2	1.42	1.64	0.35
104	AFTER 2 WEEKS	4.55	4.34	8.68	17.1	1.12	1.63	0.40
	AFTER 6 WEEKS	4.55	5.00	10.00	25.1	1.29	1.38	0.37
	AFTER 13 WEEKS	4.74	4.07	8.14	28.2	1.87	1.51	0.44
105	AFTER 2 WEEKS	3.41	3.64	7.28	17.3	1.33	1.38	0.84
	AFTER 6 WEEKS	4.96	3.86	7.72	22.6	1.30	1.30	0.73
	AFTER 13 WEEKS	4.15	4.33	8.66	22.4	2.17	1.42	0.78
106	AFTER 2 WEEKS	4.87	4.12	8.24	17.7	1.19	2.18	0.31
	AFTER 6 WEEKS	5.36	4.21	8.42	25.4	1.74	2.08	0.35
	AFTER 13 WEEKS	4.47	4.00	8.00	23.5	1.82	2.01	0.24
107	AFTER 2 WEEKS	4.56	5.89	11.78	18.5	1.00	2.50	0.38
	AFTER 6 WEEKS	4.15	6.02	12.04	28.8	1.36	2.14	0.38
	AFTER 13 WEEKS	4.44	5.26	10.52	28.7	1.59	2.11	0.36
108	AFTER 2 WEEKS	4.47	4.41	8.82	16.8	0.92	2.07	0.33
	AFTER 6 WEEKS	4.29	6.69	13.38	27.0	1.18	1.98	0.41
	AFTER 13 WEEKS	5.04	5.77	11.54	26.6	1.69	1.85	0.29
109	AFTER 2 WEEKS	3.82	4.92	9.84	19.5	0.96	1.36	0.30
	AFTER 6 WEEKS	4.34	4.88	9.76	27.0	1.51	1.44	0.24
	AFTER 13 WEEKS	4.80	4.68	9.36	27.6	1.08	1.34	0.32
	AFTER 17 WEEKS	4.29	4.75	9.50	32.6	1.14	1.34	0.36
110	AFTER 2 WEEKS	4.24	4.61	9.22	18.1	1.22	1.92	0.20
	AFTER 6 WEEKS	4.55	5.42	10.84	23.6	1.32	1.96	0.24
	AFTER 13 WEEKS	5.08	4.93	9.86	24.5	1.61	1.88	0.32
	AFTER 17 WEEKS	6.02	4.40	8.80	26.0	1.43	1.60	0.48
111	AFTER 2 WEEKS	4.44	4.89	9.78	18.5	1.34	1.69	0.31
	AFTER 6 WEEKS	4.90	5.48	10.96	25.1	1.47	1.86	0.44
	AFTER 13 WEEKS	6.93	4.31	8.62	25.3	1.54	1.64	0.29
	AFTER 17 WEEKS	5.58	5.27	10.54	30.5	1.70	1.57	0.45
112	AFTER 2 WEEKS	3.55	4.32	8.64	17.4	0.89	2.05	0.77
	AFTER 6 WEEKS	4.94	5.52	11.04	25.8	1.22	1.68	1.01
	AFTER 13 WEEKS	7.40	4.93	9.86	26.2	1.44	1.60	0.69

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 4 (2000 MG/KG/DAY)								
112	AFTER 17 WEEKS	5.60	4.72	9.44	26.2	1.51	1.77	1.11
113	AFTER 2 WEEKS	4.62	4.53	9.06	20.8	1.00	1.41	0.14
	AFTER 6 WEEKS	4.87	5.31	10.62	27.8	1.43	1.69	0.21
	AFTER 13 WEEKS	4.89	5.01	10.02	27.1	1.41	1.55	0.19
	AFTER 17 WEEKS	5.68	5.23	10.46	34.4	1.44	1.51	0.27
114	AFTER 2 WEEKS	4.81	4.60	9.20	18.8	1.05	1.78	0.18
	AFTER 6 WEEKS	5.22	4.89	9.78	24.6	1.34	1.89	0.26
	AFTER 13 WEEKS	5.42	5.19	10.38	22.3	1.70	1.86	0.34
	AFTER 17 WEEKS	4.67	5.34	10.68	29.2	1.58	2.03	0.41
115	AFTER 2 WEEKS	4.20	4.44	8.88	16.5	1.42	1.87	0.23
	AFTER 6 WEEKS	4.23	6.06	12.12	25.3	1.35	1.48	0.27
	AFTER 13 WEEKS	5.21	6.35	12.70	24.8	1.85	1.44	0.23
	AFTER 17 WEEKS	5.57	5.97	11.94	27.4	1.67	1.68	0.41
116	AFTER 2 WEEKS	4.24	5.21	10.42	19.3	1.23	2.28	0.28
	AFTER 6 WEEKS	3.67	6.21	12.42	24.4	1.60	2.60	0.33
	AFTER 13 WEEKS	4.14	4.56	9.12	26.2	1.71	2.38	0.29
	AFTER 17 WEEKS	4.59	4.59	9.18	25.7	1.64	2.27	0.30
117	AFTER 2 WEEKS	4.17	4.55	9.10	18.0	1.23	2.14	0.28
	AFTER 6 WEEKS	5.09	5.64	11.28	26.7	1.88	2.41	0.33
	AFTER 13 WEEKS	5.00	5.77	11.54	28.5	1.86	2.09	0.32
	AFTER 17 WEEKS	5.62	6.25	12.50	27.8	1.93	1.99	0.37
118	AFTER 2 WEEKS	4.18	4.86	9.72	17.1	1.11	2.32	0.26
	AFTER 6 WEEKS	5.29	5.35	10.70	25.7	1.17	2.25	0.38
	AFTER 13 WEEKS	5.83	5.03	10.06	24.6	1.48	2.18	0.46
	AFTER 17 WEEKS	5.74	4.40	8.80	25.6	1.70	2.18	0.37

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 1 (0 MG/KG/DAY)								
1	AFTER 2 WEEKS	1.43	83.7	24.0	253.4	5.9	140.9	0.0
	AFTER 6 WEEKS	1.58	67.1	23.7	123.4	5.4	86.1	0.0
	AFTER 13 WEEKS	1.42	73.3	34.7	133.9	10.7	54.1	0.0
2	AFTER 2 WEEKS	1.52	95.8	25.9	400.1	8.5	143.7	0.0
	AFTER 6 WEEKS	1.48	80.0	25.8	146.7	7.3	80.1	0.0
	AFTER 13 WEEKS	1.68	73.7	27.2	181.4	9.3	46.7	0.0
3	AFTER 2 WEEKS	1.94	78.7	21.7	225.6	5.6	135.3	0.0
	AFTER 6 WEEKS	1.81	73.9	26.7	134.6	4.6	90.2	0.0
	AFTER 13 WEEKS	1.83	77.0	31.0	189.9	5.7	54.6	0.0
4	AFTER 2 WEEKS	1.73	73.3	25.0	215.2	5.9	183.9	0.0
	AFTER 6 WEEKS	1.78	78.7	29.1	219.0	5.2	107.8	0.0
	AFTER 13 WEEKS	1.79	78.0	29.7	262.8	6.3	59.0	0.0
5	AFTER 2 WEEKS	1.81	76.1	22.2	199.2	6.0	152.1	0.0
	AFTER 6 WEEKS	1.94	74.6	26.0	192.9	8.4	83.9	0.0
	AFTER 13 WEEKS	1.70	68.7	26.7	186.5	9.9	41.5	0.0
6	AFTER 2 WEEKS	1.24	93.0	30.1	175.6	7.2	181.1	0.0
	AFTER 6 WEEKS	1.32	85.7	28.8	147.7	5.9	101.9	0.0
	AFTER 13 WEEKS	1.25	78.1	29.9	173.4	7.1	61.2	0.0
7	AFTER 2 WEEKS	1.36	72.8	21.8	272.2	5.3	137.0	0.0
	AFTER 6 WEEKS	1.38	68.2	26.7	161.0	6.0	88.4	0.0
	AFTER 13 WEEKS	1.39	67.7	28.4	163.9	7.3	57.2	0.0
8	AFTER 2 WEEKS	1.94	78.8	23.3	287.0	8.0	225.6	0.0
	AFTER 6 WEEKS	2.00	76.6	32.7	170.0	8.2	126.6	0.0
	AFTER 13 WEEKS	2.03	79.3	28.9	179.9	9.0	74.1	0.0
9	AFTER 2 WEEKS	1.77	79.8	28.2	275.5	6.6	123.9	0.0
	AFTER 6 WEEKS	1.74	77.1	36.2	203.7	5.9	82.0	0.0
	AFTER 13 WEEKS	1.86	69.6	34.1	162.6	7.0	44.9	0.0
10	AFTER 2 WEEKS	1.52	96.0	28.7	286.2	6.7	163.4	0.0
	AFTER 6 WEEKS	1.54	79.9	27.8	179.5	5.1	96.6	0.0
	AFTER 13 WEEKS	1.41	93.0	28.5	287.4	4.5	58.7	0.0
11	AFTER 2 WEEKS	1.56	79.1	25.0	256.9	5.9	232.3	0.0
	AFTER 6 WEEKS	1.46	68.3	28.8	120.1	6.1	114.8	0.0
	AFTER 13 WEEKS	1.54	72.2	26.6	166.6	6.0	74.1	0.0
12	AFTER 2 WEEKS	2.01	79.5	25.0	189.3	7.0	222.9	0.0
	AFTER 6 WEEKS	1.84	78.0	30.5	137.4	6.8	127.6	0.0
	AFTER 13 WEEKS	1.91	79.0	31.0	252.0	8.1	70.2	0.0
13	AFTER 2 WEEKS	1.29	82.7	22.7	318.3	6.3	182.4	0.0
	AFTER 6 WEEKS	1.41	69.5	25.1	192.5	5.9	98.5	0.0
	AFTER 13 WEEKS	1.42	67.5	27.8	198.3	7.0	53.9	0.0
14	AFTER 2 WEEKS	1.04	86.7	23.1	179.0	7.6	137.1	0.0
	AFTER 6 WEEKS	1.09	89.4	29.3	169.7	6.8	82.0	0.0
	AFTER 13 WEEKS	0.98	88.4	30.9	338.1	5.8	55.9	0.0
15	AFTER 2 WEEKS	1.68	82.4	27.4	301.9	7.3	123.6	0.0
	AFTER 6 WEEKS	1.56	73.5	31.6	194.2	7.1	79.3	0.0
	AFTER 13 WEEKS	1.98	77.8	35.1	331.6	7.6	55.5	0.0
16	AFTER 2 WEEKS	1.20	84.6	25.7	224.2	7.1	171.2	0.0
	AFTER 6 WEEKS	1.30	79.1	30.2	137.8	6.7	109.2	0.0
	AFTER 13 WEEKS	1.36	79.7	27.2	186.7	9.0	73.7	0.0
17	AFTER 2 WEEKS	1.39	69.7	23.2	158.2	6.6	278.7	0.0
	AFTER 6 WEEKS	1.33	80.3	30.7	208.0	8.4	159.1	0.0

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULFONATE)

REPORT

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 1 (0 MG/KG/DAY)								
17	AFTER 13 WEEKS	1.49	71.6	36.1	255.2	8.0	86.3	0.0
18	AFTER 2 WEEKS	1.14	85.7	27.9	120.7	5.7	308.3	0.0
	AFTER 6 WEEKS	1.33	85.2	31.8	279.0	5.5	153.3	0.0
	AFTER 13 WEEKS	1.36	82.5	32.2	135.8	5.6	84.0	0.0
19	AFTER 2 WEEKS	1.50	93.4	22.6	302.4	6.4	176.8	0.0
	AFTER 6 WEEKS	1.52	74.0	23.4	141.0	5.0	97.1	0.0
	AFTER 13 WEEKS	1.43	80.9	29.6	294.7	7.5	62.7	0.0
20	AFTER 2 WEEKS	1.27	72.2	27.0	172.3	6.7	247.0	0.0
	AFTER 6 WEEKS	1.35	66.8	28.3	118.6	6.7	120.0	0.0
	AFTER 13 WEEKS	1.42	85.1	34.6	319.4	8.0	79.7	0.0
21	AFTER 2 WEEKS	1.36	88.6	25.5	317.9	7.5	227.6	0.0
	AFTER 6 WEEKS	1.43	91.1	33.3	309.0	6.7	117.2	0.0
	AFTER 13 WEEKS	1.39	83.5	30.3	311.7	5.4	73.5	0.0
	AFTER 17 WEEKS	1.01	84.0	31.0	482.6	6.3	65.4	0.0
22	AFTER 2 WEEKS	1.69	81.2	29.0	294.7	6.3	198.9	0.0
	AFTER 6 WEEKS	1.57	75.4	34.4	224.0	7.1	118.5	0.0
	AFTER 13 WEEKS	1.55	74.6	38.7	268.5	8.9	68.7	0.0
	AFTER 17 WEEKS	1.51	75.0	36.0	311.9	15.6	55.8	0.0
23	AFTER 2 WEEKS	1.63	85.2	26.1	254.1	6.1	169.9	0.0
	AFTER 6 WEEKS	1.72	83.4	30.6	155.7	6.4	107.1	0.0
	AFTER 13 WEEKS	1.71	89.4	39.5	256.3	8.9	62.1	0.0
	AFTER 17 WEEKS	1.61	72.9	32.7	184.9	5.7	61.6	0.0
24	AFTER 2 WEEKS	1.20	84.6	27.4	152.8	7.3	201.6	0.0
	AFTER 6 WEEKS	1.13	74.6	31.1	159.0	4.9	122.8	0.0
	AFTER 13 WEEKS	1.41	72.6	29.7	186.3	7.5	88.4	0.0
	AFTER 17 WEEKS	1.32	73.7	34.7	324.2	11.9	83.3	0.0
25	AFTER 2 WEEKS	1.40	93.9	21.3	331.0	7.2	214.0	0.0
	AFTER 6 WEEKS	1.42	83.8	29.9	226.3	4.7	146.7	0.0
	AFTER 13 WEEKS	1.53	70.3	26.7	230.2	3.7	105.0	0.0
	AFTER 17 WEEKS	1.44	71.5	25.3	215.5	4.6	97.8	0.0
26	AFTER 2 WEEKS	1.65	75.0	25.0	144.4	5.8	138.5	0.0
	AFTER 6 WEEKS	1.55	69.4	26.1	184.3	5.3	79.6	0.0
	AFTER 13 WEEKS	1.83	67.4	26.6	335.4	6.1	51.4	0.0
	AFTER 17 WEEKS	1.79	63.2	25.1	342.1	8.2	47.4	0.0
27	AFTER 2 WEEKS	1.23	71.6	27.3	216.2	7.7	258.0	0.0
	AFTER 6 WEEKS	1.26	73.1	30.5	197.4	7.2	146.1	0.0
	AFTER 13 WEEKS	1.44	73.8	40.9	273.3	7.8	87.6	0.0
	AFTER 17 WEEKS	1.52	72.6	30.2	395.8	7.5	72.4	0.0
28	AFTER 2 WEEKS	1.68	85.0	26.3	448.2	5.6	250.3	0.0
	AFTER 6 WEEKS	1.68	82.6	31.4	155.8	5.0	142.3	0.0
	AFTER 13 WEEKS	1.57	85.4	32.2	217.7	4.9	68.3	0.0
	AFTER 17 WEEKS	1.51	83.7	33.1	185.7	3.9	66.2	0.0
29	AFTER 2 WEEKS	1.50	77.1	25.0	232.8	7.4	201.4	0.0
	AFTER 6 WEEKS	1.56	77.0	28.1	193.0	6.3	114.0	0.0
	AFTER 13 WEEKS	1.65	76.2	34.9	267.1	6.1	66.2	0.0
	AFTER 17 WEEKS	1.58	72.9	29.7	253.8	6.1	67.8	0.0
30	AFTER 2 WEEKS	1.24	78.0	28.8	195.6	6.4	197.2	0.0
	AFTER 6 WEEKS	1.34	75.7	28.7	209.0	6.9	113.6	0.0
	AFTER 13 WEEKS	1.30	79.2	29.8	268.1	5.9	70.2	0.0
	AFTER 17 WEEKS	1.35	72.4	31.0	239.2	6.2	67.1	0.0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 2 (500 MG/KG/DAY)								
37	AFTER 2 WEEKS	1.80	80.2	24.2	277.3	6.7	161.2	0.0
	AFTER 6 WEEKS	1.84	67.7	31.4	162.2	5.8	106.1	0.0
	AFTER 13 WEEKS	1.61	68.1	30.4	264.6	6.4	56.8	0.0
38	AFTER 2 WEEKS	1.48	79.5	25.8	289.6	7.2	149.8	0.0
	AFTER 6 WEEKS	1.51	70.3	28.7	146.9	6.5	91.9	0.0
	AFTER 13 WEEKS	1.41	77.5	34.3	204.1	11.7	48.7	0.0
39	AFTER 2 WEEKS	1.78	80.1	24.2	166.5	6.5	150.4	0.0
	AFTER 6 WEEKS	1.67	84.4	26.4	192.9	5.5	81.8	0.0
	AFTER 13 WEEKS	1.63	76.0	27.1	192.8	3.8	53.1	0.0
40	AFTER 2 WEEKS	1.75	72.3	22.9	159.3	6.9	338.0	0.0
	AFTER 6 WEEKS	1.53	74.8	30.6	240.5	5.7	183.0	0.0
	AFTER 13 WEEKS	1.47	64.4	26.1	243.2	5.6	78.2	0.0
41	AFTER 2 WEEKS	1.33	82.6	27.8	260.0	6.3	173.3	0.0
	AFTER 6 WEEKS	1.38	78.3	34.1	178.8	6.3	109.4	0.0
	AFTER 13 WEEKS	1.25	135.7	46.1	426.2	11.0	66.6	0.0
42	AFTER 2 WEEKS	1.80	70.1	24.4	152.8	7.3	99.2	0.0
	AFTER 6 WEEKS	1.88	65.5	28.6	147.4	7.9	61.5	0.0
	AFTER 13 WEEKS	1.76	57.8	26.0	254.9	7.8	36.1	0.0
43	AFTER 2 WEEKS	1.69	85.3	23.8	173.1	8.1	136.1	0.0
	AFTER 6 WEEKS	1.61	84.0	32.9	238.6	10.4	80.9	0.0
	AFTER 13 WEEKS	1.72	76.9	32.1	335.4	9.7	57.5	0.0
44	AFTER 2 WEEKS	1.77	96.5	29.8	209.7	6.3	165.2	0.0
	AFTER 6 WEEKS	---	---	---	---	---	---	---
	AFTER 13 WEEKS	---	---	---	---	---	---	---
45	AFTER 2 WEEKS	1.92	74.7	23.1	266.7	7.1	127.3	0.0
	AFTER 6 WEEKS	1.83	49.9	26.9	210.3	7.1	93.3	0.0
	AFTER 13 WEEKS	2.05	72.4	29.2	340.0	11.0	59.2	0.0
46	AFTER 2 WEEKS	1.74	88.5	24.3	213.2	8.1	149.4	0.0
	AFTER 6 WEEKS	1.78	69.6	23.2	235.0	7.0	76.2	0.0
	AFTER 13 WEEKS	1.69	68.2	27.9	203.6	8.0	45.4	0.0
47	AFTER 2 WEEKS	1.29	74.9	23.9	158.6	7.9	262.1	0.0
	AFTER 6 WEEKS	1.44	73.6	25.4	129.5	7.3	129.1	0.0
	AFTER 13 WEEKS	1.45	76.6	21.3	241.8	5.5	61.9	0.0
48	AFTER 2 WEEKS	1.51	71.6	22.8	205.1	6.8	138.0	0.0
	AFTER 6 WEEKS	1.54	65.5	24.1	208.7	6.4	84.1	0.0
	AFTER 13 WEEKS	1.58	61.2	22.1	197.9	4.1	54.2	0.0
49	AFTER 2 WEEKS	1.48	85.1	23.8	277.5	6.4	290.3	0.0
	AFTER 6 WEEKS	1.43	75.5	29.0	200.7	5.9	161.4	0.0
	AFTER 13 WEEKS	1.35	77.1	32.9	269.6	4.9	92.9	0.0
50	AFTER 2 WEEKS	1.60	84.9	24.1	191.0	6.2	113.0	0.0
	AFTER 6 WEEKS	1.59	80.3	32.1	307.1	5.9	63.9	0.0
	AFTER 13 WEEKS	1.62	72.7	31.2	244.1	5.8	45.1	0.0
51	AFTER 2 WEEKS	1.73	85.3	24.0	254.6	5.9	133.5	0.0
	AFTER 6 WEEKS	1.95	78.9	28.7	168.1	6.0	88.6	0.0
	AFTER 13 WEEKS	2.05	72.6	26.1	205.9	6.8	64.7	0.0
52	AFTER 2 WEEKS	1.79	88.0	25.3	261.1	6.6	129.1	0.0
	AFTER 6 WEEKS	1.75	79.5	26.0	193.7	6.3	83.1	0.0
	AFTER 13 WEEKS	1.85	83.8	34.6	230.1	8.2	54.0	0.0
53	AFTER 2 WEEKS	1.32	83.2	23.8	177.0	7.5	282.7	0.0
	AFTER 6 WEEKS	1.28	88.3	26.7	193.4	7.6	161.8	0.0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 2 (500 MG/KG/DAY)								
53	AFTER 13 WEEKS	1.52	85.5	32.7	240.5	5.7	86.6	0.0
54	AFTER 2 WEEKS	1.57	86.3	27.2	174.9	6.4	162.7	0.0
	AFTER 6 WEEKS	1.61	83.5	32.3	240.4	7.1	85.6	0.0
	AFTER 13 WEEKS	1.46	80.0	36.0	289.8	6.2	48.3	0.0
55	AFTER 2 WEEKS	1.59	87.7	30.3	215.4	6.2	192.2	0.0
	AFTER 6 WEEKS	1.61	76.4	33.7	165.4	5.7	101.2	0.0
	AFTER 13 WEEKS	1.68	81.3	34.1	328.9	6.8	58.2	0.0
56	AFTER 2 WEEKS	1.49	79.6	22.0	218.8	7.7	203.7	0.0
	AFTER 6 WEEKS	1.53	77.5	28.0	175.2	6.8	104.4	0.0
	AFTER 13 WEEKS	1.55	68.1	23.1	169.3	5.9	58.2	0.0
GROUP 3 (1000 MG/KG/DAY)								
63	AFTER 2 WEEKS	1.46	98.9	30.0	168.6	5.7	181.8	0.0
	AFTER 6 WEEKS	1.54	105.6	36.8	242.7	7.3	110.9	0.0
	AFTER 13 WEEKS	1.50	92.9	30.4	241.2	5.6	55.2	0.0
64	AFTER 2 WEEKS	1.14	74.7	27.7	177.1	6.5	279.7	0.0
	AFTER 6 WEEKS	1.23	77.7	27.0	194.3	5.9	148.1	0.0
	AFTER 13 WEEKS	1.12	65.2	26.1	276.6	4.2	76.3	0.0
65	AFTER 2 WEEKS	1.64	83.3	27.6	219.1	7.4	152.2	0.0
	AFTER 6 WEEKS	1.74	71.9	27.4	164.0	6.8	85.5	0.0
	AFTER 13 WEEKS	1.92	65.6	26.6	144.8	6.4	51.4	0.0
66	AFTER 2 WEEKS	1.40	85.6	23.1	213.4	6.4	132.4	0.0
	AFTER 6 WEEKS	1.50	88.9	29.2	173.0	6.4	87.5	0.0
	AFTER 13 WEEKS	1.42	77.1	28.7	140.8	6.8	56.5	0.0
67	AFTER 2 WEEKS	1.80	67.5	20.7	128.3	7.0	133.0	0.0
	AFTER 6 WEEKS	1.77	73.5	27.0	229.3	8.6	83.7	0.0
	AFTER 13 WEEKS	1.67	91.5	37.1	366.8	8.0	47.7	0.0
68	AFTER 2 WEEKS	1.65	87.7	27.2	183.8	5.7	177.6	0.0
	AFTER 6 WEEKS	1.71	89.7	32.4	224.4	6.4	106.8	0.0
	AFTER 13 WEEKS	1.51	102.9	62.1	392.0	8.5	54.1	0.0
69	AFTER 2 WEEKS	1.69	84.5	26.7	164.0	8.1	163.5	0.0
	AFTER 6 WEEKS	1.69	87.4	31.9	174.4	8.4	92.4	0.0
	AFTER 13 WEEKS	1.76	80.0	33.0	142.4	8.9	53.9	0.0
70	AFTER 2 WEEKS	1.51	87.7	27.5	279.4	5.7	164.2	0.0
	AFTER 6 WEEKS	1.67	92.8	33.1	448.9	7.0	89.4	0.0
	AFTER 13 WEEKS	1.63	78.9	31.7	243.4	6.6	45.1	0.0
71	AFTER 2 WEEKS	2.23	80.9	27.0	222.2	8.8	123.5	0.0
	AFTER 6 WEEKS	2.15	80.1	27.4	217.9	8.6	75.6	0.0
	AFTER 13 WEEKS	2.29	75.7	30.2	134.9	5.7	42.9	0.0
72	AFTER 2 WEEKS	1.89	69.5	16.0	160.4	7.0	138.4	0.0
	AFTER 6 WEEKS	1.83	64.6	23.3	151.7	6.0	88.0	0.0
	AFTER 13 WEEKS	1.79	68.8	28.3	222.0	7.9	55.1	0.0
73	AFTER 2 WEEKS	1.61	88.6	25.4	224.9	7.6	146.2	0.0
	AFTER 6 WEEKS	1.53	86.1	33.9	215.4	6.4	100.2	0.0
	AFTER 13 WEEKS	1.78	98.4	31.7	279.7	4.7	65.3	0.0
74	AFTER 2 WEEKS	1.23	69.3	19.1	222.1	6.2	217.4	0.0
	AFTER 6 WEEKS	1.43	73.4	29.2	195.6	6.9	132.7	0.0
	AFTER 13 WEEKS	1.44	73.8	31.7	291.5	8.8	72.7	0.0

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY

MALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 3 (1000 MG/KG/DAY)								
75	AFTER 2 WEEKS	1.65	91.5	35.8	307.8	6.2	283.1	0.0
	AFTER 6 WEEKS	1.63	91.3	40.5	174.0	6.4	169.5	0.0
	AFTER 13 WEEKS	1.53	90.6	35.6	276.5	4.4	84.6	0.0
76	AFTER 2 WEEKS	1.60	74.1	21.0	184.5	6.9	112.7	0.0
	AFTER 6 WEEKS	1.70	82.5	26.7	164.4	7.4	71.0	0.0
	AFTER 13 WEEKS	1.75	75.5	26.9	175.6	6.8	42.1	0.0
77	AFTER 2 WEEKS	1.64	79.8	24.8	184.6	7.1	149.8	0.0
	AFTER 6 WEEKS	1.79	74.4	30.5	129.5	6.4	85.1	0.0
	AFTER 13 WEEKS	1.87	73.5	30.1	204.7	7.4	46.5	0.0
78	AFTER 2 WEEKS	1.40	82.9	29.3	184.2	5.9	278.4	0.0
	AFTER 6 WEEKS	1.12	77.3	30.8	156.7	5.4	132.8	0.0
	AFTER 13 WEEKS	1.38	79.7	29.9	251.7	7.0	63.7	0.0
79	AFTER 2 WEEKS	1.97	79.0	21.8	219.6	5.9	191.8	0.0
	AFTER 6 WEEKS	2.04	74.4	25.6	189.9	6.5	122.3	0.0
	AFTER 13 WEEKS	2.09	68.6	21.3	214.7	6.0	74.0	0.0
80	AFTER 2 WEEKS	1.45	81.3	20.7	225.6	8.6	180.8	0.0
	AFTER 6 WEEKS	1.87	79.2	29.9	166.0	7.6	101.7	0.0
	AFTER 13 WEEKS	1.70	64.8	24.2	198.1	7.7	57.7	0.0
81	AFTER 2 WEEKS	1.74	71.8	21.7	185.2	6.9	126.3	0.0
	AFTER 6 WEEKS	1.88	71.9	27.8	205.3	6.2	79.0	0.0
	AFTER 13 WEEKS	1.82	70.6	25.2	273.0	7.6	46.3	0.0
82	AFTER 2 WEEKS	2.15	68.9	17.0	206.1	5.7	138.3	0.0
	AFTER 6 WEEKS	2.04	68.2	19.3	171.5	7.5	78.2	0.0
	AFTER 13 WEEKS	2.28	64.0	19.6	200.9	8.1	49.2	0.0
GROUP 4 (2000 MG/KG/DAY)								
89	AFTER 2 WEEKS	1.40	83.0	20.7	196.9	6.6	147.0	0.0
	AFTER 6 WEEKS	1.74	78.4	22.7	153.3	6.9	95.7	0.0
	AFTER 13 WEEKS	1.40	71.3	29.1	219.7	18.0	57.2	0.0
90	AFTER 2 WEEKS	1.64	74.9	33.3	244.4	7.0	176.5	0.0
	AFTER 6 WEEKS	1.64	77.5	44.2	191.6	7.7	118.1	0.0
	AFTER 13 WEEKS	1.63	71.5	38.7	280.4	9.7	71.6	0.0
91	AFTER 2 WEEKS	1.67	65.2	23.8	152.1	6.4	119.5	0.0
	AFTER 6 WEEKS	1.73	78.0	31.6	255.9	5.6	77.4	0.0
	AFTER 13 WEEKS	1.56	62.3	31.1	178.1	4.6	43.0	0.0
92	AFTER 2 WEEKS	1.81	76.4	24.4	200.0	5.8	171.9	0.0
	AFTER 6 WEEKS	1.88	75.7	28.6	180.6	6.2	107.9	0.0
	AFTER 13 WEEKS	1.66	61.8	23.9	221.2	3.9	60.6	0.0
93	AFTER 2 WEEKS	2.03	67.7	22.9	140.5	6.4	168.0	0.0
	AFTER 6 WEEKS	1.92	74.9	25.4	211.2	5.8	94.3	0.0
	AFTER 13 WEEKS	1.75	69.7	27.4	292.5	8.8	61.0	0.0
94	AFTER 2 WEEKS	2.04	70.9	22.1	151.7	7.4	100.5	0.0
	AFTER 6 WEEKS	2.14	70.2	30.8	168.0	6.0	64.2	0.0
	AFTER 13 WEEKS	1.77	65.1	25.0	326.8	4.8	37.4	0.0
95	AFTER 2 WEEKS	1.18	88.8	28.8	214.7	8.1	144.3	0.0
	AFTER 6 WEEKS	1.28	85.8	36.8	187.1	7.1	104.2	0.0
	AFTER 13 WEEKS	1.09	83.4	31.7	241.9	4.0	57.5	0.0
96	AFTER 2 WEEKS	1.61	70.6	23.2	146.5	7.9	117.8	0.0
	AFTER 6 WEEKS	1.58	70.3	30.7	327.8	8.0	72.1	0.0
	AFTER 13 WEEKS	1.75	68.1	31.9	373.9	6.9	47.0	0.0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY

MALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 4 (2000 MG/KG/DAY)								
97	AFTER 2 WEEKS	1.21	86.2	26.5	193.1	8.8	253.9	0.0
	AFTER 6 WEEKS	1.38	93.1	35.8	251.6	9.4	143.7	0.0
	AFTER 13 WEEKS	1.23	79.5	32.0	216.1	7.5	65.7	0.0
98	AFTER 2 WEEKS	1.17	69.7	19.1	239.7	8.4	272.6	0.0
	AFTER 6 WEEKS	1.30	80.3	27.1	210.0	8.3	144.8	0.0
	AFTER 13 WEEKS	1.25	68.5	24.6	255.9	6.4	67.8	0.0
99	AFTER 2 WEEKS	1.11	66.7	18.4	261.5	5.3	214.6	0.0
	AFTER 6 WEEKS	1.28	65.7	22.2	192.1	5.9	100.7	0.0
	AFTER 13 WEEKS	1.30	67.6	27.9	631.2	7.0	60.8	0.0
100	AFTER 2 WEEKS	1.39	69.9	20.0	165.8	6.6	141.6	0.0
	AFTER 6 WEEKS	1.64	75.3	33.6	190.1	7.5	96.8	0.0
	AFTER 13 WEEKS	1.55	71.6	25.0	178.1	4.9	52.5	0.0
101	AFTER 2 WEEKS	1.67	43.6	18.3	208.7	7.3	229.7	0.0
	AFTER 6 WEEKS	1.87	66.1	23.8	150.7	5.7	119.3	0.0
	AFTER 13 WEEKS	1.61	63.9	27.4	226.2	5.3	67.8	0.0
102	AFTER 2 WEEKS	1.42	77.4	23.7	166.8	7.3	155.6	0.0
	AFTER 6 WEEKS	1.59	80.2	28.4	150.7	7.1	97.6	0.0
	AFTER 13 WEEKS	1.52	78.8	24.4	314.1	4.8	52.9	0.0
103	AFTER 2 WEEKS	1.18	75.9	22.9	216.0	7.1	125.4	0.0
	AFTER 6 WEEKS	1.29	71.4	24.1	200.6	6.2	77.5	0.0
	AFTER 13 WEEKS	1.34	69.2	23.1	258.0	6.3	45.3	0.0
104	AFTER 2 WEEKS	1.32	78.9	21.2	290.0	6.4	270.6	0.0
	AFTER 6 WEEKS	1.35	79.0	22.1	216.2	6.0	135.3	0.0
	AFTER 13 WEEKS	1.37	89.2	35.9	426.4	6.6	66.4	0.0
105	AFTER 2 WEEKS	1.34	80.9	23.6	256.4	7.9	332.4	0.0
	AFTER 6 WEEKS	1.42	81.1	27.0	143.1	8.8	171.1	0.0
	AFTER 13 WEEKS	1.56	71.5	22.7	315.9	8.1	79.7	0.0
106	AFTER 2 WEEKS	1.63	86.6	21.7	143.9	7.4	150.1	0.0
	AFTER 6 WEEKS	1.75	83.2	25.4	197.8	6.8	104.5	0.0
	AFTER 13 WEEKS	1.67	85.0	29.9	261.9	8.1	60.9	0.0
107	AFTER 2 WEEKS	1.73	74.8	24.1	295.0	7.5	146.1	0.0
	AFTER 6 WEEKS	1.69	77.7	29.7	193.6	8.3	80.8	0.0
	AFTER 13 WEEKS	1.69	79.0	30.1	345.2	6.1	47.6	0.0
108	AFTER 2 WEEKS	1.52	66.8	21.6	180.1	6.2	136.1	0.0
	AFTER 6 WEEKS	1.55	75.4	30.7	306.8	8.4	92.9	0.0
	AFTER 13 WEEKS	1.47	69.6	30.6	282.1	6.1	61.3	0.0
109	AFTER 2 WEEKS	1.11	83.3	25.1	267.6	5.3	142.3	0.0
	AFTER 6 WEEKS	1.24	89.2	32.7	410.8	6.1	86.7	0.0
	AFTER 13 WEEKS	1.21	75.4	29.4	286.2	3.4	46.3	0.0
	AFTER 17 WEEKS	1.12	49.6	30.2	279.6	5.2	43.0	0.0
110	AFTER 2 WEEKS	1.41	74.3	23.0	162.4	8.9	161.5	0.0
	AFTER 6 WEEKS	1.53	77.2	27.6	290.8	7.7	90.6	0.0
	AFTER 13 WEEKS	1.58	72.6	30.3	303.4	8.0	50.7	0.0
	AFTER 17 WEEKS	1.33	64.2	24.1	211.4	6.4	48.4	0.0
111	AFTER 2 WEEKS	1.36	71.2	24.0	186.4	6.7	161.4	0.0
	AFTER 6 WEEKS	1.61	73.2	28.3	198.7	6.3	89.9	0.0
	AFTER 13 WEEKS	1.42	66.3	27.6	168.7	5.6	51.0	0.0
	AFTER 17 WEEKS	1.32	72.1	26.8	237.5	5.4	51.6	0.0
112	AFTER 2 WEEKS	1.90	75.4	16.4	245.2	6.8	120.6	0.0
	AFTER 6 WEEKS	1.70	76.8	22.8	256.3	8.2	86.8	0.0
	AFTER 13 WEEKS	1.63	56.9	19.9	197.0	5.3	62.6	0.0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 4 (2000 MG/KG/DAY)								
112	AFTER 17 WEEKS	1.72	69.3	22.7	307.9	8.2	57.7	0.0
113	AFTER 2 WEEKS	1.23	67.0	19.5	192.4	7.1	118.5	0.0
	AFTER 6 WEEKS	1.50	76.0	27.8	253.2	8.9	75.0	0.0
	AFTER 13 WEEKS	1.37	84.5	25.2	369.3	7.9	47.9	0.0
	AFTER 17 WEEKS	1.31	67.0	23.6	260.4	7.3	51.8	0.0
114	AFTER 2 WEEKS	1.39	86.6	26.2	269.4	8.1	119.6	0.0
	AFTER 6 WEEKS	1.61	80.9	34.0	191.2	7.6	67.0	0.0
	AFTER 13 WEEKS	1.62	74.5	38.0	251.4	11.3	45.9	0.0
	AFTER 17 WEEKS	1.58	75.5	33.5	239.6	10.7	42.9	0.0
115	AFTER 2 WEEKS	1.46	87.5	12.5	216.9	7.3	149.3	0.0
	AFTER 6 WEEKS	1.41	79.7	30.0	265.0	6.0	86.4	0.0
	AFTER 13 WEEKS	1.35	81.2	27.2	571.5	6.6	48.6	0.0
	AFTER 17 WEEKS	1.45	72.4	26.3	314.9	8.3	46.7	0.0
116	AFTER 2 WEEKS	1.83	80.5	24.1	154.3	8.1	145.1	0.0
	AFTER 6 WEEKS	2.16	88.2	33.5	243.3	9.0	92.0	0.0
	AFTER 13 WEEKS	1.98	69.0	27.6	330.3	6.9	47.8	0.0
	AFTER 17 WEEKS	1.87	61.4	23.6	203.4	6.3	39.1	0.0
117	AFTER 2 WEEKS	1.61	78.9	21.2	148.6	7.9	163.6	0.0
	AFTER 6 WEEKS	2.04	89.6	34.0	320.4	7.5	95.7	0.0
	AFTER 13 WEEKS	1.75	80.2	31.8	333.3	7.0	54.7	0.0
	AFTER 17 WEEKS	1.67	75.7	28.2	306.6	6.5	50.7	0.0
118	AFTER 2 WEEKS	1.66	66.5	20.0	160.9	7.3	113.5	0.0
	AFTER 6 WEEKS	1.80	78.9	27.5	423.3	6.9	66.6	0.0
	AFTER 13 WEEKS	1.81	68.1	30.6	264.8	6.4	42.5	0.0
	AFTER 17 WEEKS	1.72	60.2	23.9	233.7	6.7	40.3	0.0

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 1 (0 MG/KG/DAY)								
1	AFTER 2 WEEKS	495.3	142.3	3.47	100.8	2.72	2.94	60.87
	AFTER 6 WEEKS	160.5	141.6	3.35	101.8	2.62	2.25	61.37
	AFTER 13 WEEKS	116.4	141.4	3.83	103.5	2.66	1.77	67.07
2	AFTER 2 WEEKS	345.0	143.0	3.99	101.4	2.66	2.98	63.06
	AFTER 6 WEEKS	202.5	142.6	3.48	102.6	2.66	2.33	66.26
	AFTER 13 WEEKS	158.5	143.7	3.95	104.8	2.79	2.05	69.14
3	AFTER 2 WEEKS	253.7	142.8	3.33	101.3	2.75	2.59	63.94
	AFTER 6 WEEKS	190.6	143.3	3.17	102.7	2.68	2.00	65.17
	AFTER 13 WEEKS	137.6	142.6	3.41	103.3	2.64	2.02	66.72
4	AFTER 2 WEEKS	230.1	142.6	3.41	100.6	2.74	2.84	61.69
	AFTER 6 WEEKS	340.1	142.7	3.16	101.8	2.72	2.26	66.34
	AFTER 13 WEEKS	125.4	141.1	4.48	102.4	2.80	1.95	68.71
5	AFTER 2 WEEKS	235.1	144.1	3.36	101.2	2.78	2.89	62.69
	AFTER 6 WEEKS	176.2	142.5	3.11	100.2	2.81	2.36	66.69
	AFTER 13 WEEKS	167.3	142.2	3.53	102.9	2.71	2.00	66.92
6	AFTER 2 WEEKS	303.7	144.7	3.05	103.9	2.57	2.89	60.67
	AFTER 6 WEEKS	166.1	142.8	3.01	103.6	2.50	1.93	64.02
	AFTER 13 WEEKS	137.9	143.9	3.46	106.0	2.54	1.83	63.61
7	AFTER 2 WEEKS	274.9	144.4	3.18	102.2	2.64	2.61	58.29
	AFTER 6 WEEKS	155.8	143.2	3.15	102.9	2.61	2.09	63.42
	AFTER 13 WEEKS	128.4	144.2	3.34	105.3	2.70	1.85	65.31
8	AFTER 2 WEEKS	262.1	144.4	3.36	101.6	2.72	2.80	62.83
	AFTER 6 WEEKS	234.1	144.3	3.09	101.9	2.65	2.29	66.17
	AFTER 13 WEEKS	149.1	143.3	3.21	103.6	2.85	2.10	69.65
9	AFTER 2 WEEKS	295.1	145.0	3.38	102.5	2.74	2.84	61.97
	AFTER 6 WEEKS	215.5	144.4	3.12	102.6	2.75	2.05	70.14
	AFTER 13 WEEKS	131.7	143.9	3.66	103.6	2.81	1.94	69.85
10	AFTER 2 WEEKS	319.2	143.9	3.37	102.7	2.62	2.54	59.66
	AFTER 6 WEEKS	172.3	144.5	3.34	105.0	2.57	1.79	63.73
	AFTER 13 WEEKS	234.2	143.5	3.63	105.4	2.70	2.01	63.85
11	AFTER 2 WEEKS	375.4	143.6	2.98	101.7	2.62	2.36	60.69
	AFTER 6 WEEKS	148.7	145.0	3.11	103.3	2.53	1.85	62.14
	AFTER 13 WEEKS	121.6	144.4	3.46	103.8	2.47	1.55	62.80
12	AFTER 2 WEEKS	283.5	144.0	3.22	104.4	2.59	2.71	62.07
	AFTER 6 WEEKS	181.7	144.3	3.14	105.5	2.57	2.22	65.86
	AFTER 13 WEEKS	192.6	144.6	3.64	106.1	2.50	1.82	65.39
13	AFTER 2 WEEKS	438.2	144.2	3.37	102.0	2.70	2.62	61.77
	AFTER 6 WEEKS	201.6	142.8	3.40	103.4	2.63	2.03	66.43
	AFTER 13 WEEKS	163.5	143.9	3.57	105.0	2.63	1.69	65.78
14	AFTER 2 WEEKS	262.9	147.4	3.20	105.6	2.67	2.59	62.37
	AFTER 6 WEEKS	224.8	147.6	3.03	107.0	2.64	1.92	66.75
	AFTER 13 WEEKS	212.3	147.5	3.90	110.5	2.63	1.82	65.78
15	AFTER 2 WEEKS	320.8	144.1	3.49	102.8	2.67	2.69	63.24
	AFTER 6 WEEKS	188.0	143.7	3.16	103.7	2.57	2.06	64.67
	AFTER 13 WEEKS	273.2	145.7	3.31	105.5	2.55	1.74	66.53
16	AFTER 2 WEEKS	278.4	144.7	3.41	103.2	2.71	2.87	59.80
	AFTER 6 WEEKS	145.4	144.0	3.17	103.8	2.59	2.16	63.51
	AFTER 13 WEEKS	130.0	145.0	3.57	104.7	2.55	1.84	62.65
17	AFTER 2 WEEKS	181.2	144.5	3.33	102.5	2.73	3.13	61.33
	AFTER 6 WEEKS	226.7	144.0	3.66	104.8	2.63	2.31	62.67

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 1 (0 MG/KG/DAY)								
17	AFTER 13 WEEKS	164.0	144.0	3.71	105.3	2.59	1.97	66.91
18	AFTER 2 WEEKS	198.2	143.8	3.19	102.6	2.58	2.92	59.93
	AFTER 6 WEEKS	205.6	143.3	3.27	104.0	2.55	2.24	64.45
	AFTER 13 WEEKS	133.3	146.6	3.60	106.3	2.62	1.93	66.67
19	AFTER 2 WEEKS	594.9	144.5	3.60	101.8	2.73	2.96	60.12
	AFTER 6 WEEKS	134.8	143.4	3.53	101.9	2.60	2.18	63.79
	AFTER 13 WEEKS	209.2	145.1	3.56	104.2	2.55	1.73	64.77
20	AFTER 2 WEEKS	225.7	142.9	3.44	100.6	2.73	2.84	59.33
	AFTER 6 WEEKS	180.7	143.6	3.47	104.1	2.62	2.25	59.44
	AFTER 13 WEEKS	433.7	144.5	3.73	104.6	2.48	1.91	62.28
21	AFTER 2 WEEKS	315.8	146.9	3.22	105.6	2.66	2.76	60.33
	AFTER 6 WEEKS	301.0	144.5	3.17	104.3	2.53	2.07	63.51
	AFTER 13 WEEKS	203.5	142.9	3.32	104.7	2.52	2.08	64.06
	AFTER 17 WEEKS	273.6	145.5	3.75	107.5	2.58	2.08	64.19
22	AFTER 2 WEEKS	318.1	146.4	3.35	105.4	2.67	2.64	61.57
	AFTER 6 WEEKS	174.8	144.4	3.33	104.3	2.56	2.09	67.10
	AFTER 13 WEEKS	189.6	144.0	3.51	104.5	2.60	1.96	69.20
	AFTER 17 WEEKS	178.8	142.8	3.83	105.4	2.58	1.85	69.59
23	AFTER 2 WEEKS	304.0	145.5	3.09	104.3	2.76	2.48	63.66
	AFTER 6 WEEKS	167.8	144.2	3.47	104.3	2.71	2.03	65.43
	AFTER 13 WEEKS	239.1	143.7	3.44	105.7	2.70	1.62	69.46
	AFTER 17 WEEKS	123.5	146.7	3.69	107.8	2.78	1.84	66.99
24	AFTER 2 WEEKS	390.0	144.7	3.26	103.3	2.75	2.74	62.52
	AFTER 6 WEEKS	227.1	144.0	3.28	103.9	2.58	2.03	63.53
	AFTER 13 WEEKS	160.5	142.2	3.61	103.4	2.64	1.89	67.67
	AFTER 17 WEEKS	209.3	145.8	4.13	106.4	2.65	2.07	67.11
25	AFTER 2 WEEKS	518.7	147.2	3.34	104.7	2.72	2.65	62.16
	AFTER 6 WEEKS	269.1	144.8	3.21	104.3	2.58	1.70	65.83
	AFTER 13 WEEKS	139.6	143.7	3.81	106.1	2.69	1.83	65.47
	AFTER 17 WEEKS	122.5	147.4	4.45	108.0	2.70	1.86	66.64
26	AFTER 2 WEEKS	254.4	143.4	3.79	103.1	2.72	2.52	61.11
	AFTER 6 WEEKS	202.6	144.7	3.45	104.2	2.68	2.17	63.03
	AFTER 13 WEEKS	347.2	145.0	3.44	105.3	2.54	1.67	63.78
	AFTER 17 WEEKS	116.1	147.3	3.57	106.9	2.73	1.59	70.21
27	AFTER 2 WEEKS	232.4	145.9	3.34	103.8	2.73	2.73	62.59
	AFTER 6 WEEKS	198.0	144.1	3.51	103.6	2.63	2.08	64.14
	AFTER 13 WEEKS	186.5	144.7	3.31	106.0	2.46	1.63	63.45
	AFTER 17 WEEKS	236.6	145.4	3.56	107.7	2.59	1.63	70.18
28	AFTER 2 WEEKS	340.3	146.0	3.58	104.2	2.70	2.92	62.22
	AFTER 6 WEEKS	176.2	144.4	3.41	104.1	2.65	2.32	66.92
	AFTER 13 WEEKS	130.7	145.5	3.68	106.2	2.58	1.87	65.77
	AFTER 17 WEEKS	113.6	147.2	3.64	108.1	2.70	1.94	70.99
29	AFTER 2 WEEKS	309.6	145.3	3.35	104.3	2.73	2.74	65.07
	AFTER 6 WEEKS	219.9	143.8	3.49	104.2	2.70	2.26	66.61
	AFTER 13 WEEKS	170.3	145.7	3.47	105.5	2.53	1.86	67.94
	AFTER 17 WEEKS	175.3	149.5	4.21	109.7	2.66	1.88	71.56
30	AFTER 2 WEEKS	273.4	145.2	3.43	103.7	2.73	2.92	60.17
	AFTER 6 WEEKS	197.4	144.9	3.22	104.4	2.65	2.30	64.29
	AFTER 13 WEEKS	336.5	145.0	3.77	106.6	2.51	1.87	61.65
	AFTER 17 WEEKS	150.3	146.4	3.75	109.0	2.62	1.84	67.58

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 2 (500 MG/KG/DAY)								
37	AFTER 2 WEEKS	267.5	145.2	3.89	103.4	2.75	2.47	62.41
	AFTER 6 WEEKS	190.1	142.8	3.35	102.5	2.68	2.04	66.41
	AFTER 13 WEEKS	197.3	142.1	3.87	103.3	2.61	1.80	65.09
38	AFTER 2 WEEKS	316.5	145.2	3.28	103.0	2.69	2.85	61.92
	AFTER 6 WEEKS	165.7	143.9	3.01	103.1	2.61	2.22	66.78
	AFTER 13 WEEKS	278.1	144.2	3.60	105.2	2.68	2.01	65.68
39	AFTER 2 WEEKS	204.4	145.4	3.22	102.4	2.75	2.56	60.44
	AFTER 6 WEEKS	224.8	144.7	3.16	103.7	2.63	1.99	64.59
	AFTER 13 WEEKS	146.1	144.7	3.62	106.8	2.68	1.75	66.54
40	AFTER 2 WEEKS	238.2	146.9	3.61	105.0	2.74	2.86	60.94
	AFTER 6 WEEKS	263.2	145.1	3.65	104.6	2.68	2.44	65.91
	AFTER 13 WEEKS	169.3	144.1	3.61	105.4	2.67	2.09	66.87
41	AFTER 2 WEEKS	272.4	146.0	3.70	103.1	2.80	2.88	61.94
	AFTER 6 WEEKS	198.7	144.1	3.29	102.6	2.70	2.33	67.99
	AFTER 13 WEEKS	299.9	142.9	3.74	104.1	2.67	2.06	67.04
42	AFTER 2 WEEKS	230.8	144.6	3.26	102.0	2.76	2.71	62.78
	AFTER 6 WEEKS	190.8	143.2	3.34	101.7	2.70	2.37	66.95
	AFTER 13 WEEKS	214.0	142.6	3.85	103.6	2.65	1.95	65.22
43	AFTER 2 WEEKS	260.6	145.2	3.18	104.4	2.66	2.63	61.52
	AFTER 6 WEEKS	277.3	146.8	3.02	105.8	2.64	2.17	64.83
	AFTER 13 WEEKS	171.4	144.1	3.59	105.9	2.62	1.75	66.02
44	AFTER 2 WEEKS	205.4	145.7	3.45	104.4	2.62	3.34	60.13
	AFTER 6 WEEKS	---	---	---	---	---	---	---
	AFTER 13 WEEKS	---	---	---	---	---	---	---
45	AFTER 2 WEEKS	371.2	146.7	3.36	104.7	2.68	2.63	64.13
	AFTER 6 WEEKS	234.4	144.7	3.39	104.0	2.67	2.05	69.15
	AFTER 13 WEEKS	182.5	145.0	3.55	106.0	2.60	1.74	69.23
46	AFTER 2 WEEKS	333.4	146.2	3.81	105.8	2.74	2.59	62.88
	AFTER 6 WEEKS	190.0	145.3	4.02	106.3	2.74	2.10	66.81
	AFTER 13 WEEKS	141.5	143.0	3.80	105.6	2.69	1.83	65.89
47	AFTER 2 WEEKS	234.7	146.5	3.34	104.3	2.65	2.78	61.93
	AFTER 6 WEEKS	157.5	146.6	3.33	104.8	2.69	2.31	65.43
	AFTER 13 WEEKS	151.9	145.7	3.79	105.3	2.48	2.02	64.46
48	AFTER 2 WEEKS	237.3	147.5	3.52	105.5	2.86	2.68	64.59
	AFTER 6 WEEKS	179.5	145.1	3.44	104.2	2.75	2.28	67.44
	AFTER 13 WEEKS	151.1	146.0	3.82	105.8	2.67	1.86	66.92
49	AFTER 2 WEEKS	377.5	147.0	3.72	104.1	2.70	2.99	61.54
	AFTER 6 WEEKS	162.6	144.2	3.72	103.7	2.67	2.53	66.23
	AFTER 13 WEEKS	211.5	144.9	4.57	106.3	2.48	1.99	65.50
50	AFTER 2 WEEKS	224.6	146.3	3.47	105.1	2.75	2.49	63.13
	AFTER 6 WEEKS	271.3	144.9	3.78	105.2	2.80	2.16	66.25
	AFTER 13 WEEKS	194.3	146.1	3.73	105.3	2.70	1.89	64.90
51	AFTER 2 WEEKS	298.1	145.0	3.57	104.4	2.79	2.41	61.83
	AFTER 6 WEEKS	203.6	146.5	3.53	105.0	2.79	2.09	65.35
	AFTER 13 WEEKS	149.4	146.0	3.43	103.6	2.65	2.00	65.58
52	AFTER 2 WEEKS	330.4	146.6	3.77	104.8	2.73	3.09	60.56
	AFTER 6 WEEKS	222.9	144.1	3.60	103.9	2.76	2.65	64.18
	AFTER 13 WEEKS	228.7	144.3	4.16	104.9	2.60	2.09	64.16
53	AFTER 2 WEEKS	280.4	146.3	3.12	104.7	2.70	2.73	59.98
	AFTER 6 WEEKS	169.1	146.4	3.26	105.4	2.68	2.30	62.50

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 2 (500 MG/KG/DAY)								
53	AFTER 13 WEEKS	206.4	146.2	3.59	106.6	2.54	1.55	64.24
54	AFTER 2 WEEKS	504.9	147.0	3.16	104.4	2.72	2.85	61.59
	AFTER 6 WEEKS	239.6	145.7	3.37	104.0	2.76	2.32	66.99
	AFTER 13 WEEKS	186.9	147.0	3.97	106.9	2.60	1.93	64.17
55	AFTER 2 WEEKS	293.2	145.1	3.43	104.4	2.70	2.71	61.78
	AFTER 6 WEEKS	238.5	145.2	3.42	105.0	2.71	2.18	65.92
	AFTER 13 WEEKS	243.2	144.7	3.67	105.4	2.57	1.65	65.82
56	AFTER 2 WEEKS	293.4	149.2	3.43	108.1	2.65	2.71	58.40
	AFTER 6 WEEKS	243.3	148.9	3.55	108.0	2.70	2.35	64.63
	AFTER 13 WEEKS	140.8	148.6	3.73	110.5	2.56	1.97	61.74
GROUP 3 (1000 MG/KG/DAY)								
63	AFTER 2 WEEKS	291.2	142.1	3.58	102.8	2.61	2.59	59.39
	AFTER 6 WEEKS	273.1	152.0	3.63	106.5	2.70	2.07	68.57
	AFTER 13 WEEKS	189.0	145.4	3.31	107.0	2.55	1.69	63.94
64	AFTER 2 WEEKS	240.2	140.1	3.26	100.3	2.51	2.63	57.84
	AFTER 6 WEEKS	251.1	146.8	3.78	105.5	2.69	2.47	65.11
	AFTER 13 WEEKS	195.1	144.6	3.58	105.8	2.68	2.15	65.72
65	AFTER 2 WEEKS	336.1	140.4	3.46	100.8	2.61	2.52	58.05
	AFTER 6 WEEKS	172.3	144.8	3.72	103.7	2.72	2.30	64.31
	AFTER 13 WEEKS	143.7	143.3	3.69	104.8	2.68	1.88	65.98
66	AFTER 2 WEEKS	262.3	142.2	3.43	104.4	2.55	2.82	56.33
	AFTER 6 WEEKS	205.0	147.3	3.48	107.0	2.73	2.46	64.95
	AFTER 13 WEEKS	123.7	146.0	3.54	107.6	2.59	1.82	66.68
67	AFTER 2 WEEKS	254.9	141.7	3.78	103.7	2.70	2.46	58.49
	AFTER 6 WEEKS	207.7	145.9	3.62	107.3	2.71	2.16	64.73
	AFTER 13 WEEKS	353.9	145.5	3.76	109.6	2.69	1.99	64.86
68	AFTER 2 WEEKS	304.1	144.8	3.39	106.0	2.65	2.73	59.70
	AFTER 6 WEEKS	221.7	149.5	3.59	110.1	2.67	2.16	64.57
	AFTER 13 WEEKS	245.8	150.8	3.85	111.3	2.60	1.94	62.21
69	AFTER 2 WEEKS	318.7	140.6	3.70	102.6	2.67	2.68	58.55
	AFTER 6 WEEKS	202.6	146.0	3.57	107.1	2.69	2.01	64.06
	AFTER 13 WEEKS	205.4	144.6	3.67	107.2	2.66	1.72	63.97
70	AFTER 2 WEEKS	503.9	141.9	3.47	102.4	2.73	2.57	58.37
	AFTER 6 WEEKS	331.3	150.7	4.14	108.7	2.74	2.33	65.38
	AFTER 13 WEEKS	250.8	144.4	3.96	105.9	2.88	1.95	65.43
71	AFTER 2 WEEKS	330.3	142.4	3.49	101.2	2.80	2.89	59.92
	AFTER 6 WEEKS	189.2	146.6	3.70	105.4	2.73	2.44	64.32
	AFTER 13 WEEKS	127.9	145.6	3.63	107.3	2.79	1.69	66.99
72	AFTER 2 WEEKS	234.6	142.6	3.51	102.2	2.60	2.74	59.24
	AFTER 6 WEEKS	147.5	148.3	3.80	106.8	2.75	2.46	66.02
	AFTER 13 WEEKS	148.7	146.0	3.85	105.9	2.72	2.06	68.26
73	AFTER 2 WEEKS	265.9	141.9	3.58	103.2	2.66	2.76	61.36
	AFTER 6 WEEKS	183.3	147.7	3.90	107.7	2.67	2.33	67.12
	AFTER 13 WEEKS	459.7	147.3	4.16	107.0	2.71	2.17	66.11
74	AFTER 2 WEEKS	240.3	141.8	3.08	101.2	2.55	2.65	58.17
	AFTER 6 WEEKS	224.4	147.9	3.34	107.3	2.65	2.17	66.48
	AFTER 13 WEEKS	209.0	145.9	3.81	106.2	2.60	2.10	64.86

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 3 (1000 MG/KG/DAY)								
75	AFTER 2 WEEKS	337.0	144.3	4.03	103.9	2.66	3.13	58.88
	AFTER 6 WEEKS	159.5	149.2	3.89	108.0	2.73	2.58	66.23
	AFTER 13 WEEKS	176.4	146.6	3.90	108.2	2.57	2.10	64.35
76	AFTER 2 WEEKS	260.1	141.4	3.55	102.2	2.58	2.69	57.40
	AFTER 6 WEEKS	186.5	147.3	3.58	106.8	2.68	2.29	67.15
	AFTER 13 WEEKS	151.0	148.4	4.06	108.3	2.63	1.94	65.30
77	AFTER 2 WEEKS	321.5	141.3	3.68	101.6	2.63	2.83	60.30
	AFTER 6 WEEKS	156.6	147.8	3.70	106.3	2.81	2.41	68.54
	AFTER 13 WEEKS	162.0	146.6	3.79	105.2	2.72	1.93	67.34
78	AFTER 2 WEEKS	335.8	142.6	3.19	103.3	2.59	2.64	60.03
	AFTER 6 WEEKS	164.0	147.3	3.60	107.5	2.68	2.09	65.37
	AFTER 13 WEEKS	179.6	147.8	3.35	107.1	2.55	1.86	61.97
79	AFTER 2 WEEKS	298.5	144.9	3.64	104.1	2.73	2.96	62.81
	AFTER 6 WEEKS	162.2	150.0	4.08	107.6	2.86	2.61	69.44
	AFTER 13 WEEKS	145.2	149.6	3.91	107.4	2.69	1.91	68.48
80	AFTER 2 WEEKS	354.6	146.4	3.61	106.8	2.67	2.68	59.76
	AFTER 6 WEEKS	197.6	145.6	3.37	105.4	2.73	2.25	67.44
	AFTER 13 WEEKS	142.1	147.0	3.43	106.6	2.58	1.80	64.92
81	AFTER 2 WEEKS	271.7	145.2	3.71	103.9	2.71	2.76	61.42
	AFTER 6 WEEKS	193.0	147.3	4.01	105.4	2.75	2.33	70.11
	AFTER 13 WEEKS	268.8	146.7	4.22	106.2	2.68	1.78	64.75
82	AFTER 2 WEEKS	344.6	143.6	3.64	103.7	2.65	2.83	59.56
	AFTER 6 WEEKS	254.1	147.4	3.85	106.9	2.65	2.25	64.10
	AFTER 13 WEEKS	158.8	146.7	4.25	106.4	2.66	1.82	65.18
GROUP 4 (2000 MG/KG/DAY)								
89	AFTER 2 WEEKS	309.7	143.3	3.45	103.2	2.62	2.79	58.57
	AFTER 6 WEEKS	135.1	147.9	3.83	106.0	2.80	2.26	69.05
	AFTER 13 WEEKS	130.3	146.2	3.61	105.9	2.61	1.94	65.91
90	AFTER 2 WEEKS	248.2	141.0	3.50	100.4	2.74	2.89	62.90
	AFTER 6 WEEKS	178.1	146.8	3.66	102.9	2.81	2.40	68.17
	AFTER 13 WEEKS	167.8	144.4	3.49	103.0	2.71	1.91	70.93
91	AFTER 2 WEEKS	220.0	144.2	3.70	105.5	2.71	3.07	61.21
	AFTER 6 WEEKS	241.0	153.0	3.58	110.0	2.83	2.42	72.33
	AFTER 13 WEEKS	154.0	143.8	3.67	106.9	2.66	1.82	68.86
92	AFTER 2 WEEKS	326.8	144.0	3.49	105.3	2.70	3.44	59.17
	AFTER 6 WEEKS	198.6	149.6	3.51	107.4	2.82	2.40	67.34
	AFTER 13 WEEKS	150.1	145.8	3.50	107.9	2.66	1.95	66.43
93	AFTER 2 WEEKS	232.5	144.2	3.52	103.6	2.78	2.73	61.83
	AFTER 6 WEEKS	224.1	148.9	3.10	105.5	2.79	2.16	68.72
	AFTER 13 WEEKS	237.8	144.9	3.28	104.5	2.72	2.05	69.48
94	AFTER 2 WEEKS	249.6	142.5	3.71	101.9	2.73	3.00	63.29
	AFTER 6 WEEKS	179.8	148.6	3.24	105.0	2.88	2.47	69.91
	AFTER 13 WEEKS	205.6	144.0	3.74	103.7	2.73	2.02	68.53
95	AFTER 2 WEEKS	302.4	144.0	3.68	104.1	2.66	3.01	57.79
	AFTER 6 WEEKS	168.5	149.9	3.21	108.3	2.69	2.25	66.29
	AFTER 13 WEEKS	163.2	144.4	3.48	106.8	2.68	1.89	64.73
96	AFTER 2 WEEKS	312.6	145.1	3.35	104.7	2.60	2.91	59.78
	AFTER 6 WEEKS	242.8	147.8	3.08	105.9	2.63	2.04	64.90
	AFTER 13 WEEKS	211.8	144.7	3.64	106.0	2.63	1.89	67.77

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 4 (2000 MG/KG/DAY)								
97	AFTER 2 WEEKS	295.0	143.6	3.36	102.1	2.68	2.81	60.25
	AFTER 6 WEEKS	245.6	148.8	3.30	105.7	2.79	2.39	69.47
	AFTER 13 WEEKS	155.1	146.9	3.51	105.5	2.69	1.97	71.48
98	AFTER 2 WEEKS	223.3	143.0	3.39	104.5	2.67	3.18	61.58
	AFTER 6 WEEKS	216.0	149.3	3.42	107.1	2.81	2.59	67.73
	AFTER 13 WEEKS	223.7	145.5	3.68	105.0	2.72	2.22	65.86
99	AFTER 2 WEEKS	230.1	143.1	3.18	102.9	2.51	2.72	58.32
	AFTER 6 WEEKS	145.6	147.9	3.23	105.7	2.62	2.12	65.41
	AFTER 13 WEEKS	227.3	145.1	3.61	104.7	2.56	1.90	65.43
100	AFTER 2 WEEKS	208.5	143.7	3.21	104.0	2.66	2.56	60.61
	AFTER 6 WEEKS	160.5	148.0	3.38	104.8	2.82	2.18	69.47
	AFTER 13 WEEKS	116.0	146.1	3.44	106.1	2.49	1.59	61.80
101	AFTER 2 WEEKS	200.3	143.9	3.80	103.0	2.74	2.71	64.32
	AFTER 6 WEEKS	196.4	149.9	3.61	106.7	2.82	2.20	69.59
	AFTER 13 WEEKS	178.1	147.8	3.66	106.3	2.62	1.93	64.86
102	AFTER 2 WEEKS	208.4	142.4	3.71	104.5	2.60	2.56	59.55
	AFTER 6 WEEKS	180.7	147.9	3.75	106.5	2.83	2.37	66.31
	AFTER 13 WEEKS	237.2	146.5	4.42	107.4	2.74	1.87	67.38
103	AFTER 2 WEEKS	257.1	144.2	3.48	104.0	2.63	2.77	59.74
	AFTER 6 WEEKS	158.6	149.2	3.49	105.3	2.82	2.30	69.13
	AFTER 13 WEEKS	164.6	147.3	3.81	105.5	2.68	2.05	66.45
104	AFTER 2 WEEKS	281.0	143.2	3.77	102.2	2.68	3.13	59.36
	AFTER 6 WEEKS	178.9	148.5	3.17	104.6	2.74	2.50	65.74
	AFTER 13 WEEKS	356.2	148.2	3.44	105.8	2.57	2.04	60.46
105	AFTER 2 WEEKS	326.7	146.0	3.78	104.3	2.69	3.19	59.01
	AFTER 6 WEEKS	171.7	150.2	3.31	108.4	2.79	2.50	66.58
	AFTER 13 WEEKS	216.0	147.8	3.79	105.5	2.67	2.30	64.15
106	AFTER 2 WEEKS	222.6	144.2	3.62	103.3	2.70	2.85	61.71
	AFTER 6 WEEKS	211.3	149.2	3.25	105.0	2.86	2.33	73.35
	AFTER 13 WEEKS	165.5	146.4	3.75	106.0	2.75	1.97	68.78
107	AFTER 2 WEEKS	305.0	144.8	4.02	105.2	2.74	2.99	59.45
	AFTER 6 WEEKS	219.3	150.3	3.34	108.7	2.76	2.36	64.57
	AFTER 13 WEEKS	271.1	147.2	3.81	108.2	2.64	1.75	65.76
108	AFTER 2 WEEKS	235.0	145.1	3.77	104.3	2.75	3.15	58.83
	AFTER 6 WEEKS	230.0	150.1	3.48	108.0	2.67	2.29	67.10
	AFTER 13 WEEKS	169.7	147.9	3.86	108.0	2.58	2.04	63.81
109	AFTER 2 WEEKS	298.9	144.3	3.80	103.4	2.64	3.03	60.19
	AFTER 6 WEEKS	266.9	151.0	3.61	107.9	2.60	2.35	68.05
	AFTER 13 WEEKS	134.9	145.5	3.42	106.1	2.65	1.95	65.60
	AFTER 17 WEEKS	186.9	146.8	3.60	107.4	2.61	1.69	65.01
110	AFTER 2 WEEKS	222.4	144.1	4.20	105.3	2.75	2.93	64.59
	AFTER 6 WEEKS	214.4	151.3	3.52	109.2	2.75	2.25	70.69
	AFTER 13 WEEKS	182.1	145.2	3.69	106.4	2.65	2.13	68.26
	AFTER 17 WEEKS	127.7	147.4	3.64	107.8	2.59	1.42	66.99
111	AFTER 2 WEEKS	205.5	145.5	3.95	105.4	2.76	2.95	59.73
	AFTER 6 WEEKS	172.0	150.3	3.56	108.3	2.81	2.36	67.73
	AFTER 13 WEEKS	128.8	145.1	3.86	107.4	2.67	1.93	64.84
	AFTER 17 WEEKS	175.4	147.6	3.37	108.1	2.69	1.85	66.36
112	AFTER 2 WEEKS	373.6	146.9	3.94	100.9	2.72	3.19	59.13
	AFTER 6 WEEKS	293.3	149.1	3.76	106.3	2.79	2.38	66.73
	AFTER 13 WEEKS	138.9	144.6	3.77	106.4	2.74	1.93	65.67

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 4 (2000 MG/KG/DAY)								
112	AFTER 17 WEEKS	169.7	146.2	4.72	107.0	2.62	1.82	67.76
113	AFTER 2 WEEKS	210.8	143.2	3.79	104.2	2.68	3.04	59.36
	AFTER 6 WEEKS	200.3	149.6	3.68	107.6	2.75	2.38	66.61
	AFTER 13 WEEKS	516.7	145.1	3.94	105.3	2.66	2.08	65.35
	AFTER 17 WEEKS	135.1	147.4	3.56	108.8	2.57	1.67	65.48
114	AFTER 2 WEEKS	469.6	146.2	3.59	106.6	2.63	2.63	60.48
	AFTER 6 WEEKS	171.4	150.7	3.25	108.3	2.71	2.22	66.22
	AFTER 13 WEEKS	170.1	147.4	4.11	108.0	2.65	1.97	63.22
	AFTER 17 WEEKS	156.9	150.2	3.32	108.8	2.67	1.70	68.08
115	AFTER 2 WEEKS	298.7	144.8	4.00	103.1	2.71	3.08	60.33
	AFTER 6 WEEKS	210.3	150.1	3.54	108.3	2.74	2.28	68.36
	AFTER 13 WEEKS	308.8	145.9	4.26	106.0	2.60	2.11	62.41
	AFTER 17 WEEKS	249.2	147.4	3.65	107.1	2.68	1.76	66.96
116	AFTER 2 WEEKS	242.7	143.0	4.33	104.9	2.69	2.88	59.46
	AFTER 6 WEEKS	211.0	150.8	3.81	108.1	2.73	2.50	68.40
	AFTER 13 WEEKS	170.3	145.2	3.75	106.6	2.55	1.76	65.90
	AFTER 17 WEEKS	103.6	143.0	3.51	104.0	2.54	1.66	64.02
117	AFTER 2 WEEKS	191.9	146.1	3.71	106.5	2.73	2.79	61.08
	AFTER 6 WEEKS	266.3	150.6	3.58	108.4	2.77	2.56	69.03
	AFTER 13 WEEKS	246.1	148.2	3.93	107.8	2.63	1.96	63.13
	AFTER 17 WEEKS	211.0	143.1	3.58	104.9	2.58	1.62	64.00
118	AFTER 2 WEEKS	185.7	145.9	3.95	106.0	2.74	2.68	62.40
	AFTER 6 WEEKS	296.6	153.1	3.83	111.2	2.77	2.12	68.47
	AFTER 13 WEEKS	189.2	148.5	4.32	108.5	2.64	1.81	65.54
	AFTER 17 WEEKS	153.7	145.0	3.82	105.8	2.60	1.62	64.87

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 1 (0 MG/KG/DAY)				
1	AFTER 2 WEEKS	39.99	20.88	1.92
	AFTER 6 WEEKS	39.04	22.33	1.75
	AFTER 13 WEEKS	40.98	26.09	1.57
2	AFTER 2 WEEKS	40.76	22.30	1.83
	AFTER 6 WEEKS	40.68	25.58	1.59
	AFTER 13 WEEKS	41.98	27.16	1.55
3	AFTER 2 WEEKS	41.79	22.15	1.89
	AFTER 6 WEEKS	40.70	24.47	1.66
	AFTER 13 WEEKS	40.22	26.50	1.52
4	AFTER 2 WEEKS	41.29	20.40	2.02
	AFTER 6 WEEKS	42.11	24.23	1.74
	AFTER 13 WEEKS	42.08	26.63	1.58
5	AFTER 2 WEEKS	41.22	21.47	1.92
	AFTER 6 WEEKS	41.98	24.71	1.70
	AFTER 13 WEEKS	41.18	25.74	1.60
6	AFTER 2 WEEKS	39.69	20.98	1.89
	AFTER 6 WEEKS	40.14	23.88	1.68
	AFTER 13 WEEKS	38.61	25.00	1.54
7	AFTER 2 WEEKS	39.93	18.36	2.17
	AFTER 6 WEEKS	41.75	21.67	1.93
	AFTER 13 WEEKS	41.71	23.60	1.77
8	AFTER 2 WEEKS	40.89	21.94	1.86
	AFTER 6 WEEKS	40.77	25.40	1.61
	AFTER 13 WEEKS	41.33	28.32	1.46
9	AFTER 2 WEEKS	41.14	20.83	1.98
	AFTER 6 WEEKS	43.45	26.69	1.63
	AFTER 13 WEEKS	42.35	27.50	1.54
10	AFTER 2 WEEKS	39.73	19.93	1.99
	AFTER 6 WEEKS	39.94	23.79	1.68
	AFTER 13 WEEKS	40.20	23.65	1.70
11	AFTER 2 WEEKS	41.07	19.62	2.09
	AFTER 6 WEEKS	40.76	21.38	1.91
	AFTER 13 WEEKS	40.89	21.91	1.87
12	AFTER 2 WEEKS	40.29	21.78	1.85
	AFTER 6 WEEKS	41.31	24.55	1.68
	AFTER 13 WEEKS	40.60	24.79	1.64
13	AFTER 2 WEEKS	41.72	20.05	2.08
	AFTER 6 WEEKS	42.26	24.17	1.75
	AFTER 13 WEEKS	40.70	25.08	1.62
14	AFTER 2 WEEKS	41.45	20.92	1.98
	AFTER 6 WEEKS	42.20	24.55	1.72
	AFTER 13 WEEKS	40.96	24.82	1.65
15	AFTER 2 WEEKS	41.23	22.01	1.87
	AFTER 6 WEEKS	40.69	23.98	1.70
	AFTER 13 WEEKS	41.68	24.85	1.68
16	AFTER 2 WEEKS	40.22	19.58	2.05
	AFTER 6 WEEKS	40.12	23.39	1.72
	AFTER 13 WEEKS	39.84	22.81	1.75
17	AFTER 2 WEEKS	41.48	19.85	2.09
	AFTER 6 WEEKS	41.09	21.58	1.90

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 1 (0 MG/KG/DAY)				
17	AFTER 13 WEEKS	40.43	26.48	1.53
18	AFTER 2 WEEKS	39.42	20.51	1.92
	AFTER 6 WEEKS	39.95	24.50	1.63
	AFTER 13 WEEKS	39.86	26.81	1.49
19	AFTER 2 WEEKS	40.22	19.90	2.02
	AFTER 6 WEEKS	40.22	23.57	1.71
	AFTER 13 WEEKS	39.78	24.99	1.59
20	AFTER 2 WEEKS	40.04	19.29	2.08
	AFTER 6 WEEKS	38.58	20.86	1.85
	AFTER 13 WEEKS	38.89	23.39	1.66
21	AFTER 2 WEEKS	41.86	18.47	2.27
	AFTER 6 WEEKS	41.94	21.57	1.94
	AFTER 13 WEEKS	40.54	23.52	1.72
	AFTER 17 WEEKS	40.16	24.03	1.67
22	AFTER 2 WEEKS	40.17	21.40	1.88
	AFTER 6 WEEKS	42.09	25.01	1.68
	AFTER 13 WEEKS	42.97	26.23	1.64
	AFTER 17 WEEKS	40.88	28.71	1.42
23	AFTER 2 WEEKS	43.27	20.39	2.12
	AFTER 6 WEEKS	42.34	23.09	1.83
	AFTER 13 WEEKS	42.68	26.78	1.59
	AFTER 17 WEEKS	40.34	26.65	1.51
24	AFTER 2 WEEKS	41.91	20.61	2.03
	AFTER 6 WEEKS	39.80	23.73	1.68
	AFTER 13 WEEKS	41.12	26.55	1.55
	AFTER 17 WEEKS	41.19	25.92	1.59
25	AFTER 2 WEEKS	42.70	19.46	2.19
	AFTER 6 WEEKS	42.22	23.61	1.79
	AFTER 13 WEEKS	41.48	23.99	1.73
	AFTER 17 WEEKS	41.12	25.52	1.61
26	AFTER 2 WEEKS	41.98	19.13	2.19
	AFTER 6 WEEKS	41.06	21.97	1.87
	AFTER 13 WEEKS	40.35	23.43	1.72
	AFTER 17 WEEKS	44.26	25.95	1.71
27	AFTER 2 WEEKS	42.62	19.97	2.13
	AFTER 6 WEEKS	41.89	22.25	1.88
	AFTER 13 WEEKS	40.10	23.35	1.72
	AFTER 17 WEEKS	41.98	28.20	1.49
28	AFTER 2 WEEKS	42.21	20.01	2.11
	AFTER 6 WEEKS	42.48	24.44	1.74
	AFTER 13 WEEKS	39.17	26.60	1.47
	AFTER 17 WEEKS	42.24	28.75	1.47
29	AFTER 2 WEEKS	44.60	20.47	2.18
	AFTER 6 WEEKS	43.76	22.85	1.92
	AFTER 13 WEEKS	42.69	25.25	1.69
	AFTER 17 WEEKS	45.04	26.52	1.70
30	AFTER 2 WEEKS	38.95	21.22	1.84
	AFTER 6 WEEKS	40.12	24.17	1.66
	AFTER 13 WEEKS	37.61	24.04	1.56
	AFTER 17 WEEKS	40.34	27.24	1.48

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**CLINICAL BIOCHEMISTRY
MALES**

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 2 (500 MG/KG/DAY)				
37	AFTER 2 WEEKS	40.68	21.73	1.87
	AFTER 6 WEEKS	42.53	23.88	1.78
	AFTER 13 WEEKS	41.06	24.03	1.71
38	AFTER 2 WEEKS	41.51	20.41	2.03
	AFTER 6 WEEKS	42.55	24.23	1.76
	AFTER 13 WEEKS	41.46	24.22	1.71
39	AFTER 2 WEEKS	41.54	18.90	2.20
	AFTER 6 WEEKS	41.25	23.34	1.77
	AFTER 13 WEEKS	41.40	25.14	1.65
40	AFTER 2 WEEKS	39.72	21.22	1.87
	AFTER 6 WEEKS	40.55	25.36	1.60
	AFTER 13 WEEKS	40.96	25.91	1.58
41	AFTER 2 WEEKS	40.71	21.23	1.92
	AFTER 6 WEEKS	42.21	25.78	1.64
	AFTER 13 WEEKS	39.94	27.10	1.47
42	AFTER 2 WEEKS	41.45	21.33	1.94
	AFTER 6 WEEKS	41.65	25.30	1.65
	AFTER 13 WEEKS	40.42	24.80	1.63
43	AFTER 2 WEEKS	42.00	19.52	2.15
	AFTER 6 WEEKS	41.91	22.92	1.83
	AFTER 13 WEEKS	41.91	24.11	1.74
44	AFTER 2 WEEKS	39.89	20.24	1.97
	AFTER 6 WEEKS	---	---	---
	AFTER 13 WEEKS	---	---	---
45	AFTER 2 WEEKS	41.45	22.68	1.83
	AFTER 6 WEEKS	42.47	26.68	1.59
	AFTER 13 WEEKS	41.64	27.59	1.51
46	AFTER 2 WEEKS	42.01	20.87	2.01
	AFTER 6 WEEKS	42.46	24.35	1.74
	AFTER 13 WEEKS	41.88	24.01	1.74
47	AFTER 2 WEEKS	41.95	19.98	2.10
	AFTER 6 WEEKS	40.96	24.47	1.67
	AFTER 13 WEEKS	39.76	24.70	1.61
48	AFTER 2 WEEKS	44.73	19.86	2.25
	AFTER 6 WEEKS	43.64	23.80	1.83
	AFTER 13 WEEKS	41.55	25.37	1.64
49	AFTER 2 WEEKS	43.94	17.60	2.50
	AFTER 6 WEEKS	43.28	22.95	1.89
	AFTER 13 WEEKS	40.74	24.76	1.65
50	AFTER 2 WEEKS	43.50	19.63	2.22
	AFTER 6 WEEKS	40.42	25.83	1.56
	AFTER 13 WEEKS	40.96	23.94	1.71
51	AFTER 2 WEEKS	43.04	18.79	2.29
	AFTER 6 WEEKS	41.95	23.40	1.79
	AFTER 13 WEEKS	40.36	25.22	1.60
52	AFTER 2 WEEKS	41.29	19.27	2.14
	AFTER 6 WEEKS	40.22	23.96	1.68
	AFTER 13 WEEKS	37.99	26.17	1.45
53	AFTER 2 WEEKS	40.39	19.59	2.06
	AFTER 6 WEEKS	39.55	22.95	1.72

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 2 (500 MG/KG/DAY)				
53	AFTER 13 WEEKS	40.12	24.12	1.66
54	AFTER 2 WEEKS	43.27	18.32	2.36
	AFTER 6 WEEKS	43.34	23.65	1.83
	AFTER 13 WEEKS	41.00	23.17	1.77
55	AFTER 2 WEEKS	41.72	20.06	2.08
	AFTER 6 WEEKS	41.37	24.55	1.69
	AFTER 13 WEEKS	40.60	25.22	1.61
56	AFTER 2 WEEKS	40.30	18.10	2.23
	AFTER 6 WEEKS	41.23	23.40	1.76
	AFTER 13 WEEKS	39.22	22.52	1.74
GROUP 3 (1000 MG/KG/DAY)				
63	AFTER 2 WEEKS	40.27	19.12	2.11
	AFTER 6 WEEKS	44.23	24.34	1.82
	AFTER 13 WEEKS	40.21	23.73	1.69
64	AFTER 2 WEEKS	39.15	18.69	2.09
	AFTER 6 WEEKS	41.73	23.38	1.78
	AFTER 13 WEEKS	40.62	25.10	1.62
65	AFTER 2 WEEKS	38.87	19.18	2.03
	AFTER 6 WEEKS	39.50	24.81	1.59
	AFTER 13 WEEKS	40.56	25.42	1.60
66	AFTER 2 WEEKS	39.66	16.67	2.38
	AFTER 6 WEEKS	41.47	23.48	1.77
	AFTER 13 WEEKS	42.48	24.20	1.76
67	AFTER 2 WEEKS	39.56	18.93	2.09
	AFTER 6 WEEKS	39.67	25.06	1.58
	AFTER 13 WEEKS	38.68	26.18	1.48
68	AFTER 2 WEEKS	41.06	18.64	2.20
	AFTER 6 WEEKS	41.46	23.11	1.79
	AFTER 13 WEEKS	39.98	22.23	1.80
69	AFTER 2 WEEKS	39.85	18.70	2.13
	AFTER 6 WEEKS	40.72	23.34	1.74
	AFTER 13 WEEKS	39.79	24.18	1.65
70	AFTER 2 WEEKS	40.51	17.86	2.27
	AFTER 6 WEEKS	42.16	23.22	1.82
	AFTER 13 WEEKS	42.73	22.70	1.88
71	AFTER 2 WEEKS	40.01	19.91	2.01
	AFTER 6 WEEKS	39.91	24.41	1.63
	AFTER 13 WEEKS	41.24	25.75	1.60
72	AFTER 2 WEEKS	41.42	17.82	2.32
	AFTER 6 WEEKS	42.95	23.07	1.86
	AFTER 13 WEEKS	43.92	24.34	1.80
73	AFTER 2 WEEKS	40.52	20.84	1.94
	AFTER 6 WEEKS	42.67	24.45	1.75
	AFTER 13 WEEKS	42.21	23.90	1.77
74	AFTER 2 WEEKS	39.55	18.62	2.12
	AFTER 6 WEEKS	40.89	25.59	1.60
	AFTER 13 WEEKS	39.83	25.03	1.59

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 3 (1000 MG/KG/DAY)				
75	AFTER 2 WEEKS	40.94	17.94	2.28
	AFTER 6 WEEKS	43.33	22.90	1.89
	AFTER 13 WEEKS	40.55	23.80	1.70
76	AFTER 2 WEEKS	38.99	18.41	2.12
	AFTER 6 WEEKS	41.24	25.91	1.59
	AFTER 13 WEEKS	41.19	24.11	1.71
77	AFTER 2 WEEKS	40.55	19.75	2.05
	AFTER 6 WEEKS	42.21	26.33	1.60
	AFTER 13 WEEKS	41.65	25.69	1.62
78	AFTER 2 WEEKS	41.88	18.15	2.31
	AFTER 6 WEEKS	41.66	23.71	1.76
	AFTER 13 WEEKS	38.57	23.40	1.65
79	AFTER 2 WEEKS	42.00	20.81	2.02
	AFTER 6 WEEKS	42.45	26.99	1.57
	AFTER 13 WEEKS	41.58	26.90	1.55
80	AFTER 2 WEEKS	40.71	19.05	2.14
	AFTER 6 WEEKS	41.49	25.95	1.60
	AFTER 13 WEEKS	39.25	25.67	1.53
81	AFTER 2 WEEKS	41.22	20.20	2.04
	AFTER 6 WEEKS	43.35	26.76	1.62
	AFTER 13 WEEKS	40.72	24.03	1.69
82	AFTER 2 WEEKS	40.44	19.12	2.12
	AFTER 6 WEEKS	41.30	22.80	1.81
	AFTER 13 WEEKS	40.73	24.45	1.67
GROUP 4 (2000 MG/KG/DAY)				
89	AFTER 2 WEEKS	41.66	16.91	2.46
	AFTER 6 WEEKS	46.15	22.90	2.02
	AFTER 13 WEEKS	43.80	22.11	1.98
90	AFTER 2 WEEKS	42.69	20.21	2.11
	AFTER 6 WEEKS	43.47	24.70	1.76
	AFTER 13 WEEKS	44.04	26.89	1.64
91	AFTER 2 WEEKS	41.09	20.12	2.04
	AFTER 6 WEEKS	44.90	27.43	1.64
	AFTER 13 WEEKS	42.70	26.16	1.63
92	AFTER 2 WEEKS	40.31	18.86	2.14
	AFTER 6 WEEKS	43.07	24.27	1.77
	AFTER 13 WEEKS	41.59	24.84	1.67
93	AFTER 2 WEEKS	40.84	20.99	1.95
	AFTER 6 WEEKS	43.12	25.60	1.68
	AFTER 13 WEEKS	42.54	26.94	1.58
94	AFTER 2 WEEKS	42.80	20.49	2.09
	AFTER 6 WEEKS	43.64	26.27	1.66
	AFTER 13 WEEKS	42.83	25.70	1.67
95	AFTER 2 WEEKS	40.30	17.49	2.30
	AFTER 6 WEEKS	43.81	22.48	1.95
	AFTER 13 WEEKS	40.56	24.17	1.68
96	AFTER 2 WEEKS	40.66	19.12	2.13
	AFTER 6 WEEKS	41.39	23.51	1.76
	AFTER 13 WEEKS	42.28	25.49	1.66

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 4 (2000 MG/KG/DAY)				
97	AFTER 2 WEEKS	41.98	18.27	2.30
	AFTER 6 WEEKS	44.45	25.02	1.78
	AFTER 13 WEEKS	43.91	27.57	1.59
98	AFTER 2 WEEKS	42.27	19.31	2.19
	AFTER 6 WEEKS	43.14	24.59	1.75
	AFTER 13 WEEKS	40.74	25.12	1.62
99	AFTER 2 WEEKS	39.49	18.83	2.10
	AFTER 6 WEEKS	41.48	23.93	1.73
	AFTER 13 WEEKS	39.90	25.53	1.56
100	AFTER 2 WEEKS	42.54	18.07	2.35
	AFTER 6 WEEKS	44.15	25.32	1.74
	AFTER 13 WEEKS	39.60	22.20	1.78
101	AFTER 2 WEEKS	43.92	20.40	2.15
	AFTER 6 WEEKS	44.62	24.97	1.79
	AFTER 13 WEEKS	42.23	22.63	1.87
102	AFTER 2 WEEKS	41.49	18.06	2.30
	AFTER 6 WEEKS	43.23	23.08	1.87
	AFTER 13 WEEKS	42.99	24.39	1.76
103	AFTER 2 WEEKS	40.61	19.13	2.12
	AFTER 6 WEEKS	43.38	25.75	1.68
	AFTER 13 WEEKS	40.52	25.93	1.56
104	AFTER 2 WEEKS	41.83	17.53	2.39
	AFTER 6 WEEKS	43.83	21.91	2.00
	AFTER 13 WEEKS	40.72	19.74	2.06
105	AFTER 2 WEEKS	40.05	18.96	2.11
	AFTER 6 WEEKS	42.24	24.34	1.74
	AFTER 13 WEEKS	39.01	25.14	1.55
106	AFTER 2 WEEKS	42.30	19.41	2.18
	AFTER 6 WEEKS	46.23	27.12	1.70
	AFTER 13 WEEKS	43.25	25.53	1.69
107	AFTER 2 WEEKS	39.57	19.88	1.99
	AFTER 6 WEEKS	40.76	23.81	1.71
	AFTER 13 WEEKS	40.11	25.65	1.56
108	AFTER 2 WEEKS	39.85	18.98	2.10
	AFTER 6 WEEKS	42.43	24.67	1.72
	AFTER 13 WEEKS	40.46	23.35	1.73
109	AFTER 2 WEEKS	39.89	20.30	1.97
	AFTER 6 WEEKS	41.45	26.60	1.56
	AFTER 13 WEEKS	39.15	26.45	1.48
	AFTER 17 WEEKS	38.75	26.26	1.48
110	AFTER 2 WEEKS	44.42	20.17	2.20
	AFTER 6 WEEKS	45.17	25.52	1.77
	AFTER 13 WEEKS	42.98	25.28	1.70
	AFTER 17 WEEKS	42.41	24.58	1.73
111	AFTER 2 WEEKS	41.81	17.92	2.33
	AFTER 6 WEEKS	44.09	23.64	1.87
	AFTER 13 WEEKS	42.04	22.80	1.84
	AFTER 17 WEEKS	42.80	23.56	1.82
112	AFTER 2 WEEKS	41.43	17.70	2.34
	AFTER 6 WEEKS	43.84	22.89	1.92
	AFTER 13 WEEKS	43.18	22.49	1.92

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
MALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 4 (2000 MG/KG/DAY)				
112	AFTER 17 WEEKS	43.44	24.32	1.79
113	AFTER 2 WEEKS	41.27	18.09	2.28
	AFTER 6 WEEKS	43.26	23.35	1.85
	AFTER 13 WEEKS	43.41	21.94	1.98
	AFTER 17 WEEKS	41.61	23.87	1.74
114	AFTER 2 WEEKS	42.38	18.10	2.34
	AFTER 6 WEEKS	43.00	23.22	1.85
	AFTER 13 WEEKS	41.64	21.58	1.93
	AFTER 17 WEEKS	43.39	24.69	1.76
115	AFTER 2 WEEKS	41.12	19.21	2.14
	AFTER 6 WEEKS	43.36	25.00	1.73
	AFTER 13 WEEKS	39.50	22.91	1.72
	AFTER 17 WEEKS	41.44	25.52	1.62
116	AFTER 2 WEEKS	41.46	18.00	2.30
	AFTER 6 WEEKS	44.19	24.21	1.83
	AFTER 13 WEEKS	41.29	24.61	1.68
	AFTER 17 WEEKS	39.85	24.17	1.65
117	AFTER 2 WEEKS	42.34	18.74	2.26
	AFTER 6 WEEKS	45.25	23.78	1.90
	AFTER 13 WEEKS	41.79	21.34	1.96
	AFTER 17 WEEKS	41.97	22.03	1.91
118	AFTER 2 WEEKS	43.14	19.26	2.24
	AFTER 6 WEEKS	43.86	24.61	1.78
	AFTER 13 WEEKS	41.52	24.02	1.73
	AFTER 17 WEEKS	40.47	24.40	1.66

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 1 (0 MG/KG/DAY)								
125	AFTER 2 WEEKS	4.45	5.12	10.24	21.8	1.15	1.46	0.22
	AFTER 6 WEEKS	3.69	4.84	9.68	25.1	1.39	1.37	0.28
	AFTER 13 WEEKS	4.42	4.70	9.40	27.5	1.81	1.33	0.25
126	AFTER 2 WEEKS	3.77	4.41	8.82	21.4	1.55	1.01	0.16
	AFTER 6 WEEKS	3.83	5.27	10.54	24.4	1.53	1.28	0.24
	AFTER 13 WEEKS	4.52	6.29	12.58	26.0	2.84	1.18	0.28
127	AFTER 2 WEEKS	3.29	5.70	11.40	24.9	1.33	1.24	0.29
	AFTER 6 WEEKS	5.58	6.56	13.12	32.8	1.54	1.20	0.18
	AFTER 13 WEEKS	4.39	7.24	14.48	32.1	2.13	1.12	0.24
128	AFTER 2 WEEKS	4.13	4.40	8.80	20.7	1.05	1.81	0.22
	AFTER 6 WEEKS	3.71	5.38	10.76	26.1	1.65	1.54	0.25
	AFTER 13 WEEKS	4.48	5.23	10.46	27.6	2.92	2.60	0.27
129	AFTER 2 WEEKS	3.49	6.18	12.36	22.7	1.68	1.68	0.42
	AFTER 6 WEEKS	4.06	4.89	9.78	25.2	1.46	1.87	0.34
	AFTER 13 WEEKS	5.70	6.09	12.18	25.3	3.03	1.90	0.47
130	AFTER 2 WEEKS	4.04	4.67	9.34	19.4	1.03	1.53	0.15
	AFTER 6 WEEKS	4.36	5.56	11.12	27.0	1.14	1.27	0.20
	AFTER 13 WEEKS	4.76	6.03	12.06	27.1	1.91	1.39	0.21
131	AFTER 2 WEEKS	3.87	5.38	10.76	23.8	1.43	1.37	0.20
	AFTER 6 WEEKS	3.73	6.19	12.38	30.5	1.71	1.36	0.29
	AFTER 13 WEEKS	4.84	6.39	12.78	36.3	2.13	1.25	0.19
132	AFTER 2 WEEKS	4.07	5.11	10.22	24.0	1.28	1.57	0.13
	AFTER 6 WEEKS	5.33	5.97	11.94	31.7	1.78	1.41	0.18
	AFTER 13 WEEKS	4.77	7.09	14.18	34.8	1.75	1.42	0.20
133	AFTER 2 WEEKS	4.15	6.86	13.72	24.6	1.25	1.39	0.22
	AFTER 6 WEEKS	6.54	6.84	13.68	31.0	0.98	1.42	0.28
	AFTER 13 WEEKS	4.66	7.05	14.10	32.2	1.21	1.40	0.31
134	AFTER 2 WEEKS	3.81	4.45	8.90	20.7	1.10	1.54	0.31
	AFTER 6 WEEKS	3.84	5.72	11.44	29.4	1.38	1.26	0.23
	AFTER 13 WEEKS	4.83	5.78	11.56	31.5	2.12	1.43	0.22
135	AFTER 2 WEEKS	4.31	5.87	11.74	26.4	1.13	1.52	0.25
	AFTER 6 WEEKS	5.07	5.94	11.88	28.6	1.81	1.32	0.22
	AFTER 13 WEEKS	5.47	5.81	11.62	31.4	3.09	1.43	0.28
136	AFTER 2 WEEKS	4.03	4.77	9.54	22.6	1.69	1.23	0.32
	AFTER 6 WEEKS	4.74	5.78	11.56	29.4	1.33	1.51	0.26
	AFTER 13 WEEKS	4.81	6.49	12.98	30.0	1.63	1.61	0.37
137	AFTER 2 WEEKS	3.91	5.10	10.20	19.3	1.24	1.72	0.22
	AFTER 6 WEEKS	3.91	5.38	10.76	25.9	1.50	1.48	0.25
	AFTER 13 WEEKS	4.76	6.49	12.98	27.9	3.12	1.70	0.28
138	AFTER 2 WEEKS	4.29	5.51	11.02	20.3	1.31	1.62	0.18
	AFTER 6 WEEKS	4.23	5.66	11.32	22.4	1.41	1.63	0.18
	AFTER 13 WEEKS	5.27	6.88	13.76	29.1	2.58	1.53	0.18
139	AFTER 2 WEEKS	4.64	5.28	10.56	21.6	1.07	1.84	0.24
	AFTER 6 WEEKS	4.94	6.05	12.10	27.7	1.45	1.65	0.36
	AFTER 13 WEEKS	5.18	6.33	12.66	28.5	1.86	1.79	0.40
140	AFTER 2 WEEKS	4.32	4.62	9.24	21.3	1.19	2.65	0.24
	AFTER 6 WEEKS	4.21	6.38	12.76	25.6	1.90	2.50	0.25
	AFTER 13 WEEKS	4.64	5.81	11.62	29.8	2.94	2.53	0.29
141	AFTER 2 WEEKS	4.02	5.15	10.30	20.0	1.25	1.16	0.15
	AFTER 6 WEEKS	4.35	5.67	11.34	22.8	1.43	1.50	0.21

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**CLINICAL BIOCHEMISTRY
FEMALES**

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 1 (0 MG/KG/DAY)								
141	AFTER 13 WEEKS	7.04	6.01	12.02	29.5	1.90	1.34	0.23
142	AFTER 2 WEEKS	3.70	5.03	10.06	21.2	1.53	1.40	0.15
	AFTER 6 WEEKS	4.61	7.20	14.40	30.8	1.82	0.90	0.19
	AFTER 13 WEEKS	4.54	8.05	16.10	30.7	2.38	1.00	0.22
143	AFTER 2 WEEKS	4.04	4.54	9.08	21.3	0.97	1.58	0.27
	AFTER 6 WEEKS	3.47	5.09	10.18	26.1	1.12	1.55	0.29
	AFTER 13 WEEKS	5.70	5.14	10.28	28.8	1.78	1.61	0.25
144	AFTER 2 WEEKS	4.36	6.69	13.38	28.4	1.15	1.90	0.25
	AFTER 6 WEEKS	4.86	7.78	15.56	36.3	1.17	1.62	0.28
	AFTER 13 WEEKS	4.94	6.80	13.60	39.8	1.94	1.53	0.29
145	AFTER 2 WEEKS	4.20	6.52	13.04	24.1	0.81	1.91	0.21
	AFTER 6 WEEKS	4.53	6.21	12.42	28.4	1.17	1.75	0.33
	AFTER 13 WEEKS	6.15	7.24	14.48	32.1	1.50	1.65	0.24
	AFTER 17 WEEKS	5.43	6.31	12.62	41.1	1.36	2.14	0.42
146	AFTER 2 WEEKS	3.91	6.25	12.50	22.7	0.84	1.20	0.24
	AFTER 6 WEEKS	4.92	6.34	12.68	28.4	0.87	1.37	0.26
	AFTER 13 WEEKS	5.45	6.19	12.38	29.7	1.23	1.24	0.20
	AFTER 17 WEEKS	5.54	5.89	11.78	33.0	1.20	1.43	0.28
147	AFTER 2 WEEKS	3.82	5.49	10.98	25.2	1.40	1.30	0.26
	AFTER 6 WEEKS	4.02	5.97	11.94	29.5	1.20	1.66	0.28
	AFTER 13 WEEKS	4.42	5.90	11.80	32.8	2.10	1.62	0.29
	AFTER 17 WEEKS	4.86	5.06	10.12	32.2	2.00	1.59	0.32
148	AFTER 2 WEEKS	3.65	5.43	10.86	23.7	1.37	1.13	0.20
	AFTER 6 WEEKS	5.54	6.74	13.48	27.6	1.56	0.89	0.24
	AFTER 13 WEEKS	5.07	6.31	12.62	27.3	1.83	0.97	0.26
	AFTER 17 WEEKS	4.74	5.97	11.94	32.0	1.98	0.76	0.26
149	AFTER 2 WEEKS	4.54	5.64	11.28	20.1	0.91	1.30	0.22
	AFTER 6 WEEKS	4.42	5.76	11.52	27.9	1.17	1.13	0.25
	AFTER 13 WEEKS	4.89	5.60	11.20	27.6	1.67	1.23	0.26
	AFTER 17 WEEKS	4.53	5.82	11.64	32.1	1.72	0.85	0.28
150	AFTER 2 WEEKS	4.94	5.33	10.66	24.4	1.09	1.68	0.37
	AFTER 6 WEEKS	3.98	6.71	13.42	27.6	1.71	1.38	0.31
	AFTER 13 WEEKS	5.34	6.46	12.92	31.3	1.98	1.48	0.26
	AFTER 17 WEEKS	4.40	6.43	12.86	39.3	1.86	1.18	0.34
151	AFTER 2 WEEKS	5.28	5.74	11.48	23.7	1.10	2.06	0.28
	AFTER 6 WEEKS	5.52	6.17	12.34	25.9	1.33	1.81	0.27
	AFTER 13 WEEKS	5.42	5.32	10.64	26.9	1.93	2.03	0.33
	AFTER 17 WEEKS	6.23	5.67	11.34	30.4	1.94	1.81	0.39
152	AFTER 2 WEEKS	5.26	5.66	11.32	20.5	1.02	1.48	0.19
	AFTER 6 WEEKS	4.29	5.60	11.20	25.1	1.14	1.87	0.21
	AFTER 13 WEEKS	5.30	5.59	11.18	25.5	1.90	1.58	0.21
	AFTER 17 WEEKS	4.84	5.50	11.00	31.3	1.17	1.47	0.31
153	AFTER 2 WEEKS	3.64	5.97	11.94	24.2	1.22	1.34	0.23
	AFTER 6 WEEKS	3.55	6.54	13.08	31.1	1.30	1.38	0.24
	AFTER 13 WEEKS	5.32	5.16	10.32	33.2	1.97	1.35	0.26
	AFTER 17 WEEKS	4.98	7.35	14.69	42.2	1.63	1.35	0.33
154	AFTER 2 WEEKS	4.11	3.98	7.96	19.4	1.48	2.44	0.34
	AFTER 6 WEEKS	4.44	4.40	8.80	23.0	1.78	2.05	0.33
	AFTER 13 WEEKS	5.95	3.80	7.60	27.4	3.03	2.49	0.32
	AFTER 17 WEEKS	5.20	5.83	11.66	34.8	1.98	2.22	0.40

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 2 (500 MG/KG/DAY)								
161	AFTER 2 WEEKS	3.95	6.28	12.56	21.1	1.26	2.16	0.21
	AFTER 6 WEEKS	5.52	6.02	12.04	25.9	1.42	1.99	0.22
	AFTER 13 WEEKS	4.80	5.50	11.00	26.9	1.62	1.76	0.22
162	AFTER 2 WEEKS	4.41	4.91	9.82	20.2	1.21	1.61	0.15
	AFTER 6 WEEKS	3.94	6.34	12.68	25.8	1.70	1.45	0.22
	AFTER 13 WEEKS	6.05	6.26	12.52	26.1	1.86	1.45	0.26
163	AFTER 2 WEEKS	3.99	6.34	12.68	23.3	0.96	1.66	0.24
	AFTER 6 WEEKS	4.27	7.54	15.08	33.9	1.38	1.21	0.25
	AFTER 13 WEEKS	4.66	7.51	15.02	42.0	1.74	1.66	0.37
164	AFTER 2 WEEKS	4.06	7.54	15.08	23.4	0.93	1.54	0.18
	AFTER 6 WEEKS	4.79	6.59	13.18	30.0	1.44	1.37	0.24
	AFTER 13 WEEKS	5.00	6.57	13.14	32.8	1.69	1.53	0.30
165	AFTER 2 WEEKS	3.77	4.24	8.48	20.3	1.13	1.43	0.20
	AFTER 6 WEEKS	4.42	4.84	9.68	25.3	1.46	1.24	0.24
	AFTER 13 WEEKS	5.25	5.60	11.20	29.4	1.89	1.49	0.22
166	AFTER 2 WEEKS	3.03	5.89	11.78	22.1	1.12	2.34	0.27
	AFTER 6 WEEKS	4.49	5.59	11.18	25.2	1.56	2.30	0.29
	AFTER 13 WEEKS	4.89	5.92	11.84	27.9	2.57	2.26	0.27
167	AFTER 2 WEEKS	4.75	5.44	10.88	21.6	1.02	1.67	0.24
	AFTER 6 WEEKS	4.92	5.59	11.18	26.7	1.93	1.28	0.20
	AFTER 13 WEEKS	5.04	6.47	12.94	31.2	1.85	1.36	0.28
168	AFTER 2 WEEKS	5.31	4.79	9.58	21.1	1.10	1.45	0.22
	AFTER 6 WEEKS	5.93	6.15	12.30	26.7	1.57	1.17	0.25
	AFTER 13 WEEKS	5.27	5.91	11.82	29.4	1.43	0.90	0.22
169	AFTER 2 WEEKS	3.96	7.68	15.36	27.1	1.09	2.25	0.22
	AFTER 6 WEEKS	3.89	7.65	15.30	30.7	1.23	2.31	0.25
	AFTER 13 WEEKS	4.74	7.18	14.36	35.1	1.68	2.36	0.29
170	AFTER 2 WEEKS	4.17	5.58	11.16	22.7	1.16	2.22	0.25
	AFTER 6 WEEKS	3.87	6.48	12.96	28.9	1.32	2.17	0.23
	AFTER 13 WEEKS	4.61	6.36	12.72	32.4	1.57	1.97	0.23
171	AFTER 2 WEEKS	4.03	5.68	11.36	22.3	1.11	0.90	0.13
	AFTER 6 WEEKS	5.51	5.48	10.96	23.8	0.97	0.95	0.17
	AFTER 13 WEEKS	4.98	5.80	11.60	25.0	1.65	0.64	0.15
172	AFTER 2 WEEKS	3.21	6.11	12.22	24.8	1.45	1.58	0.22
	AFTER 6 WEEKS	4.00	5.66	11.32	26.1	1.94	1.44	0.24
	AFTER 13 WEEKS	4.35	7.26	14.52	29.9	2.25	1.16	0.24
173	AFTER 2 WEEKS	4.11	4.37	8.74	18.7	1.37	1.58	0.30
	AFTER 6 WEEKS	3.99	4.31	8.62	21.0	1.68	1.54	0.31
	AFTER 13 WEEKS	6.43	6.48	12.96	24.9	2.32	1.69	0.31
174	AFTER 2 WEEKS	4.70	4.86	9.72	24.7	1.23	1.39	0.17
	AFTER 6 WEEKS	4.19	6.00	12.00	27.7	1.48	1.45	0.23
	AFTER 13 WEEKS	5.31	4.90	9.80	29.2	2.41	1.86	0.23
175	AFTER 2 WEEKS	3.71	6.70	13.40	26.3	1.40	1.13	0.21
	AFTER 6 WEEKS	3.32	6.02	12.04	34.1	1.20	1.05	0.26
	AFTER 13 WEEKS	4.45	5.74	11.48	33.7	1.89	1.14	0.28
176	AFTER 2 WEEKS	4.64	5.70	11.40	22.5	0.73	1.50	0.19
	AFTER 6 WEEKS	4.44	6.09	12.18	30.0	1.01	1.21	0.24
	AFTER 13 WEEKS	4.63	7.44	14.88	32.9	1.92	0.99	0.26
177	AFTER 2 WEEKS	3.89	5.47	10.94	19.4	1.28	1.30	0.19
	AFTER 6 WEEKS	4.42	6.00	12.00	24.2	1.96	1.13	0.23

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 2 (500 MG/KG/DAY)								
177	AFTER 13 WEEKS	6.23	6.19	12.38	32.9	1.71	1.19	0.23
178	AFTER 2 WEEKS	4.62	5.86	11.72	22.4	1.27	1.43	0.33
	AFTER 6 WEEKS	4.88	5.91	11.82	26.3	1.80	1.04	0.23
	AFTER 13 WEEKS	4.67	6.68	13.36	26.4	1.70	1.13	0.24
179	AFTER 2 WEEKS	3.62	5.71	11.42	23.1	1.32	2.31	0.28
	AFTER 6 WEEKS	3.87	7.30	14.60	31.4	1.39	1.59	0.25
	AFTER 13 WEEKS	4.47	6.85	13.70	33.1	1.69	1.76	0.26
180	AFTER 2 WEEKS	5.64	5.24	10.48	22.1	1.38	1.64	0.33
	AFTER 6 WEEKS	5.09	5.63	11.26	27.4	2.14	1.37	0.27
	AFTER 13 WEEKS	5.52	5.39	10.78	28.5	2.12	0.92	0.19
GROUP 3 (1000 MG/KG/DAY)								
187	AFTER 2 WEEKS	4.84	4.69	9.38	20.3	1.16	1.49	0.29
	AFTER 6 WEEKS	4.48	5.31	10.62	26.0	1.39	1.19	0.26
	AFTER 13 WEEKS	5.40	6.01	12.02	32.2	1.90	1.00	0.27
188	AFTER 2 WEEKS	3.90	6.45	12.90	22.2	1.43	1.18	0.22
	AFTER 6 WEEKS	5.88	5.58	11.16	30.3	2.04	1.00	0.35
	AFTER 13 WEEKS	4.47	8.93	17.86	30.9	1.72	0.96	0.22
189	AFTER 2 WEEKS	4.16	5.05	10.10	20.8	1.25	1.33	0.22
	AFTER 6 WEEKS	5.85	4.64	9.28	25.8	1.60	1.36	0.27
	AFTER 13 WEEKS	4.34	5.40	10.80	29.6	1.92	1.33	0.24
190	AFTER 2 WEEKS	3.92	6.23	12.46	20.8	1.18	1.42	0.22
	AFTER 6 WEEKS	4.56	5.71	11.42	26.1	1.20	1.62	0.29
	AFTER 13 WEEKS	4.45	5.27	10.54	26.0	1.39	1.60	0.31
191	AFTER 2 WEEKS	4.44	5.62	11.24	24.6	1.20	0.82	0.26
	AFTER 6 WEEKS	5.61	4.76	9.52	25.1	1.84	0.92	0.32
	AFTER 13 WEEKS	4.66	6.11	12.22	29.7	1.64	0.93	0.29
192	AFTER 2 WEEKS	4.42	6.90	13.80	22.5	1.37	2.11	0.20
	AFTER 6 WEEKS	5.25	5.92	11.84	25.9	2.32	2.06	0.27
	AFTER 13 WEEKS	4.59	6.59	13.18	32.4	2.25	2.13	0.23
193	AFTER 2 WEEKS	4.89	5.96	11.92	20.3	1.09	1.38	0.13
	AFTER 6 WEEKS	4.78	5.94	11.88	27.7	1.30	1.51	0.17
	AFTER 13 WEEKS	4.96	7.11	14.22	32.2	1.32	1.40	0.21
194	AFTER 2 WEEKS	3.82	5.09	10.18	21.2	1.12	1.08	0.21
	AFTER 6 WEEKS	3.45	5.94	11.88	30.6	1.10	1.24	0.29
	AFTER 13 WEEKS	3.95	6.44	12.88	30.0	1.63	1.18	0.27
195	AFTER 2 WEEKS	4.33	5.32	10.64	20.5	1.35	1.52	0.24
	AFTER 6 WEEKS	5.02	5.19	10.38	23.5	1.66	1.58	0.25
	AFTER 13 WEEKS	4.96	5.84	11.68	27.8	2.27	1.53	0.24
196	AFTER 2 WEEKS	4.85	4.18	8.36	15.8	1.34	1.57	0.17
	AFTER 6 WEEKS	5.14	6.00	12.00	22.2	1.70	1.58	0.20
	AFTER 13 WEEKS	5.11	6.03	12.06	22.7	1.62	1.26	0.15
197	AFTER 2 WEEKS	4.28	4.56	9.12	21.7	0.85	1.98	0.31
	AFTER 6 WEEKS	4.37	5.40	10.80	25.4	0.95	1.70	0.21
	AFTER 13 WEEKS	6.60	5.79	11.58	28.1	2.33	1.42	0.23
198	AFTER 2 WEEKS	3.45	6.23	12.46	23.2	1.43	1.60	0.23
	AFTER 6 WEEKS	3.91	6.02	12.04	25.6	1.61	1.96	0.31
	AFTER 13 WEEKS	5.52	5.68	11.36	26.4	2.16	1.67	0.23

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**CLINICAL BIOCHEMISTRY
FEMALES**

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 3 (1000 MG/KG/DAY)								
199	AFTER 2 WEEKS	4.04	5.71	11.42	22.4	1.15	1.30	0.29
	AFTER 6 WEEKS	5.32	6.48	12.96	28.6	1.70	1.26	0.34
	AFTER 13 WEEKS	5.93	5.39	10.78	28.1	1.91	1.38	0.24
200	AFTER 2 WEEKS	4.42	6.60	13.20	21.2	1.10	1.14	0.19
	AFTER 6 WEEKS	5.14	6.07	12.14	24.7	1.32	1.38	0.24
	AFTER 13 WEEKS	5.39	6.21	12.42	26.2	1.83	1.45	0.24
201	AFTER 2 WEEKS	5.23	5.51	11.02	23.1	1.19	1.88	0.20
	AFTER 6 WEEKS	5.72	5.55	11.10	28.6	1.54	1.62	0.37
	AFTER 13 WEEKS	5.29	5.90	11.80	28.8	2.14	1.96	0.27
202	AFTER 2 WEEKS	4.08	6.18	12.36	23.4	1.51	1.07	0.20
	AFTER 6 WEEKS	5.11	7.13	14.26	29.7	1.57	1.23	0.28
	AFTER 13 WEEKS	5.06	6.41	12.82	29.1	1.71	1.08	0.21
203	AFTER 2 WEEKS	5.43	5.22	10.44	21.3	1.11	1.64	0.20
	AFTER 6 WEEKS	4.92	5.37	10.74	25.7	1.18	1.51	0.28
	AFTER 13 WEEKS	5.11	6.18	12.36	27.5	1.74	1.02	0.22
204	AFTER 2 WEEKS	4.35	6.10	12.20	21.4	0.78	1.62	0.30
	AFTER 6 WEEKS	5.56	6.13	12.26	26.9	0.92	1.22	0.23
	AFTER 13 WEEKS	5.29	6.49	12.98	29.3	1.58	1.28	0.25
205	AFTER 2 WEEKS	4.53	5.47	10.94	18.6	1.04	1.42	0.20
	AFTER 6 WEEKS	5.52	6.12	12.24	24.7	0.86	1.34	0.24
	AFTER 13 WEEKS	5.52	5.86	11.72	24.3	1.30	1.18	0.19
206	AFTER 2 WEEKS	4.51	5.60	11.20	19.8	1.53	0.93	0.13
	AFTER 6 WEEKS	4.40	6.41	12.82	26.1	1.12	0.81	0.13
	AFTER 13 WEEKS	5.24	5.47	10.94	24.5	1.99	0.90	0.18
GROUP 4 (2000 MG/KG/DAY)								
213	AFTER 2 WEEKS	4.64	4.88	9.76	18.5	0.87	1.34	0.17
	AFTER 6 WEEKS	2.89	5.06	10.12	26.3	1.58	1.20	0.27
	AFTER 13 WEEKS	5.27	7.11	14.22	32.8	1.06	1.22	0.25
214	AFTER 2 WEEKS	4.55	5.00	10.00	21.4	0.90	1.84	0.16
	AFTER 6 WEEKS	3.58	7.03	14.06	32.7	1.63	1.54	0.27
	AFTER 13 WEEKS	5.08	7.01	14.02	37.9	1.44	1.55	0.24
215	AFTER 2 WEEKS	4.87	5.50	11.00	23.2	1.32	1.19	0.23
	AFTER 6 WEEKS	4.74	5.51	11.02	29.1	1.76	0.90	0.20
	AFTER 13 WEEKS	4.88	6.11	12.22	31.8	1.81	0.52	0.20
216	AFTER 2 WEEKS	4.23	5.86	11.72	20.7	1.11	1.20	0.18
	AFTER 6 WEEKS	5.35	7.52	15.04	26.4	2.01	1.22	0.18
	AFTER 13 WEEKS	5.36	6.70	13.40	31.5	1.41	1.03	0.21
217	AFTER 2 WEEKS	5.02	5.33	10.66	21.2	0.95	1.68	0.16
	AFTER 6 WEEKS	4.21	6.42	12.84	29.0	1.68	1.12	0.25
	AFTER 13 WEEKS	4.64	5.67	11.34	31.3	2.33	1.46	0.26
218	AFTER 2 WEEKS	5.47	4.51	9.02	19.1	1.08	1.15	0.15
	AFTER 6 WEEKS	3.05	6.37	12.74	27.4	1.99	1.83	0.22
	AFTER 13 WEEKS	4.42	4.91	9.82	27.2	1.98	1.08	0.20
219	AFTER 2 WEEKS	4.16	6.48	12.96	20.6	1.42	1.60	0.23
	AFTER 6 WEEKS	3.31	6.20	12.40	27.9	1.69	1.30	0.27
	AFTER 13 WEEKS	5.23	5.27	10.54	30.5	3.56	1.52	0.30
220	AFTER 2 WEEKS	4.68	4.31	8.62	18.4	1.34	1.20	0.21
	AFTER 6 WEEKS	3.47	6.34	12.68	30.2	1.49	1.01	0.27
	AFTER 13 WEEKS	4.20	5.06	10.12	27.5	1.61	0.96	0.21

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 4 (2000 MG/KG/DAY)								
221	AFTER 2 WEEKS	4.42	4.06	8.12	21.2	1.02	0.96	0.21
	AFTER 6 WEEKS	3.83	4.02	8.04	34.8	1.63	0.77	0.20
	AFTER 13 WEEKS	5.09	5.64	11.28	28.1	1.30	0.81	0.19
222	AFTER 2 WEEKS	4.27	7.29	14.58	26.9	1.44	1.38	0.19
	AFTER 6 WEEKS	4.02	7.42	14.84	35.5	1.77	1.35	0.21
	AFTER 13 WEEKS	4.77	6.43	12.86	33.5	1.60	1.38	0.16
223	AFTER 2 WEEKS	4.66	6.51	13.02	24.5	0.66	2.01	0.26
	AFTER 6 WEEKS	6.28	7.27	14.54	34.3	1.27	1.98	0.32
	AFTER 13 WEEKS	5.78	6.10	12.20	33.9	1.84	2.45	0.38
224	AFTER 2 WEEKS	4.18	4.88	9.76	22.2	1.18	1.46	0.23
	AFTER 6 WEEKS	3.35	5.99	11.98	27.6	1.75	1.06	0.28
	AFTER 13 WEEKS	5.11	4.72	9.44	26.8	2.33	0.98	0.23
225	AFTER 2 WEEKS	4.95	6.32	12.64	19.2	0.93	2.31	0.18
	AFTER 6 WEEKS	4.24	5.65	11.30	25.6	1.94	2.01	0.26
	AFTER 13 WEEKS	4.26	6.49	12.98	27.8	2.08	2.20	0.24
226	AFTER 2 WEEKS	4.36	6.31	12.62	26.7	1.05	1.19	0.17
	AFTER 6 WEEKS	3.58	6.73	13.46	30.8	1.67	1.56	0.26
	AFTER 13 WEEKS	3.36	5.92	11.84	32.7	2.36	1.44	0.22
227	AFTER 2 WEEKS	4.73	4.78	9.56	19.2	1.15	1.16	0.14
	AFTER 6 WEEKS	3.28	5.15	10.30	28.6	1.43	1.35	0.34
	AFTER 13 WEEKS	4.46	4.79	9.58	27.0	2.12	1.50	0.25
228	AFTER 2 WEEKS	4.26	5.21	10.42	20.1	1.08	1.14	0.21
	AFTER 6 WEEKS	3.32	7.25	14.50	28.4	1.44	0.98	0.25
	AFTER 13 WEEKS	5.05	4.60	9.20	23.2	1.81	1.03	0.28
229	AFTER 2 WEEKS	4.31	5.33	10.66	20.2	1.54	1.55	0.20
	AFTER 6 WEEKS	3.83	6.10	12.20	27.0	1.75	1.91	0.23
	AFTER 13 WEEKS	4.93	5.54	11.08	26.6	2.46	1.36	0.23
230	AFTER 2 WEEKS	3.92	6.15	12.30	21.6	0.94	1.14	0.21
	AFTER 6 WEEKS	3.72	6.75	13.50	30.2	1.15	1.27	0.28
	AFTER 13 WEEKS	4.47	6.49	12.98	29.3	2.02	0.96	0.32
231	AFTER 2 WEEKS	4.35	3.74	7.48	20.0	1.16	1.67	0.30
	AFTER 6 WEEKS	3.81	5.91	11.82	28.7	2.04	1.21	0.33
	AFTER 13 WEEKS	4.63	6.24	12.48	33.4	2.56	1.20	0.34
232	AFTER 2 WEEKS	3.88	5.58	11.16	23.6	1.07	1.19	0.17
	AFTER 6 WEEKS	4.40	6.47	12.94	33.1	1.31	1.26	0.21
	AFTER 13 WEEKS	5.13	7.04	14.08	32.0	1.48	1.00	0.22
233	AFTER 2 WEEKS	3.86	5.78	11.56	24.9	1.26	1.86	0.35
	AFTER 6 WEEKS	4.07	5.96	11.92	29.8	1.48	2.03	0.37
	AFTER 13 WEEKS	5.09	6.59	13.18	20.7	1.57	1.90	0.40
	AFTER 17 WEEKS	4.25	5.92	11.84	32.6	1.91	2.09	0.47
234	AFTER 2 WEEKS	4.09	7.10	14.20	24.9	1.20	1.10	0.21
	AFTER 6 WEEKS	5.14	6.34	12.68	28.8	1.56	1.19	0.30
	AFTER 13 WEEKS	5.69	7.38	14.76	30.1	1.55	1.71	0.35
	AFTER 17 WEEKS	5.94	6.84	13.68	32.7	1.89	1.85	0.42
235	AFTER 2 WEEKS	4.70	6.87	13.74	22.5	1.38	2.18	0.19
	AFTER 6 WEEKS	4.69	6.16	12.32	28.5	1.60	1.88	0.26
	AFTER 13 WEEKS	4.90	5.87	11.74	29.7	1.33	1.67	0.31
	AFTER 17 WEEKS	4.58	5.67	11.34	31.1	1.65	1.81	0.29
236	AFTER 2 WEEKS	4.14	5.44	10.88	20.0	1.02	1.19	0.17
	AFTER 6 WEEKS	4.72	5.64	11.28	29.3	1.37	1.45	0.24
	AFTER 13 WEEKS	5.47	8.24	16.47	32.9	1.42	1.03	0.26

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
GROUP 4 (2000 MG/KG/DAY)								
236	AFTER 17 WEEKS	5.29	5.27	10.54	28.3	1.97	0.92	0.28
237	AFTER 2 WEEKS	4.13	5.04	10.08	20.6	0.92	1.82	0.20
	AFTER 6 WEEKS	3.98	4.94	9.88	28.5	1.18	1.93	0.32
	AFTER 13 WEEKS	5.64	4.97	9.94	28.0	0.93	1.30	0.21
	AFTER 17 WEEKS	4.85	5.61	11.22	30.2	1.30	1.59	0.24
238	AFTER 2 WEEKS	4.05	6.57	13.14	21.7	1.38	1.20	0.25
	AFTER 6 WEEKS	3.54	5.55	11.10	26.1	1.38	1.67	0.30
	AFTER 13 WEEKS	4.86	5.44	10.88	26.5	1.72	1.64	0.32
	AFTER 17 WEEKS	4.69	5.42	10.84	30.6	1.59	1.22	0.27
239	AFTER 2 WEEKS	4.23	6.30	12.60	19.8	1.19	1.28	0.14
	AFTER 6 WEEKS	3.66	7.14	14.28	26.6	1.54	1.03	0.17
	AFTER 13 WEEKS	5.53	6.52	13.04	28.7	2.04	0.87	0.14
	AFTER 17 WEEKS	4.62	5.78	11.56	31.3	1.67	0.87	0.17
240	AFTER 2 WEEKS	4.30	5.68	11.36	22.7	0.88	2.16	0.48
	AFTER 6 WEEKS	2.99	6.62	13.24	31.6	1.29	1.53	0.22
	AFTER 13 WEEKS	3.92	5.96	11.92	37.6	1.85	1.63	0.27
	AFTER 17 WEEKS	4.55	6.50	13.00	37.1	1.25	1.39	0.28
241	AFTER 2 WEEKS	4.83	6.76	13.52	23.8	1.20	1.13	0.19
	AFTER 6 WEEKS	3.83	6.21	12.42	28.8	1.86	0.89	0.21
	AFTER 13 WEEKS	4.96	7.05	14.10	37.1	2.42	0.72	0.21
	AFTER 17 WEEKS	4.94	6.44	12.88	34.8	1.63	0.76	0.22
242	AFTER 2 WEEKS	4.29	6.40	12.80	22.5	1.20	1.47	0.24
	AFTER 6 WEEKS	4.38	6.60	13.20	31.6	1.63	1.98	0.31
	AFTER 13 WEEKS	5.65	5.70	11.40	31.5	2.83	1.94	0.30
	AFTER 17 WEEKS	4.29	6.12	12.24	33.1	1.73	1.80	0.30

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 1 (0 MG/KG/DAY)								
125	AFTER 2 WEEKS	1.34	93.7	20.3	343.2	8.0	86.0	0.0
	AFTER 6 WEEKS	1.44	88.1	25.9	284.8	6.4	42.1	0.0
	AFTER 13 WEEKS	1.42	94.5	29.0	309.2	7.5	24.0	0.0
126	AFTER 2 WEEKS	1.03	81.9	23.8	390.1	7.4	72.6	0.0
	AFTER 6 WEEKS	1.41	65.7	21.9	219.7	4.5	33.8	0.0
	AFTER 13 WEEKS	1.38	68.4	27.1	208.0	6.5	18.2	0.0
127	AFTER 2 WEEKS	1.14	90.8	23.0	288.5	7.4	71.0	0.0
	AFTER 6 WEEKS	1.24	97.1	28.3	378.6	6.2	45.3	0.0
	AFTER 13 WEEKS	1.22	101.3	27.6	185.5	6.1	21.6	0.0
128	AFTER 2 WEEKS	1.51	77.3	23.0	430.0	5.3	89.6	0.0
	AFTER 6 WEEKS	1.52	72.9	27.8	329.9	7.5	47.5	0.0
	AFTER 13 WEEKS	2.33	191.3	99.3	368.2	105.0	17.6	0.0
129	AFTER 2 WEEKS	1.54	74.2	17.3	274.9	5.2	81.8	0.0
	AFTER 6 WEEKS	1.88	68.9	22.6	156.8	4.7	49.6	0.0
	AFTER 13 WEEKS	1.96	78.4	22.9	282.7	7.2	31.2	0.0
130	AFTER 2 WEEKS	1.22	81.8	22.1	441.2	7.7	115.3	0.0
	AFTER 6 WEEKS	1.26	77.4	25.0	226.0	7.0	62.6	0.0
	AFTER 13 WEEKS	1.47	94.1	39.4	255.3	5.1	47.8	0.0
131	AFTER 2 WEEKS	1.24	75.0	15.6	238.9	5.6	105.5	0.0
	AFTER 6 WEEKS	1.44	78.9	17.4	399.5	5.8	59.8	0.0
	AFTER 13 WEEKS	1.43	197.6	53.4	403.3	57.1	31.6	0.0
132	AFTER 2 WEEKS	1.32	76.0	21.3	357.5	6.4	82.8	0.0
	AFTER 6 WEEKS	1.49	74.1	27.0	292.6	4.1	54.3	0.0
	AFTER 13 WEEKS	1.48	82.9	38.9	212.0	15.5	24.6	0.0
133	AFTER 2 WEEKS	1.21	76.7	19.3	344.1	6.6	109.3	0.0
	AFTER 6 WEEKS	1.55	70.0	31.2	204.3	13.7	50.8	0.0
	AFTER 13 WEEKS	1.62	89.7	55.5	232.5	40.6	21.6	0.0
134	AFTER 2 WEEKS	1.43	87.9	22.3	348.7	5.5	112.5	2.5
	AFTER 6 WEEKS	1.40	84.8	24.9	301.0	4.6	56.0	0.0
	AFTER 13 WEEKS	1.51	79.7	26.2	257.9	5.5	29.0	0.0
135	AFTER 2 WEEKS	1.43	84.6	21.1	374.9	6.1	120.8	0.0
	AFTER 6 WEEKS	1.48	90.3	25.7	380.4	5.3	64.5	0.0
	AFTER 13 WEEKS	1.66	74.4	25.2	163.3	3.5	27.5	0.0
136	AFTER 2 WEEKS	1.19	79.3	21.3	356.8	5.8	66.6	0.0
	AFTER 6 WEEKS	1.57	72.9	18.3	307.6	4.9	42.3	0.0
	AFTER 13 WEEKS	1.78	72.2	25.0	210.8	5.9	19.0	0.0
137	AFTER 2 WEEKS	1.57	81.2	17.3	275.8	5.6	79.3	0.0
	AFTER 6 WEEKS	1.62	67.0	23.7	240.0	5.8	44.1	0.0
	AFTER 13 WEEKS	1.84	79.8	39.0	170.0	27.8	26.5	0.0
138	AFTER 2 WEEKS	1.35	76.4	16.2	360.8	8.2	75.9	0.0
	AFTER 6 WEEKS	1.53	69.5	19.5	274.1	6.7	42.4	0.0
	AFTER 13 WEEKS	1.51	73.7	23.8	265.5	12.1	27.7	0.0
139	AFTER 2 WEEKS	1.69	75.3	18.6	209.5	5.8	78.4	0.0
	AFTER 6 WEEKS	1.90	74.3	22.9	205.5	7.7	37.6	0.0
	AFTER 13 WEEKS	1.99	110.2	61.9	180.0	68.4	17.9	0.0
140	AFTER 2 WEEKS	2.20	84.8	25.5	290.5	5.9	90.0	0.0
	AFTER 6 WEEKS	2.32	76.6	22.0	292.5	5.6	52.6	0.0
	AFTER 13 WEEKS	2.39	106.7	53.5	177.7	22.9	31.2	0.0
141	AFTER 2 WEEKS	1.12	81.4	18.9	477.5	5.9	129.3	0.0
	AFTER 6 WEEKS	1.51	81.3	28.7	284.8	5.8	71.0	0.0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 1 (0 MG/KG/DAY)								
141	AFTER 13 WEEKS	1.49	83.1	33.3	250.0	14.7	30.2	0.0
142	AFTER 2 WEEKS	1.22	85.9	25.4	205.3	6.5	145.6	0.0
	AFTER 6 WEEKS	1.14	110.8	40.9	246.6	13.6	94.6	0.0
	AFTER 13 WEEKS	1.13	126.2	42.0	340.5	14.5	59.4	0.0
143	AFTER 2 WEEKS	1.46	84.4	19.9	371.1	4.8	61.1	0.0
	AFTER 6 WEEKS	1.57	96.0	37.5	403.1	6.4	35.7	0.0
	AFTER 13 WEEKS	1.68	84.2	33.1	214.6	6.2	22.0	0.0
144	AFTER 2 WEEKS	1.57	86.8	14.9	384.1	---	97.8	0.0
	AFTER 6 WEEKS	1.73	70.6	20.1	314.8	4.9	46.2	0.0
	AFTER 13 WEEKS	1.75	66.5	20.5	232.1	5.9	21.8	0.0
145	AFTER 2 WEEKS	1.69	72.2	16.4	309.3	4.6	54.9	0.0
	AFTER 6 WEEKS	1.86	61.7	22.5	220.4	3.6	31.7	0.0
	AFTER 13 WEEKS	1.76	84.0	41.0	214.5	23.1	18.2	0.0
	AFTER 17 WEEKS	2.17	69.2	33.4	266.1	11.2	15.5	0.0
146	AFTER 2 WEEKS	1.01	74.1	23.2	357.0	6.1	85.4	0.0
	AFTER 6 WEEKS	1.37	74.6	27.5	247.9	5.2	53.6	0.0
	AFTER 13 WEEKS	1.24	87.0	40.1	231.8	12.6	24.7	0.0
	AFTER 17 WEEKS	1.37	68.2	29.3	276.1	7.8	22.2	0.0
147	AFTER 2 WEEKS	1.24	86.5	20.2	405.3	6.8	62.9	0.0
	AFTER 6 WEEKS	1.66	89.0	30.5	267.6	7.0	37.2	0.0
	AFTER 13 WEEKS	1.67	82.3	35.4	204.2	17.6	16.9	0.0
	AFTER 17 WEEKS	1.72	74.8	28.6	199.6	13.2	17.1	0.0
148	AFTER 2 WEEKS	1.02	94.5	23.9	384.4	8.4	105.4	0.0
	AFTER 6 WEEKS	1.16	83.3	27.1	297.3	4.8	60.9	0.0
	AFTER 13 WEEKS	1.20	84.2	28.1	322.2	7.9	22.8	0.0
	AFTER 17 WEEKS	1.04	69.0	30.3	242.5	5.8	21.9	0.0
149	AFTER 2 WEEKS	1.16	79.7	17.4	347.4	8.2	107.7	0.0
	AFTER 6 WEEKS	1.29	82.6	27.2	235.7	7.3	52.7	0.0
	AFTER 13 WEEKS	1.40	79.9	33.2	211.2	14.2	22.1	0.0
	AFTER 17 WEEKS	1.11	94.2	42.2	345.5	23.6	20.9	0.0
150	AFTER 2 WEEKS	1.45	60.0	21.4	25.6	3.2	---	0.0
	AFTER 6 WEEKS	1.40	86.9	27.3	298.5	6.7	87.7	0.0
	AFTER 13 WEEKS	1.46	77.2	23.0	209.2	7.6	35.5	0.0
	AFTER 17 WEEKS	1.26	80.4	25.0	285.7	7.6	30.4	0.0
151	AFTER 2 WEEKS	1.79	78.5	21.2	255.3	5.9	65.3	0.0
	AFTER 6 WEEKS	1.91	79.3	29.1	312.9	9.5	32.4	0.0
	AFTER 13 WEEKS	2.14	94.0	40.6	221.6	16.9	19.9	0.0
	AFTER 17 WEEKS	2.00	80.6	37.7	413.2	18.5	18.5	0.0
152	AFTER 2 WEEKS	1.29	77.7	19.0	412.3	8.0	67.0	0.0
	AFTER 6 WEEKS	1.76	88.5	26.6	292.5	6.0	40.4	0.0
	AFTER 13 WEEKS	1.65	70.3	27.3	253.6	11.1	21.2	0.0
	AFTER 17 WEEKS	1.49	78.4	32.5	338.5	10.3	18.9	0.0
153	AFTER 2 WEEKS	1.20	77.0	24.7	236.8	7.1	101.7	0.0
	AFTER 6 WEEKS	1.39	102.3	35.3	738.0	7.9	55.0	0.0
	AFTER 13 WEEKS	1.45	68.3	33.4	228.5	5.3	28.0	0.0
	AFTER 17 WEEKS	1.44	79.3	39.9	348.4	6.1	25.5	0.0
154	AFTER 2 WEEKS	2.01	74.1	13.4	202.9	4.8	110.7	0.0
	AFTER 6 WEEKS	2.13	100.0	35.3	392.8	13.0	48.4	0.0
	AFTER 13 WEEKS	2.46	60.2	22.3	240.4	5.1	24.3	0.0
	AFTER 17 WEEKS	2.31	66.8	30.2	226.1	16.1	22.1	0.0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 2 (500 MG/KG/DAY)								
161	AFTER 2 WEEKS	1.83	82.1	17.2	330.7	6.1	101.3	0.0
	AFTER 6 WEEKS	2.02	78.0	18.1	253.3	4.7	61.7	0.0
	AFTER 13 WEEKS	1.74	85.6	25.6	191.0	7.7	29.1	0.0
162	AFTER 2 WEEKS	1.44	83.5	21.9	207.9	5.7	71.7	0.0
	AFTER 6 WEEKS	1.53	84.8	25.0	380.7	5.1	38.1	0.0
	AFTER 13 WEEKS	1.56	75.3	24.8	154.9	8.6	20.6	0.0
163	AFTER 2 WEEKS	1.45	83.2	19.7	224.9	8.9	77.5	0.0
	AFTER 6 WEEKS	1.36	95.9	23.1	380.3	8.1	50.2	0.0
	AFTER 13 WEEKS	1.84	92.9	37.7	273.9	24.5	24.9	0.0
164	AFTER 2 WEEKS	1.38	72.6	24.8	202.2	5.7	124.4	0.0
	AFTER 6 WEEKS	1.43	100.8	26.0	219.5	5.0	25.2	0.0
	AFTER 13 WEEKS	1.57	82.6	42.2	299.8	16.4	23.2	0.0
165	AFTER 2 WEEKS	1.35	87.3	20.5	336.5	7.3	102.6	0.0
	AFTER 6 WEEKS	1.28	79.4	26.3	375.5	8.3	47.4	0.0
	AFTER 13 WEEKS	1.59	68.4	21.5	190.9	4.5	24.3	0.0
166	AFTER 2 WEEKS	1.91	83.4	18.5	362.6	6.9	79.7	0.0
	AFTER 6 WEEKS	2.10	76.5	22.8	297.0	7.5	40.6	0.0
	AFTER 13 WEEKS	2.09	119.8	42.1	313.8	59.7	22.8	0.0
167	AFTER 2 WEEKS	1.48	67.6	20.2	338.9	5.9	70.0	0.0
	AFTER 6 WEEKS	1.41	67.7	22.3	382.8	4.6	39.6	0.0
	AFTER 13 WEEKS	1.45	62.6	31.7	232.3	6.2	21.1	0.0
168	AFTER 2 WEEKS	1.35	89.4	20.2	296.9	7.5	88.8	0.0
	AFTER 6 WEEKS	1.38	99.7	26.0	368.1	5.6	48.4	0.0
	AFTER 13 WEEKS	1.11	93.2	27.0	365.2	4.3	24.8	0.0
169	AFTER 2 WEEKS	1.77	81.0	19.6	267.3	6.9	77.8	0.0
	AFTER 6 WEEKS	1.98	84.0	28.0	301.9	10.4	46.3	0.0
	AFTER 13 WEEKS	2.08	148.7	59.0	412.4	36.8	26.4	0.0
170	AFTER 2 WEEKS	1.75	73.7	22.0	209.2	7.3	59.2	0.0
	AFTER 6 WEEKS	1.99	72.0	22.8	295.6	6.1	63.2	0.0
	AFTER 13 WEEKS	1.76	87.5	37.8	208.8	23.7	24.7	0.0
171	AFTER 2 WEEKS	0.96	93.0	20.8	409.8	6.5	98.1	0.0
	AFTER 6 WEEKS	1.12	79.8	19.7	411.2	5.0	57.6	0.0
	AFTER 13 WEEKS	0.87	82.5	23.9	223.6	7.0	26.9	0.0
172	AFTER 2 WEEKS	1.50	87.5	21.6	384.1	9.6	128.6	0.0
	AFTER 6 WEEKS	1.50	69.1	26.2	235.5	9.3	53.2	0.0
	AFTER 13 WEEKS	1.45	84.8	36.2	248.7	15.2	27.1	0.0
173	AFTER 2 WEEKS	1.50	80.1	18.2	286.2	6.9	75.0	0.0
	AFTER 6 WEEKS	1.63	111.2	41.2	245.0	9.8	43.2	0.0
	AFTER 13 WEEKS	1.98	85.6	43.3	194.8	20.0	22.5	0.0
174	AFTER 2 WEEKS	1.30	89.3	23.0	427.0	6.3	115.2	0.0
	AFTER 6 WEEKS	1.49	84.2	25.9	268.4	6.2	56.6	0.0
	AFTER 13 WEEKS	1.83	65.6	23.4	299.8	4.0	26.2	0.0
175	AFTER 2 WEEKS	1.13	84.7	13.6	241.3	7.8	86.2	0.0
	AFTER 6 WEEKS	1.24	84.5	20.6	303.8	5.5	42.5	0.0
	AFTER 13 WEEKS	1.39	82.5	22.1	179.3	6.8	30.2	0.0
176	AFTER 2 WEEKS	1.40	86.7	16.9	295.2	6.3	78.6	0.0
	AFTER 6 WEEKS	1.36	84.2	24.0	232.5	6.0	50.5	0.0
	AFTER 13 WEEKS	1.28	78.7	35.7	222.5	11.7	24.9	0.0
177	AFTER 2 WEEKS	1.34	69.0	15.9	286.9	5.1	67.3	0.0
	AFTER 6 WEEKS	1.30	65.2	19.6	237.6	3.9	39.1	0.0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 2 (500 MG/KG/DAY)								
177	AFTER 13 WEEKS	1.50	64.7	18.7	274.7	3.6	27.3	0.0
178	AFTER 2 WEEKS	1.45	70.1	15.1	190.5	7.0	76.1	0.0
	AFTER 6 WEEKS	1.21	70.3	20.3	257.9	4.3	47.1	0.0
	AFTER 13 WEEKS	1.37	68.8	22.7	298.0	3.9	26.5	0.0
179	AFTER 2 WEEKS	1.79	104.3	25.4	454.4	6.8	108.8	0.0
	AFTER 6 WEEKS	1.49	103.9	29.1	433.9	7.3	54.2	0.0
	AFTER 13 WEEKS	1.67	155.0	45.6	545.9	33.2	33.3	0.0
180	AFTER 2 WEEKS	1.81	91.5	20.8	255.2	6.0	76.5	0.0
	AFTER 6 WEEKS	1.58	87.9	30.5	327.8	5.6	34.7	0.0
	AFTER 13 WEEKS	1.18	85.3	23.6	297.1	4.6	22.6	0.0
GROUP 3 (1000 MG/KG/DAY)								
187	AFTER 2 WEEKS	1.54	74.0	15.3	228.7	5.1	96.5	0.0
	AFTER 6 WEEKS	1.38	78.3	18.7	244.6	4.6	47.0	0.0
	AFTER 13 WEEKS	1.21	68.8	21.2	193.0	4.2	27.8	0.0
188	AFTER 2 WEEKS	1.23	83.2	19.9	452.5	7.1	98.9	0.0
	AFTER 6 WEEKS	1.20	78.6	31.6	324.6	7.7	58.8	0.0
	AFTER 13 WEEKS	1.15	68.8	30.4	198.8	10.2	32.0	0.0
189	AFTER 2 WEEKS	1.31	77.8	20.4	256.9	5.6	90.0	0.0
	AFTER 6 WEEKS	1.67	77.8	22.9	278.1	4.5	45.0	0.0
	AFTER 13 WEEKS	1.44	78.9	29.1	397.8	6.6	23.5	0.0
190	AFTER 2 WEEKS	1.27	88.0	20.9	435.9	7.5	87.6	0.0
	AFTER 6 WEEKS	1.67	74.3	29.9	313.5	5.8	54.5	0.0
	AFTER 13 WEEKS	1.70	90.0	35.6	295.8	8.6	30.9	0.0
191	AFTER 2 WEEKS	1.07	85.8	15.7	327.2	7.9	88.8	0.0
	AFTER 6 WEEKS	1.21	73.3	22.7	244.2	5.0	41.4	0.0
	AFTER 13 WEEKS	1.23	66.1	22.7	248.1	4.4	16.6	0.0
192	AFTER 2 WEEKS	1.95	72.7	15.5	321.7	6.8	67.8	0.0
	AFTER 6 WEEKS	2.18	70.2	20.9	230.0	5.5	34.8	0.0
	AFTER 13 WEEKS	2.06	69.4	23.5	229.6	6.6	16.6	0.0
193	AFTER 2 WEEKS	1.25	76.0	15.2	294.7	7.9	142.1	0.0
	AFTER 6 WEEKS	1.36	73.3	17.7	381.3	7.8	73.7	0.0
	AFTER 13 WEEKS	1.30	81.4	23.8	267.9	9.3	36.4	0.0
194	AFTER 2 WEEKS	1.10	89.6	18.9	233.7	5.9	52.0	0.0
	AFTER 6 WEEKS	1.36	119.3	25.5	357.3	5.5	33.2	0.0
	AFTER 13 WEEKS	1.26	90.6	27.3	358.1	5.3	21.2	0.0
195	AFTER 2 WEEKS	1.47	73.2	18.1	340.4	5.6	71.1	0.0
	AFTER 6 WEEKS	1.60	73.0	23.2	287.8	5.4	36.5	0.0
	AFTER 13 WEEKS	1.54	66.9	24.4	271.9	4.1	21.6	0.0
196	AFTER 2 WEEKS	1.46	72.2	19.8	182.8	5.9	100.4	0.0
	AFTER 6 WEEKS	1.53	76.3	26.0	215.5	6.7	56.8	0.0
	AFTER 13 WEEKS	1.27	81.1	18.8	370.8	5.1	26.4	0.0
197	AFTER 2 WEEKS	1.77	72.5	15.9	190.2	5.9	77.4	0.0
	AFTER 6 WEEKS	1.72	76.2	17.7	302.1	4.8	47.3	0.0
	AFTER 13 WEEKS	1.54	91.8	36.2	226.4	30.4	24.5	0.0
198	AFTER 2 WEEKS	1.47	72.2	17.8	311.7	5.9	84.3	0.0
	AFTER 6 WEEKS	1.91	111.4	29.4	810.0	9.2	52.1	0.0
	AFTER 13 WEEKS	1.89	80.0	30.4	160.3	10.8	28.4	0.0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 3 (1000 MG/KG/DAY)								
199	AFTER 2 WEEKS	1.33	82.2	17.9	185.7	5.6	101.4	0.0
	AFTER 6 WEEKS	1.42	97.9	31.5	346.5	8.3	44.3	0.0
	AFTER 13 WEEKS	1.73	74.2	27.6	166.6	13.8	20.7	0.0
200	AFTER 2 WEEKS	1.16	87.6	17.8	369.3	10.1	137.4	0.0
	AFTER 6 WEEKS	1.41	85.7	20.6	389.4	8.2	73.8	0.0
	AFTER 13 WEEKS	1.61	82.4	19.9	209.6	6.0	39.0	0.0
201	AFTER 2 WEEKS	1.71	76.6	23.7	155.3	6.1	124.8	0.0
	AFTER 6 WEEKS	1.71	127.5	34.8	760.2	7.1	70.7	0.0
	AFTER 13 WEEKS	2.07	90.6	37.9	320.7	18.4	27.3	0.0
202	AFTER 2 WEEKS	1.09	81.9	17.7	199.6	6.3	77.0	0.0
	AFTER 6 WEEKS	1.37	99.1	22.6	425.2	6.1	50.1	0.0
	AFTER 13 WEEKS	1.31	75.2	27.8	232.4	8.8	21.0	0.0
203	AFTER 2 WEEKS	1.48	85.2	16.1	247.2	8.2	69.4	0.0
	AFTER 6 WEEKS	1.46	85.0	23.0	401.8	6.6	38.3	0.0
	AFTER 13 WEEKS	1.11	76.3	31.0	207.9	7.6	22.9	0.0
204	AFTER 2 WEEKS	1.37	84.5	19.7	343.5	7.2	66.1	0.0
	AFTER 6 WEEKS	1.27	80.9	20.3	266.0	7.3	45.5	0.0
	AFTER 13 WEEKS	1.41	70.0	21.5	201.7	4.3	21.2	0.0
205	AFTER 2 WEEKS	1.28	82.0	17.7	235.0	8.2	77.7	0.0
	AFTER 6 WEEKS	1.36	74.3	23.3	343.7	6.2	44.1	0.0
	AFTER 13 WEEKS	1.25	68.3	22.9	219.4	10.5	22.7	0.0
206	AFTER 2 WEEKS	1.01	87.6	18.7	363.0	8.0	80.0	0.0
	AFTER 6 WEEKS	0.95	84.4	24.8	327.3	5.2	41.2	0.0
	AFTER 13 WEEKS	1.08	81.0	23.1	219.8	4.3	21.9	0.0
GROUP 4 (2000 MG/KG/DAY)								
213	AFTER 2 WEEKS	1.35	82.2	13.1	262.2	6.3	80.5	0.0
	AFTER 6 WEEKS	1.38	82.7	20.1	337.1	5.9	42.9	0.0
	AFTER 13 WEEKS	1.41	96.4	35.1	299.4	18.8	23.1	0.0
214	AFTER 2 WEEKS	1.69	73.4	16.1	180.2	7.3	63.4	0.0
	AFTER 6 WEEKS	1.53	82.6	23.5	223.4	6.8	43.2	0.0
	AFTER 13 WEEKS	1.50	63.1	20.8	262.2	6.9	19.9	0.0
215	AFTER 2 WEEKS	1.22	96.2	96.2	223.1	5.9	83.2	0.0
	AFTER 6 WEEKS	1.03	124.9	32.4	394.9	8.1	52.7	0.0
	AFTER 13 WEEKS	0.75	92.3	26.3	264.5	5.0	20.7	0.0
216	AFTER 2 WEEKS	1.03	76.8	15.4	304.4	8.3	92.2	0.0
	AFTER 6 WEEKS	1.23	81.1	16.7	387.6	7.5	68.8	0.0
	AFTER 13 WEEKS	1.14	68.0	20.3	301.0	5.2	27.3	0.0
217	AFTER 2 WEEKS	1.45	69.7	16.4	166.3	8.5	76.4	0.0
	AFTER 6 WEEKS	1.22	100.1	26.7	403.2	7.1	85.2	0.0
	AFTER 13 WEEKS	1.47	82.7	31.4	242.1	20.0	27.2	0.0
218	AFTER 2 WEEKS	1.14	86.3	17.8	295.2	6.4	144.8	0.0
	AFTER 6 WEEKS	1.82	70.8	22.8	380.7	6.3	43.2	0.0
	AFTER 13 WEEKS	1.10	80.6	22.2	280.8	8.3	36.6	0.0
219	AFTER 2 WEEKS	1.35	72.2	17.0	257.0	---	66.9	0.0
	AFTER 6 WEEKS	1.28	70.6	22.2	267.9	6.2	34.8	0.0
	AFTER 13 WEEKS	1.52	136.3	53.4	253.3	312.5	22.8	0.0
220	AFTER 2 WEEKS	1.18	78.5	14.4	213.7	6.4	93.5	0.0
	AFTER 6 WEEKS	1.16	96.5	25.5	579.6	6.4	53.6	0.0
	AFTER 13 WEEKS	1.08	77.1	21.1	261.5	7.0	33.7	0.0

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 4 (2000 MG/KG/DAY)								
221	AFTER 2 WEEKS	0.96	79.7	19.0	368.1	6.1	99.5	0.0
	AFTER 6 WEEKS	0.87	69.5	19.8	514.6	5.8	61.7	0.0
	AFTER 13 WEEKS	0.96	80.1	29.5	363.8	15.8	33.3	0.0
222	AFTER 2 WEEKS	1.35	78.2	22.1	251.1	8.1	99.2	0.0
	AFTER 6 WEEKS	1.38	82.4	25.7	469.2	8.0	61.3	0.0
	AFTER 13 WEEKS	1.39	78.1	28.2	297.2	11.1	27.0	0.0
223	AFTER 2 WEEKS	1.61	70.4	15.7	143.9	7.1	115.6	0.0
	AFTER 6 WEEKS	1.94	86.5	27.9	157.4	14.5	60.7	0.0
	AFTER 13 WEEKS	2.33	83.7	37.1	237.7	21.6	22.5	0.0
224	AFTER 2 WEEKS	1.38	71.3	16.3	151.0	5.2	111.9	0.0
	AFTER 6 WEEKS	1.21	72.8	24.8	233.4	4.3	57.7	0.0
	AFTER 13 WEEKS	1.09	72.0	23.7	196.7	5.4	24.6	0.0
225	AFTER 2 WEEKS	2.03	69.1	13.5	222.5	7.4	62.8	0.0
	AFTER 6 WEEKS	2.11	69.8	19.4	344.5	7.0	33.6	0.0
	AFTER 13 WEEKS	2.24	75.1	29.9	156.5	13.4	18.9	0.0
226	AFTER 2 WEEKS	1.15	71.4	21.0	178.5	8.2	98.3	0.0
	AFTER 6 WEEKS	1.61	86.0	26.7	312.6	8.0	60.7	0.0
	AFTER 13 WEEKS	1.45	91.0	29.4	254.4	8.7	28.1	0.0
227	AFTER 2 WEEKS	1.20	65.6	18.4	294.7	9.4	112.1	0.0
	AFTER 6 WEEKS	1.52	65.1	20.0	238.1	5.8	54.2	0.0
	AFTER 13 WEEKS	1.84	61.4	22.7	196.4	6.9	24.7	0.0
228	AFTER 2 WEEKS	1.22	81.0	18.5	379.7	8.1	132.7	0.0
	AFTER 6 WEEKS	1.10	90.2	25.6	587.3	21.2	69.1	0.0
	AFTER 13 WEEKS	1.19	138.5	114.4	315.8	120.0	30.0	0.0
229	AFTER 2 WEEKS	1.45	92.9	23.4	552.4	6.8	69.2	0.0
	AFTER 6 WEEKS	1.95	91.3	21.4	393.0	5.5	42.1	0.0
	AFTER 13 WEEKS	1.52	71.9	22.6	224.0	7.8	17.8	0.0
230	AFTER 2 WEEKS	1.19	66.5	12.3	182.2	6.1	78.2	0.0
	AFTER 6 WEEKS	1.37	83.0	27.8	376.7	5.8	44.2	0.0
	AFTER 13 WEEKS	1.26	78.8	30.4	206.8	15.6	21.5	0.0
231	AFTER 2 WEEKS	1.67	69.9	16.9	194.2	7.0	104.0	0.0
	AFTER 6 WEEKS	1.38	83.5	23.1	318.2	10.0	59.1	0.0
	AFTER 13 WEEKS	1.49	85.3	48.2	305.8	48.9	24.1	0.0
232	AFTER 2 WEEKS	1.17	73.5	18.0	246.9	8.2	155.3	0.0
	AFTER 6 WEEKS	1.34	72.6	26.9	293.4	7.5	75.9	0.0
	AFTER 13 WEEKS	1.09	74.5	25.8	265.7	6.7	44.4	0.0
233	AFTER 2 WEEKS	1.66	72.9	12.5	176.2	7.4	95.1	0.0
	AFTER 6 WEEKS	2.12	74.2	21.5	295.5	6.5	45.0	0.0
	AFTER 13 WEEKS	1.99	68.3	25.1	233.1	10.4	21.0	0.0
	AFTER 17 WEEKS	2.16	65.0	17.9	290.4	3.2	19.2	0.0
234	AFTER 2 WEEKS	1.07	69.0	19.4	231.7	6.6	69.5	0.0
	AFTER 6 WEEKS	1.37	69.4	28.3	436.8	6.3	41.2	0.0
	AFTER 13 WEEKS	1.84	68.7	34.5	206.4	10.3	16.2	0.0
	AFTER 17 WEEKS	2.03	73.2	44.5	225.0	24.1	15.9	0.0
235	AFTER 2 WEEKS	1.91	66.8	17.3	312.0	6.8	83.1	0.0
	AFTER 6 WEEKS	1.86	65.6	23.2	270.8	5.7	50.4	0.0
	AFTER 13 WEEKS	1.66	72.8	45.8	209.6	24.6	20.5	0.0
	AFTER 17 WEEKS	1.94	63.7	25.7	273.9	10.2	19.7	0.0
236	AFTER 2 WEEKS	1.08	91.5	25.9	255.9	11.7	89.0	0.0
	AFTER 6 WEEKS	1.53	90.6	22.9	370.8	7.5	53.1	0.0
	AFTER 13 WEEKS	1.06	88.0	24.1	539.3	8.3	25.7	0.0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
GROUP 4 (2000 MG/KG/DAY)								
236	AFTER 17 WEEKS	1.05	94.0	30.4	335.5	8.1	27.7	0.0
237	AFTER 2 WEEKS	1.59	79.3	16.6	183.8	7.7	75.5	0.0
	AFTER 6 WEEKS	1.82	75.1	21.1	272.9	5.8	32.8	0.0
	AFTER 13 WEEKS	1.22	77.8	21.3	338.5	7.4	19.3	0.0
	AFTER 17 WEEKS	1.62	43.7	19.5	216.6	3.7	19.3	0.0
238	AFTER 2 WEEKS	1.16	79.0	19.2	197.7	7.2	131.6	0.0
	AFTER 6 WEEKS	1.55	87.8	26.5	441.0	8.0	58.8	0.0
	AFTER 13 WEEKS	1.76	98.7	30.4	414.1	13.7	24.2	0.0
	AFTER 17 WEEKS	1.33	101.8	52.5	423.8	62.2	19.8	0.0
239	AFTER 2 WEEKS	1.33	76.7	14.0	215.4	7.2	145.0	0.0
	AFTER 6 WEEKS	1.16	79.7	19.3	451.8	8.1	71.7	0.0
	AFTER 13 WEEKS	1.11	73.2	19.6	267.3	9.9	39.0	0.0
	AFTER 17 WEEKS	1.12	77.2	21.0	276.3	8.5	36.1	0.0
240	AFTER 2 WEEKS	1.94	73.2	16.9	143.6	6.2	71.1	0.0
	AFTER 6 WEEKS	1.54	75.3	21.4	332.7	5.1	37.6	0.0
	AFTER 13 WEEKS	1.64	75.9	22.4	300.8	5.4	17.7	0.0
	AFTER 17 WEEKS	1.53	68.0	22.4	275.0	9.4	14.2	0.0
241	AFTER 2 WEEKS	1.19	72.0	14.2	169.5	7.4	121.6	0.0
	AFTER 6 WEEKS	1.04	76.5	19.8	355.1	7.4	68.8	0.0
	AFTER 13 WEEKS	0.93	64.4	20.1	208.3	7.2	30.6	0.0
	AFTER 17 WEEKS	0.95	70.1	20.7	334.0	7.8	26.1	0.0
242	AFTER 2 WEEKS	1.38	65.9	16.2	172.4	6.1	104.2	0.0
	AFTER 6 WEEKS	1.86	67.9	21.5	323.6	5.1	54.1	0.0
	AFTER 13 WEEKS	2.03	63.2	27.6	251.4	11.7	22.8	0.0
	AFTER 17 WEEKS	1.85	87.8	49.1	383.9	47.0	20.0	0.0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 1 (0 MG/KG/DAY)								
125	AFTER 2 WEEKS	379.4	139.7	3.08	102.7	2.42	2.06	59.13
	AFTER 6 WEEKS	208.8	142.2	3.52	104.8	2.63	1.60	60.87
	AFTER 13 WEEKS	213.5	140.2	3.63	104.9	2.67	1.67	64.43
126	AFTER 2 WEEKS	381.2	141.3	3.15	102.8	2.53	2.45	60.30
	AFTER 6 WEEKS	157.6	141.5	3.60	101.4	2.59	1.52	63.08
	AFTER 13 WEEKS	147.1	141.8	3.81	104.1	2.71	1.75	69.42
127	AFTER 2 WEEKS	250.7	140.0	3.32	100.0	2.53	2.09	61.11
	AFTER 6 WEEKS	258.3	140.4	3.20	101.8	2.56	1.40	65.99
	AFTER 13 WEEKS	139.5	141.4	3.51	103.8	2.55	1.65	65.17
128	AFTER 2 WEEKS	355.7	139.4	3.40	103.0	2.50	1.90	58.35
	AFTER 6 WEEKS	267.8	141.2	3.47	103.1	2.60	1.84	64.35
	AFTER 13 WEEKS	181.2	142.3	3.32	104.1	2.62	1.27	72.71
129	AFTER 2 WEEKS	250.5	139.7	3.24	103.0	2.48	2.19	57.34
	AFTER 6 WEEKS	189.5	140.4	3.40	102.5	2.66	1.78	62.56
	AFTER 13 WEEKS	194.0	143.3	3.42	104.8	2.61	1.51	64.51
130	AFTER 2 WEEKS	316.2	139.5	3.14	100.7	2.45	2.18	58.05
	AFTER 6 WEEKS	175.9	141.3	3.06	101.7	2.60	1.75	64.34
	AFTER 13 WEEKS	172.4	141.6	3.34	105.0	2.52	1.85	65.17
131	AFTER 2 WEEKS	231.0	140.6	3.35	102.8	2.56	1.95	61.48
	AFTER 6 WEEKS	244.4	141.5	3.36	103.7	2.67	1.63	67.40
	AFTER 13 WEEKS	245.2	142.5	3.34	105.1	2.57	1.39	69.45
132	AFTER 2 WEEKS	426.8	142.0	3.17	104.3	2.50	2.28	61.17
	AFTER 6 WEEKS	245.0	142.3	2.85	105.3	2.52	1.41	66.71
	AFTER 13 WEEKS	179.3	143.7	3.81	106.0	2.67	1.55	69.13
133	AFTER 2 WEEKS	369.2	139.5	3.22	101.6	2.50	2.26	60.79
	AFTER 6 WEEKS	145.5	140.3	2.85	102.5	2.54	1.19	66.17
	AFTER 13 WEEKS	170.0	141.8	3.41	104.7	2.69	1.74	71.97
134	AFTER 2 WEEKS	284.6	141.3	3.31	102.8	2.51	2.04	60.05
	AFTER 6 WEEKS	239.5	142.4	3.21	104.3	2.65	1.87	64.64
	AFTER 13 WEEKS	150.7	142.8	3.44	107.7	2.54	1.32	68.36
135	AFTER 2 WEEKS	307.9	140.1	3.22	102.9	2.54	2.24	60.48
	AFTER 6 WEEKS	249.6	142.0	3.20	103.6	2.50	1.60	64.34
	AFTER 13 WEEKS	121.4	141.6	2.97	106.7	2.50	1.28	68.62
136	AFTER 2 WEEKS	281.1	139.8	3.46	101.2	2.53	2.08	59.46
	AFTER 6 WEEKS	218.9	141.7	3.16	102.4	2.60	1.34	66.87
	AFTER 13 WEEKS	163.9	141.2	3.21	106.3	2.67	1.66	69.39
137	AFTER 2 WEEKS	382.6	141.8	3.40	104.9	2.46	2.05	61.18
	AFTER 6 WEEKS	183.7	142.3	3.38	104.0	2.65	1.91	67.21
	AFTER 13 WEEKS	128.9	142.6	3.49	105.0	2.60	1.62	71.54
138	AFTER 2 WEEKS	267.5	143.0	3.26	105.8	2.45	2.07	57.44
	AFTER 6 WEEKS	187.2	145.2	3.08	107.0	2.66	1.78	61.43
	AFTER 13 WEEKS	177.4	142.9	3.16	106.1	2.43	1.42	61.52
139	AFTER 2 WEEKS	183.3	140.5	3.22	102.8	2.52	1.89	62.82
	AFTER 6 WEEKS	188.1	141.2	3.53	103.0	2.70	1.66	67.32
	AFTER 13 WEEKS	191.4	141.1	3.53	104.4	2.69	1.67	69.90
140	AFTER 2 WEEKS	386.1	142.5	3.14	102.7	2.51	2.29	60.97
	AFTER 6 WEEKS	225.8	142.1	3.28	102.1	2.62	1.95	67.68
	AFTER 13 WEEKS	186.9	143.5	3.37	105.6	2.60	1.55	70.77
141	AFTER 2 WEEKS	354.7	144.0	3.35	105.2	2.55	2.15	60.95
	AFTER 6 WEEKS	264.3	142.4	3.48	103.7	2.71	1.76	63.63

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 1 (0 MG/KG/DAY)								
141	AFTER 13 WEEKS	168.2	143.3	3.08	105.7	2.64	0.88	67.03
142	AFTER 2 WEEKS	277.4	142.7	2.92	103.9	2.52	2.24	61.37
	AFTER 6 WEEKS	218.6	143.1	2.93	103.3	2.60	1.84	64.14
	AFTER 13 WEEKS	277.3	142.4	3.50	107.2	2.48	1.91	61.02
143	AFTER 2 WEEKS	337.9	144.0	3.22	106.1	2.47	2.10	61.21
	AFTER 6 WEEKS	349.5	144.0	3.15	105.0	2.69	1.65	66.95
	AFTER 13 WEEKS	165.0	143.8	2.90	107.3	2.49	1.33	68.69
144	AFTER 2 WEEKS	396.1	146.7	3.31	107.5	2.60	2.35	61.51
	AFTER 6 WEEKS	198.4	143.0	3.29	104.7	2.63	1.92	65.92
	AFTER 13 WEEKS	180.4	143.4	3.29	106.6	2.59	1.63	66.90
145	AFTER 2 WEEKS	309.3	142.6	3.46	103.6	2.56	2.02	60.10
	AFTER 6 WEEKS	183.8	143.3	3.72	104.9	2.68	1.51	64.41
	AFTER 13 WEEKS	129.3	141.6	3.52	105.3	2.59	1.33	67.46
	AFTER 17 WEEKS	151.0	142.1	3.21	105.5	2.68	1.28	70.57
146	AFTER 2 WEEKS	299.7	142.1	3.55	103.2	2.48	2.25	56.99
	AFTER 6 WEEKS	222.5	142.2	3.24	103.3	2.55	1.79	61.57
	AFTER 13 WEEKS	208.2	142.1	3.56	104.8	2.48	1.50	61.51
	AFTER 17 WEEKS	161.7	141.4	3.14	104.4	2.49	1.43	62.55
147	AFTER 2 WEEKS	690.7	142.9	3.40	104.5	2.48	2.25	60.65
	AFTER 6 WEEKS	302.0	143.4	3.20	104.7	2.61	1.64	67.31
	AFTER 13 WEEKS	141.8	143.6	3.14	105.7	2.59	1.45	66.91
	AFTER 17 WEEKS	152.3	142.0	3.39	105.4	2.59	1.39	69.85
148	AFTER 2 WEEKS	361.4	149.1	3.53	108.9	2.63	2.23	65.18
	AFTER 6 WEEKS	191.2	142.2	3.15	106.1	2.50	1.31	66.96
	AFTER 13 WEEKS	276.3	147.7	3.65	110.1	2.67	1.35	69.60
	AFTER 17 WEEKS	156.2	141.4	3.40	106.7	2.65	1.60	71.88
149	AFTER 2 WEEKS	253.2	140.0	3.53	103.0	2.60	2.35	58.14
	AFTER 6 WEEKS	162.4	142.2	3.46	103.6	2.60	1.76	64.64
	AFTER 13 WEEKS	126.4	147.8	3.86	109.0	2.56	1.32	68.42
	AFTER 17 WEEKS	225.7	142.1	3.56	103.8	2.57	1.56	71.00
150	AFTER 2 WEEKS	555.6	144.7	3.57	105.5	2.41	2.46	57.67
	AFTER 6 WEEKS	238.9	147.1	3.32	106.8	2.68	2.20	70.01
	AFTER 13 WEEKS	119.3	142.5	3.58	105.4	2.55	1.61	65.18
	AFTER 17 WEEKS	175.7	141.6	3.48	105.5	2.58	1.43	67.45
151	AFTER 2 WEEKS	217.4	143.9	2.99	105.9	2.59	1.72	62.72
	AFTER 6 WEEKS	197.3	143.0	3.57	103.4	2.70	1.51	70.04
	AFTER 13 WEEKS	179.3	142.6	3.21	104.5	2.68	1.42	69.44
	AFTER 17 WEEKS	244.9	142.2	3.31	104.6	2.67	1.19	70.24
152	AFTER 2 WEEKS	337.5	145.3	3.28	106.5	2.49	2.10	61.55
	AFTER 6 WEEKS	258.1	155.4	3.47	114.2	2.74	1.83	67.39
	AFTER 13 WEEKS	181.9	146.1	3.45	109.0	2.55	1.29	69.43
	AFTER 17 WEEKS	174.8	147.3	3.39	109.2	2.75	1.38	72.58
153	AFTER 2 WEEKS	293.6	143.1	3.20	104.9	2.51	2.05	60.60
	AFTER 6 WEEKS	625.1	157.0	3.79	113.9	2.62	2.22	64.27
	AFTER 13 WEEKS	189.4	144.2	3.49	112.9	2.56	1.42	70.66
	AFTER 17 WEEKS	216.0	142.6	3.13	107.3	2.56	1.38	67.36
154	AFTER 2 WEEKS	270.0	143.2	3.06	104.1	2.62	1.94	62.43
	AFTER 6 WEEKS	292.4	145.0	3.57	104.4	2.79	1.91	72.52
	AFTER 13 WEEKS	127.2	148.7	3.39	109.1	2.71	1.43	77.39
	AFTER 17 WEEKS	136.8	143.1	3.25	104.8	2.74	1.30	77.54

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 2 (500 MG/KG/DAY)								
161	AFTER 2 WEEKS	380.4	143.9	3.61	106.7	2.67	2.29	62.49
	AFTER 6 WEEKS	161.7	144.6	3.10	109.1	2.57	1.19	65.01
	AFTER 13 WEEKS	148.4	143.2	3.47	108.4	2.68	1.58	66.73
162	AFTER 2 WEEKS	219.7	142.4	3.41	104.4	2.61	2.07	61.53
	AFTER 6 WEEKS	407.6	145.2	3.76	105.9	2.71	2.06	66.52
	AFTER 13 WEEKS	100.7	142.2	3.34	106.0	2.60	1.21	70.41
163	AFTER 2 WEEKS	291.3	144.2	3.29	105.3	2.61	2.12	60.91
	AFTER 6 WEEKS	336.6	143.2	3.74	107.0	2.69	1.98	60.49
	AFTER 13 WEEKS	159.2	143.6	3.43	109.0	2.68	1.52	70.51
164	AFTER 2 WEEKS	253.0	144.3	3.06	104.4	2.56	2.39	62.95
	AFTER 6 WEEKS	209.6	146.8	3.39	106.5	2.54	1.69	67.41
	AFTER 13 WEEKS	158.6	145.4	3.47	107.0	2.58	1.67	72.19
165	AFTER 2 WEEKS	259.4	143.2	3.22	104.8	2.63	2.25	59.98
	AFTER 6 WEEKS	226.3	145.1	3.45	106.3	2.64	1.90	64.42
	AFTER 13 WEEKS	109.4	144.0	3.08	107.1	2.56	1.28	71.35
166	AFTER 2 WEEKS	358.2	149.4	3.47	108.5	2.70	2.37	64.09
	AFTER 6 WEEKS	247.1	143.2	3.32	105.0	2.68	1.75	67.16
	AFTER 13 WEEKS	163.5	142.5	3.36	105.5	2.57	1.45	69.23
167	AFTER 2 WEEKS	265.3	149.2	3.31	109.6	2.54	2.09	62.24
	AFTER 6 WEEKS	325.3	145.9	3.43	105.9	2.64	1.87	66.87
	AFTER 13 WEEKS	158.0	143.0	3.28	107.5	2.54	1.36	69.60
168	AFTER 2 WEEKS	330.5	144.6	2.98	106.8	2.62	2.12	62.06
	AFTER 6 WEEKS	280.9	144.2	3.38	105.7	2.69	1.59	68.18
	AFTER 13 WEEKS	202.0	143.6	3.70	107.3	2.72	1.57	69.95
169	AFTER 2 WEEKS	214.2	145.2	3.28	105.6	2.64	2.36	64.23
	AFTER 6 WEEKS	193.8	145.7	3.32	105.1	2.75	2.05	68.09
	AFTER 13 WEEKS	322.2	145.9	3.35	106.7	2.65	1.76	73.34
170	AFTER 2 WEEKS	292.9	169.4	4.16	124.1	2.38	2.55	64.91
	AFTER 6 WEEKS	208.7	145.9	3.64	106.1	2.68	2.15	65.20
	AFTER 13 WEEKS	159.1	143.9	4.16	107.2	2.67	1.80	68.53
171	AFTER 2 WEEKS	440.3	151.1	3.56	110.5	2.55	2.18	63.25
	AFTER 6 WEEKS	250.6	148.5	3.78	108.3	2.63	1.76	67.95
	AFTER 13 WEEKS	127.8	145.8	3.46	110.1	2.66	1.59	66.45
172	AFTER 2 WEEKS	504.4	144.3	3.38	105.1	2.78	2.40	65.52
	AFTER 6 WEEKS	216.2	146.1	3.34	106.0	2.90	2.16	70.74
	AFTER 13 WEEKS	152.2	144.5	3.42	106.9	2.81	1.83	72.71
173	AFTER 2 WEEKS	254.1	144.5	3.40	105.6	2.69	2.10	63.87
	AFTER 6 WEEKS	628.4	145.9	3.67	105.8	2.78	2.14	68.47
	AFTER 13 WEEKS	112.6	144.3	2.85	108.4	2.60	1.29	74.36
174	AFTER 2 WEEKS	626.6	146.3	3.33	108.1	2.51	2.20	61.04
	AFTER 6 WEEKS	342.0	145.7	3.29	106.9	2.65	2.17	64.93
	AFTER 13 WEEKS	199.5	144.6	3.16	108.8	2.56	1.70	67.89
175	AFTER 2 WEEKS	219.1	148.0	3.21	108.9	2.60	2.29	61.49
	AFTER 6 WEEKS	337.1	148.4	3.44	110.0	2.60	1.92	60.72
	AFTER 13 WEEKS	233.8	147.4	3.28	111.1	2.55	1.53	65.30
176	AFTER 2 WEEKS	256.9	145.8	3.40	109.2	2.62	1.88	63.40
	AFTER 6 WEEKS	192.0	146.9	3.23	108.8	2.65	1.73	66.43
	AFTER 13 WEEKS	162.5	145.7	3.61	107.3	2.67	1.89	70.87
177	AFTER 2 WEEKS	250.8	145.9	3.37	107.2	2.71	2.46	66.50
	AFTER 6 WEEKS	170.0	146.2	3.53	106.7	2.72	2.08	69.40

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 2 (500 MG/KG/DAY)								
177	AFTER 13 WEEKS	165.7	143.5	3.17	108.9	2.50	1.34	69.27
178	AFTER 2 WEEKS	171.9	145.2	3.17	106.7	2.62	2.00	65.51
	AFTER 6 WEEKS	172.2	145.9	2.98	105.5	2.67	1.70	66.92
	AFTER 13 WEEKS	188.5	144.2	3.96	106.3	2.70	1.78	70.23
179	AFTER 2 WEEKS	513.2	148.6	3.30	108.1	2.63	2.28	64.60
	AFTER 6 WEEKS	717.8	145.8	3.58	106.8	2.65	1.92	62.06
	AFTER 13 WEEKS	824.1	143.7	3.91	108.5	2.53	1.72	61.07
180	AFTER 2 WEEKS	343.0	145.6	2.97	107.5	2.57	2.02	64.96
	AFTER 6 WEEKS	247.8	147.0	3.26	108.5	2.76	1.82	68.74
	AFTER 13 WEEKS	323.6	146.4	3.39	110.7	2.55	1.53	67.18
GROUP 3 (1000 MG/KG/DAY)								
187	AFTER 2 WEEKS	193.5	141.3	3.24	103.0	2.53	2.00	61.78
	AFTER 6 WEEKS	230.2	145.7	3.60	104.7	2.78	1.93	66.61
	AFTER 13 WEEKS	125.7	143.8	2.91	104.8	2.62	1.73	67.21
188	AFTER 2 WEEKS	411.0	143.2	3.57	105.2	2.58	2.25	62.43
	AFTER 6 WEEKS	310.9	144.5	3.21	105.7	2.63	1.66	68.65
	AFTER 13 WEEKS	136.9	145.4	3.52	108.8	2.85	1.66	70.31
189	AFTER 2 WEEKS	326.9	140.8	3.27	102.5	2.56	1.96	61.95
	AFTER 6 WEEKS	208.2	149.2	3.47	108.6	2.82	1.64	71.44
	AFTER 13 WEEKS	239.9	144.3	3.76	107.0	2.73	1.75	72.84
190	AFTER 2 WEEKS	557.3	143.2	3.32	106.0	2.54	2.24	61.45
	AFTER 6 WEEKS	277.2	148.0	3.61	108.4	2.74	1.78	69.73
	AFTER 13 WEEKS	201.0	144.8	3.43	107.6	2.72	1.48	69.87
191	AFTER 2 WEEKS	382.1	143.0	3.21	106.0	2.55	2.55	63.59
	AFTER 6 WEEKS	226.5	148.5	3.51	108.1	2.73	1.78	69.52
	AFTER 13 WEEKS	160.2	144.5	3.62	107.5	2.66	1.56	69.96
192	AFTER 2 WEEKS	245.9	153.7	3.51	112.7	2.54	2.42	63.08
	AFTER 6 WEEKS	187.0	153.2	3.37	112.5	2.66	1.75	69.61
	AFTER 13 WEEKS	166.7	143.6	3.28	107.4	2.63	1.75	68.03
193	AFTER 2 WEEKS	233.7	142.9	3.54	105.5	2.61	2.12	62.27
	AFTER 6 WEEKS	217.1	148.0	3.31	107.9	2.68	1.95	67.11
	AFTER 13 WEEKS	205.7	144.9	3.24	108.2	2.71	1.71	68.98
194	AFTER 2 WEEKS	247.4	147.9	3.53	109.4	2.62	2.43	60.81
	AFTER 6 WEEKS	720.0	148.0	3.90	108.5	2.68	2.14	64.84
	AFTER 13 WEEKS	243.3	145.0	3.59	107.3	2.65	1.93	66.83
195	AFTER 2 WEEKS	357.9	147.3	3.54	108.9	2.66	2.45	62.36
	AFTER 6 WEEKS	216.4	150.1	3.66	110.9	2.79	1.90	66.49
	AFTER 13 WEEKS	215.6	145.2	3.47	108.4	2.64	1.58	68.89
196	AFTER 2 WEEKS	184.3	142.2	3.27	104.8	2.52	2.39	58.97
	AFTER 6 WEEKS	175.7	149.7	3.65	110.0	2.73	2.33	65.49
	AFTER 13 WEEKS	194.0	142.4	3.13	106.9	2.53	1.61	64.28
197	AFTER 2 WEEKS	228.3	146.5	3.38	108.9	2.54	1.91	62.61
	AFTER 6 WEEKS	203.6	149.6	3.18	111.6	2.60	1.94	66.35
	AFTER 13 WEEKS	132.2	139.1	2.99	102.4	2.52	1.16	68.21
198	AFTER 2 WEEKS	268.6	143.9	3.29	106.9	2.52	2.27	62.84
	AFTER 6 WEEKS	880.0	138.5	3.65	100.7	2.57	2.10	66.84
	AFTER 13 WEEKS	156.8	149.1	3.33	111.1	2.56	1.22	69.63

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 3 (1000 MG/KG/DAY)								
199	AFTER 2 WEEKS	205.0	149.7	3.39	111.1	2.63	1.99	63.49
	AFTER 6 WEEKS	267.3	150.8	3.71	112.1	2.72	1.75	70.34
	AFTER 13 WEEKS	104.8	146.7	3.18	110.9	2.62	1.25	72.71
200	AFTER 2 WEEKS	354.4	146.9	3.16	108.4	2.62	2.56	65.19
	AFTER 6 WEEKS	247.4	150.0	3.76	109.4	2.71	2.09	65.96
	AFTER 13 WEEKS	260.2	145.2	3.80	108.1	2.56	1.55	69.39
201	AFTER 2 WEEKS	290.8	142.5	3.18	105.4	2.59	2.30	63.27
	AFTER 6 WEEKS	981.0	152.2	3.75	113.3	2.52	2.21	64.89
	AFTER 13 WEEKS	189.8	145.1	3.59	108.4	2.66	1.56	71.95
202	AFTER 2 WEEKS	313.9	141.7	3.21	104.4	2.54	1.99	58.71
	AFTER 6 WEEKS	715.2	147.8	3.44	108.6	2.65	1.83	61.22
	AFTER 13 WEEKS	176.4	143.6	3.41	107.5	2.63	1.67	64.56
203	AFTER 2 WEEKS	314.0	142.6	3.16	105.1	2.55	2.29	61.86
	AFTER 6 WEEKS	246.9	147.2	3.64	109.1	2.62	1.91	64.40
	AFTER 13 WEEKS	150.5	144.0	3.68	107.0	2.61	1.95	63.23
204	AFTER 2 WEEKS	278.9	144.2	3.38	106.6	2.58	2.02	58.70
	AFTER 6 WEEKS	173.0	148.1	2.86	110.1	2.51	1.90	61.52
	AFTER 13 WEEKS	149.8	145.5	3.29	109.3	2.50	1.14	64.80
205	AFTER 2 WEEKS	222.2	152.7	3.57	114.9	2.46	2.09	59.75
	AFTER 6 WEEKS	220.5	146.9	3.40	109.8	2.59	1.81	65.03
	AFTER 13 WEEKS	147.4	144.6	3.33	109.9	2.54	1.19	67.35
206	AFTER 2 WEEKS	277.5	148.6	3.42	107.0	2.57	2.46	61.48
	AFTER 6 WEEKS	208.8	148.8	3.68	109.2	2.69	2.19	66.30
	AFTER 13 WEEKS	176.5	145.6	3.97	106.8	2.70	2.05	68.84
GROUP 4 (2000 MG/KG/DAY)								
213	AFTER 2 WEEKS	232.2	146.3	3.59	109.3	2.64	2.46	64.21
	AFTER 6 WEEKS	241.2	152.8	3.94	111.9	2.88	1.89	69.72
	AFTER 13 WEEKS	190.9	150.9	3.67	114.2	2.74	1.58	72.07
214	AFTER 2 WEEKS	227.4	143.4	3.36	105.8	2.62	2.23	62.67
	AFTER 6 WEEKS	186.0	148.2	3.44	108.2	2.78	1.91	67.19
	AFTER 13 WEEKS	198.2	142.8	3.44	107.0	2.67	1.51	66.18
215	AFTER 2 WEEKS	251.7	144.1	3.33	106.3	2.54	2.25	59.41
	AFTER 6 WEEKS	293.7	147.2	2.83	107.3	2.54	1.75	65.83
	AFTER 13 WEEKS	149.0	144.8	3.58	108.1	2.57	1.76	64.96
216	AFTER 2 WEEKS	338.1	142.9	3.61	106.4	2.58	2.47	58.99
	AFTER 6 WEEKS	241.3	149.3	2.91	108.4	2.63	1.98	67.30
	AFTER 13 WEEKS	216.9	146.5	3.35	109.7	2.66	1.68	68.71
217	AFTER 2 WEEKS	172.1	141.9	3.43	104.4	2.50	2.40	61.17
	AFTER 6 WEEKS	239.7	150.3	3.09	108.5	2.74	1.96	66.98
	AFTER 13 WEEKS	166.8	144.0	3.47	106.5	2.64	1.84	70.45
218	AFTER 2 WEEKS	289.2	142.0	3.54	105.1	2.55	2.02	61.11
	AFTER 6 WEEKS	230.5	150.6	3.52	108.5	2.71	2.06	67.35
	AFTER 13 WEEKS	156.1	146.4	3.64	110.2	2.56	1.47	63.04
219	AFTER 2 WEEKS	269.5	135.2	3.62	104.7	2.71	2.44	63.59
	AFTER 6 WEEKS	173.0	152.1	3.37	111.6	2.75	2.04	68.32
	AFTER 13 WEEKS	147.5	143.1	3.54	107.5	2.59	1.17	67.73
220	AFTER 2 WEEKS	206.5	156.5	3.91	116.5	2.51	2.34	57.98
	AFTER 6 WEEKS	387.6	150.5	3.65	110.1	2.56	1.67	64.46
	AFTER 13 WEEKS	162.8	145.0	3.55	107.3	2.58	1.75	67.47

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 4 (2000 MG/KG/DAY)								
221	AFTER 2 WEEKS	354.9	144.1	3.72	107.2	2.57	2.32	59.97
	AFTER 6 WEEKS	286.2	151.0	3.07	110.9	2.68	1.66	67.37
	AFTER 13 WEEKS	208.8	143.3	3.31	107.1	2.57	1.59	66.91
222	AFTER 2 WEEKS	293.7	145.3	3.34	108.4	2.56	2.26	61.32
	AFTER 6 WEEKS	362.9	152.8	3.20	111.6	2.61	2.12	65.54
	AFTER 13 WEEKS	213.7	144.9	3.36	107.8	2.55	1.61	65.30
223	AFTER 2 WEEKS	178.2	142.4	3.39	105.1	2.53	2.36	61.89
	AFTER 6 WEEKS	124.5	149.7	2.98	110.3	2.63	1.85	69.25
	AFTER 13 WEEKS	135.4	145.0	3.21	106.8	2.73	1.34	73.46
224	AFTER 2 WEEKS	217.8	142.8	3.41	104.3	2.55	2.13	61.32
	AFTER 6 WEEKS	212.4	149.3	3.70	108.3	2.78	2.04	66.10
	AFTER 13 WEEKS	155.1	146.1	3.39	108.2	2.76	1.70	66.76
225	AFTER 2 WEEKS	233.1	146.1	3.49	108.3	2.59	2.25	63.15
	AFTER 6 WEEKS	257.5	151.3	3.42	110.6	2.77	1.85	71.15
	AFTER 13 WEEKS	116.4	145.5	3.16	108.6	2.77	1.64	72.26
226	AFTER 2 WEEKS	170.2	141.7	3.43	104.6	2.52	2.16	61.60
	AFTER 6 WEEKS	205.1	148.0	3.63	105.7	2.63	1.86	65.74
	AFTER 13 WEEKS	191.5	143.5	3.63	106.4	2.57	1.83	65.17
227	AFTER 2 WEEKS	226.1	147.9	4.00	107.3	2.60	2.58	65.27
	AFTER 6 WEEKS	180.5	148.0	3.42	107.0	2.71	2.04	71.98
	AFTER 13 WEEKS	121.7	145.5	3.41	106.0	2.66	1.59	76.51
228	AFTER 2 WEEKS	309.1	166.1	4.32	124.2	2.67	2.40	61.04
	AFTER 6 WEEKS	448.4	150.9	3.41	110.0	2.69	2.33	65.01
	AFTER 13 WEEKS	207.4	145.6	3.13	108.3	2.53	1.51	64.38
229	AFTER 2 WEEKS	431.9	139.8	3.33	103.3	2.54	2.51	59.08
	AFTER 6 WEEKS	262.1	149.6	2.96	109.6	2.72	1.90	67.11
	AFTER 13 WEEKS	159.9	146.0	3.16	107.7	2.64	1.54	67.53
230	AFTER 2 WEEKS	190.5	144.1	3.50	106.7	2.63	2.24	64.58
	AFTER 6 WEEKS	265.5	149.6	3.39	110.6	2.75	1.70	67.10
	AFTER 13 WEEKS	114.6	146.5	3.39	109.0	2.67	1.40	70.79
231	AFTER 2 WEEKS	191.9	144.5	3.52	105.4	2.66	2.25	62.32
	AFTER 6 WEEKS	268.4	151.9	3.56	109.2	2.76	2.10	68.10
	AFTER 13 WEEKS	225.1	144.5	3.28	106.8	2.68	1.59	70.68
232	AFTER 2 WEEKS	252.5	146.3	3.14	106.6	2.58	2.33	60.98
	AFTER 6 WEEKS	219.2	149.5	3.17	108.2	2.64	1.87	65.86
	AFTER 13 WEEKS	179.1	145.6	3.14	108.3	2.55	1.64	64.67
233	AFTER 2 WEEKS	214.0	145.7	3.11	108.6	2.55	2.27	61.04
	AFTER 6 WEEKS	219.9	148.9	3.31	108.8	2.77	1.63	67.02
	AFTER 13 WEEKS	165.4	143.3	3.19	108.2	2.56	1.14	66.59
	AFTER 17 WEEKS	143.1	146.4	3.68	107.3	2.73	1.56	71.88
234	AFTER 2 WEEKS	238.2	145.8	3.64	107.9	2.60	2.56	61.77
	AFTER 6 WEEKS	298.2	149.1	3.56	110.4	2.58	1.60	66.80
	AFTER 13 WEEKS	178.1	143.1	3.27	106.6	2.64	1.44	72.88
	AFTER 17 WEEKS	181.1	141.8	3.16	105.2	2.63	1.31	71.49
235	AFTER 2 WEEKS	286.3	146.9	3.68	108.4	2.69	2.39	66.12
	AFTER 6 WEEKS	214.2	149.2	3.23	110.2	2.71	1.79	68.77
	AFTER 13 WEEKS	175.6	145.7	3.51	109.4	2.73	1.70	70.59
	AFTER 17 WEEKS	162.3	142.5	3.42	106.4	2.69	1.54	71.83
236	AFTER 2 WEEKS	251.3	145.2	3.47	109.0	2.60	2.36	59.58
	AFTER 6 WEEKS	243.3	150.5	2.68	111.8	2.60	1.33	66.58
	AFTER 13 WEEKS	316.8	142.9	3.16	107.3	2.45	1.36	65.60

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
GROUP 4 (2000 MG/KG/DAY)								
236	AFTER 17 WEEKS	196.4	141.7	3.12	105.5	2.57	1.34	69.45
237	AFTER 2 WEEKS	197.1	143.5	3.56	105.2	2.64	2.56	60.37
	AFTER 6 WEEKS	213.5	150.7	3.47	108.7	2.71	1.77	66.70
	AFTER 13 WEEKS	180.3	143.6	3.30	107.2	2.57	1.53	64.78
	AFTER 17 WEEKS	123.7	141.7	3.45	105.3	2.55	1.49	68.37
238	AFTER 2 WEEKS	200.6	144.4	3.41	107.0	2.60	2.28	62.15
	AFTER 6 WEEKS	302.7	149.5	3.75	107.6	2.73	1.85	69.33
	AFTER 13 WEEKS	508.9	147.0	3.78	109.1	2.57	1.51	67.55
	AFTER 17 WEEKS	193.8	145.5	3.42	107.8	2.63	1.33	70.71
239	AFTER 2 WEEKS	177.9	147.8	3.53	108.7	2.59	2.27	64.05
	AFTER 6 WEEKS	266.2	149.6	3.79	109.6	2.74	1.96	67.35
	AFTER 13 WEEKS	170.3	145.9	3.30	109.1	2.64	1.62	69.71
	AFTER 17 WEEKS	168.5	142.3	3.26	105.7	2.72	1.55	73.40
240	AFTER 2 WEEKS	241.9	147.2	3.75	108.1	2.73	2.12	63.73
	AFTER 6 WEEKS	203.1	154.9	4.26	113.8	2.85	2.09	69.77
	AFTER 13 WEEKS	142.9	148.8	3.53	111.7	2.66	1.54	67.82
	AFTER 17 WEEKS	124.9	145.2	3.55	109.6	2.75	1.44	70.20
241	AFTER 2 WEEKS	237.2	145.9	3.58	107.5	2.69	2.50	65.36
	AFTER 6 WEEKS	232.4	152.7	3.71	110.6	2.79	2.08	68.07
	AFTER 13 WEEKS	128.4	146.4	3.35	109.9	2.66	1.37	68.19
	AFTER 17 WEEKS	177.7	142.3	3.12	106.1	2.68	1.34	67.07
242	AFTER 2 WEEKS	197.5	146.5	3.74	108.9	2.61	2.62	63.78
	AFTER 6 WEEKS	227.8	151.6	3.73	111.2	2.73	1.87	70.21
	AFTER 13 WEEKS	149.2	145.8	2.91	109.3	2.60	1.31	72.16
	AFTER 17 WEEKS	241.7	143.5	3.15	106.3	2.76	1.61	73.90

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 1 (0 MG/KG/DAY)				
125	AFTER 2 WEEKS	41.50	17.63	2.35
	AFTER 6 WEEKS	42.58	18.29	2.33
	AFTER 13 WEEKS	45.02	19.41	2.32
126	AFTER 2 WEEKS	41.66	18.64	2.23
	AFTER 6 WEEKS	42.65	20.43	2.09
	AFTER 13 WEEKS	48.07	21.35	2.25
127	AFTER 2 WEEKS	42.40	18.71	2.27
	AFTER 6 WEEKS	45.00	20.99	2.14
	AFTER 13 WEEKS	44.54	20.63	2.16
128	AFTER 2 WEEKS	40.18	18.17	2.21
	AFTER 6 WEEKS	43.84	20.51	2.14
	AFTER 13 WEEKS	48.82	23.89	2.04
129	AFTER 2 WEEKS	39.60	17.74	2.23
	AFTER 6 WEEKS	43.37	19.19	2.26
	AFTER 13 WEEKS	45.79	18.72	2.45
130	AFTER 2 WEEKS	39.07	18.98	2.06
	AFTER 6 WEEKS	42.62	21.72	1.96
	AFTER 13 WEEKS	43.45	21.72	2.00
131	AFTER 2 WEEKS	43.32	18.16	2.39
	AFTER 6 WEEKS	46.52	20.88	2.23
	AFTER 13 WEEKS	48.42	21.03	2.30
132	AFTER 2 WEEKS	42.21	18.96	2.23
	AFTER 6 WEEKS	46.63	20.08	2.32
	AFTER 13 WEEKS	48.39	20.74	2.33
133	AFTER 2 WEEKS	40.80	19.99	2.04
	AFTER 6 WEEKS	44.05	22.12	1.99
	AFTER 13 WEEKS	48.52	23.45	2.07
134	AFTER 2 WEEKS	40.80	19.25	2.12
	AFTER 6 WEEKS	43.47	21.17	2.05
	AFTER 13 WEEKS	45.52	22.84	1.99
135	AFTER 2 WEEKS	42.33	18.15	2.33
	AFTER 6 WEEKS	44.48	19.86	2.24
	AFTER 13 WEEKS	48.45	20.17	2.40
136	AFTER 2 WEEKS	41.50	17.96	2.31
	AFTER 6 WEEKS	45.10	21.77	2.07
	AFTER 13 WEEKS	47.58	21.81	2.18
137	AFTER 2 WEEKS	44.73	16.45	2.72
	AFTER 6 WEEKS	48.30	18.91	2.55
	AFTER 13 WEEKS	51.05	20.49	2.49
138	AFTER 2 WEEKS	39.70	17.74	2.24
	AFTER 6 WEEKS	42.87	18.56	2.31
	AFTER 13 WEEKS	43.58	17.94	2.43
139	AFTER 2 WEEKS	43.48	19.34	2.25
	AFTER 6 WEEKS	46.47	20.85	2.23
	AFTER 13 WEEKS	48.99	20.91	2.34
140	AFTER 2 WEEKS	43.34	17.63	2.46
	AFTER 6 WEEKS	46.16	21.52	2.14
	AFTER 13 WEEKS	49.31	21.46	2.30
141	AFTER 2 WEEKS	43.46	17.49	2.48
	AFTER 6 WEEKS	44.02	19.61	2.24

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 1 (0 MG/KG/DAY)				
141	AFTER 13 WEEKS	47.32	19.71	2.40
142	AFTER 2 WEEKS	43.56	17.81	2.45
	AFTER 6 WEEKS	45.60	18.54	2.46
	AFTER 13 WEEKS	40.53	20.49	1.98
143	AFTER 2 WEEKS	42.74	18.47	2.31
	AFTER 6 WEEKS	46.23	20.72	2.23
	AFTER 13 WEEKS	46.33	22.36	2.07
144	AFTER 2 WEEKS	41.51	20.00	2.08
	AFTER 6 WEEKS	44.32	21.60	2.05
	AFTER 13 WEEKS	46.22	20.68	2.24
145	AFTER 2 WEEKS	42.62	17.48	2.44
	AFTER 6 WEEKS	44.87	19.54	2.30
	AFTER 13 WEEKS	49.10	18.36	2.67
	AFTER 17 WEEKS	49.26	21.31	2.31
146	AFTER 2 WEEKS	39.00	17.99	2.17
	AFTER 6 WEEKS	40.78	20.79	1.96
	AFTER 13 WEEKS	41.56	19.95	2.08
	AFTER 17 WEEKS	41.38	21.17	1.95
147	AFTER 2 WEEKS	41.33	19.32	2.14
	AFTER 6 WEEKS	45.75	21.56	2.12
	AFTER 13 WEEKS	45.56	21.35	2.13
	AFTER 17 WEEKS	46.26	23.59	1.96
148	AFTER 2 WEEKS	44.22	20.96	2.11
	AFTER 6 WEEKS	45.26	21.70	2.09
	AFTER 13 WEEKS	47.03	22.57	2.08
	AFTER 17 WEEKS	49.34	22.54	2.19
149	AFTER 2 WEEKS	38.89	19.25	2.02
	AFTER 6 WEEKS	43.68	20.96	2.08
	AFTER 13 WEEKS	45.20	23.22	1.95
	AFTER 17 WEEKS	47.08	23.92	1.97
150	AFTER 2 WEEKS	---	---	---
	AFTER 6 WEEKS	41.72	28.29	1.47
	AFTER 13 WEEKS	42.18	23.00	1.83
	AFTER 17 WEEKS	43.21	24.24	1.78
151	AFTER 2 WEEKS	44.32	18.40	2.41
	AFTER 6 WEEKS	48.69	21.35	2.28
	AFTER 13 WEEKS	49.07	20.37	2.41
	AFTER 17 WEEKS	48.81	21.43	2.28
152	AFTER 2 WEEKS	41.48	20.07	2.07
	AFTER 6 WEEKS	44.89	22.50	2.00
	AFTER 13 WEEKS	46.16	23.27	1.98
	AFTER 17 WEEKS	47.73	24.85	1.92
153	AFTER 2 WEEKS	41.97	18.63	2.25
	AFTER 6 WEEKS	44.08	20.19	2.18
	AFTER 13 WEEKS	45.77	24.89	1.84
	AFTER 17 WEEKS	44.95	22.41	2.01
154	AFTER 2 WEEKS	44.69	17.74	2.52
	AFTER 6 WEEKS	50.00	22.52	2.22
	AFTER 13 WEEKS	53.69	23.70	2.27
	AFTER 17 WEEKS	52.77	24.77	2.13

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 2 (500 MG/KG/DAY)				
161	AFTER 2 WEEKS	43.66	18.83	2.32
	AFTER 6 WEEKS	45.29	19.72	2.30
	AFTER 13 WEEKS	46.45	20.28	2.29
162	AFTER 2 WEEKS	43.49	18.04	2.41
	AFTER 6 WEEKS	46.21	20.31	2.28
	AFTER 13 WEEKS	49.85	20.56	2.42
163	AFTER 2 WEEKS	43.22	17.69	2.44
	AFTER 6 WEEKS	42.52	17.97	2.37
	AFTER 13 WEEKS	49.83	20.68	2.41
164	AFTER 2 WEEKS	44.13	18.82	2.34
	AFTER 6 WEEKS	34.09	33.32	1.02
	AFTER 13 WEEKS	48.73	23.46	2.08
165	AFTER 2 WEEKS	41.40	18.58	2.23
	AFTER 6 WEEKS	43.39	21.03	2.06
	AFTER 13 WEEKS	48.22	23.13	2.08
166	AFTER 2 WEEKS	44.62	19.47	2.29
	AFTER 6 WEEKS	46.89	20.27	2.31
	AFTER 13 WEEKS	48.30	20.93	2.31
167	AFTER 2 WEEKS	43.20	19.04	2.27
	AFTER 6 WEEKS	47.20	19.67	2.40
	AFTER 13 WEEKS	49.19	20.41	2.41
168	AFTER 2 WEEKS	43.10	18.96	2.27
	AFTER 6 WEEKS	46.31	21.87	2.12
	AFTER 13 WEEKS	46.93	23.02	2.04
169	AFTER 2 WEEKS	42.67	21.56	1.98
	AFTER 6 WEEKS	44.77	23.32	1.92
	AFTER 13 WEEKS	48.63	24.71	1.97
170	AFTER 2 WEEKS	15.68	49.23	0.32
	AFTER 6 WEEKS	42.79	22.41	1.91
	AFTER 13 WEEKS	46.23	22.30	2.07
171	AFTER 2 WEEKS	45.75	17.50	2.61
	AFTER 6 WEEKS	44.55	23.40	1.90
	AFTER 13 WEEKS	44.65	21.80	2.05
172	AFTER 2 WEEKS	45.04	20.48	2.20
	AFTER 6 WEEKS	48.99	21.75	2.25
	AFTER 13 WEEKS	52.13	20.58	2.53
173	AFTER 2 WEEKS	45.18	18.69	2.42
	AFTER 6 WEEKS	49.39	19.08	2.59
	AFTER 13 WEEKS	52.22	22.14	2.36
174	AFTER 2 WEEKS	43.82	17.22	2.54
	AFTER 6 WEEKS	44.66	20.27	2.20
	AFTER 13 WEEKS	48.24	19.65	2.45
175	AFTER 2 WEEKS	43.04	18.45	2.33
	AFTER 6 WEEKS	42.80	17.92	2.39
	AFTER 13 WEEKS	47.33	17.97	2.63
176	AFTER 2 WEEKS	43.33	20.07	2.16
	AFTER 6 WEEKS	44.19	22.24	1.99
	AFTER 13 WEEKS	47.27	23.60	2.00
177	AFTER 2 WEEKS	46.60	19.90	2.34
	AFTER 6 WEEKS	47.92	21.48	2.23

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 2 (500 MG/KG/DAY)				
177	AFTER 13 WEEKS	49.38	19.89	2.48
178	AFTER 2 WEEKS	44.91	20.60	2.18
	AFTER 6 WEEKS	45.29	21.63	2.09
	AFTER 13 WEEKS	47.58	22.65	2.10
179	AFTER 2 WEEKS	42.55	22.05	1.93
	AFTER 6 WEEKS	41.12	20.94	1.96
	AFTER 13 WEEKS	41.09	19.98	2.06
180	AFTER 2 WEEKS	46.57	18.39	2.53
	AFTER 6 WEEKS	47.82	20.92	2.29
	AFTER 13 WEEKS	46.65	20.53	2.27
GROUP 3 (1000 MG/KG/DAY)				
187	AFTER 2 WEEKS	43.29	18.49	2.34
	AFTER 6 WEEKS	46.00	20.61	2.23
	AFTER 13 WEEKS	47.40	19.81	2.39
188	AFTER 2 WEEKS	44.43	18.00	2.47
	AFTER 6 WEEKS	46.60	22.05	2.11
	AFTER 13 WEEKS	49.30	21.01	2.35
189	AFTER 2 WEEKS	44.61	17.34	2.57
	AFTER 6 WEEKS	48.58	22.86	2.13
	AFTER 13 WEEKS	50.54	22.30	2.27
190	AFTER 2 WEEKS	41.96	19.49	2.15
	AFTER 6 WEEKS	46.18	23.55	1.96
	AFTER 13 WEEKS	46.64	23.23	2.01
191	AFTER 2 WEEKS	44.79	18.80	2.38
	AFTER 6 WEEKS	47.17	22.35	2.11
	AFTER 13 WEEKS	49.16	20.80	2.36
192	AFTER 2 WEEKS	44.08	19.00	2.32
	AFTER 6 WEEKS	48.96	20.65	2.37
	AFTER 13 WEEKS	49.38	18.65	2.65
193	AFTER 2 WEEKS	42.00	20.27	2.07
	AFTER 6 WEEKS	44.02	23.09	1.91
	AFTER 13 WEEKS	45.77	23.21	1.97
194	AFTER 2 WEEKS	42.05	18.76	2.24
	AFTER 6 WEEKS	45.60	19.24	2.37
	AFTER 13 WEEKS	46.34	20.49	2.26
195	AFTER 2 WEEKS	44.10	18.26	2.42
	AFTER 6 WEEKS	46.02	20.47	2.25
	AFTER 13 WEEKS	48.36	20.53	2.36
196	AFTER 2 WEEKS	41.99	16.99	2.47
	AFTER 6 WEEKS	45.31	20.18	2.25
	AFTER 13 WEEKS	45.00	19.28	2.33
197	AFTER 2 WEEKS	42.68	19.93	2.14
	AFTER 6 WEEKS	43.93	22.42	1.96
	AFTER 13 WEEKS	45.72	22.49	2.03
198	AFTER 2 WEEKS	45.54	17.30	2.63
	AFTER 6 WEEKS	47.31	19.53	2.42
	AFTER 13 WEEKS	51.13	18.50	2.76

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 3 (1000 MG/KG/DAY)				
199	AFTER 2 WEEKS	43.74	19.75	2.21
	AFTER 6 WEEKS	48.77	21.57	2.26
	AFTER 13 WEEKS	51.40	21.31	2.41
200	AFTER 2 WEEKS	46.10	19.09	2.41
	AFTER 6 WEEKS	44.70	21.26	2.10
	AFTER 13 WEEKS	48.51	20.88	2.32
201	AFTER 2 WEEKS	44.99	18.28	2.46
	AFTER 6 WEEKS	45.07	19.82	2.27
	AFTER 13 WEEKS	49.05	22.90	2.14
202	AFTER 2 WEEKS	42.51	16.20	2.62
	AFTER 6 WEEKS	43.18	18.04	2.39
	AFTER 13 WEEKS	45.63	18.93	2.41
203	AFTER 2 WEEKS	42.74	19.12	2.24
	AFTER 6 WEEKS	44.29	20.11	2.20
	AFTER 13 WEEKS	43.86	19.37	2.26
204	AFTER 2 WEEKS	40.35	18.35	2.20
	AFTER 6 WEEKS	41.76	19.76	2.11
	AFTER 13 WEEKS	45.13	19.67	2.29
205	AFTER 2 WEEKS	40.19	19.56	2.05
	AFTER 6 WEEKS	44.16	20.87	2.12
	AFTER 13 WEEKS	45.70	21.65	2.11
206	AFTER 2 WEEKS	43.16	18.32	2.36
	AFTER 6 WEEKS	44.71	21.59	2.07
	AFTER 13 WEEKS	47.41	21.43	2.21
GROUP 4 (2000 MG/KG/DAY)				
213	AFTER 2 WEEKS	44.65	19.56	2.28
	AFTER 6 WEEKS	47.74	21.98	2.17
	AFTER 13 WEEKS	50.08	21.99	2.28
214	AFTER 2 WEEKS	42.71	19.96	2.14
	AFTER 6 WEEKS	45.32	21.87	2.07
	AFTER 13 WEEKS	45.23	20.95	2.16
215	AFTER 2 WEEKS	41.86	17.55	2.39
	AFTER 6 WEEKS	43.78	22.05	1.99
	AFTER 13 WEEKS	45.17	19.79	2.28
216	AFTER 2 WEEKS	42.27	16.72	2.53
	AFTER 6 WEEKS	46.27	21.03	2.20
	AFTER 13 WEEKS	49.48	19.23	2.57
217	AFTER 2 WEEKS	41.55	19.62	2.12
	AFTER 6 WEEKS	45.72	21.26	2.15
	AFTER 13 WEEKS	48.51	21.94	2.21
218	AFTER 2 WEEKS	42.82	18.29	2.34
	AFTER 6 WEEKS	45.48	21.87	2.08
	AFTER 13 WEEKS	43.33	19.71	2.20
219	AFTER 2 WEEKS	46.08	17.51	2.63
	AFTER 6 WEEKS	47.09	21.23	2.22
	AFTER 13 WEEKS	43.41	24.32	1.78
220	AFTER 2 WEEKS	42.31	15.67	2.70
	AFTER 6 WEEKS	45.72	18.74	2.44
	AFTER 13 WEEKS	46.75	20.72	2.26

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 4 (2000 MG/KG/DAY)				
221	AFTER 2 WEEKS	42.27	17.70	2.39
	AFTER 6 WEEKS	44.61	22.76	1.96
	AFTER 13 WEEKS	46.13	20.78	2.22
222	AFTER 2 WEEKS	43.93	17.39	2.53
	AFTER 6 WEEKS	44.85	20.69	2.17
	AFTER 13 WEEKS	46.19	19.11	2.42
223	AFTER 2 WEEKS	41.31	20.58	2.01
	AFTER 6 WEEKS	44.70	24.55	1.82
	AFTER 13 WEEKS	49.00	24.46	2.00
224	AFTER 2 WEEKS	42.98	18.34	2.34
	AFTER 6 WEEKS	45.59	20.51	2.22
	AFTER 13 WEEKS	48.28	18.48	2.61
225	AFTER 2 WEEKS	44.09	19.06	2.31
	AFTER 6 WEEKS	48.77	22.38	2.18
	AFTER 13 WEEKS	50.09	22.17	2.26
226	AFTER 2 WEEKS	42.81	18.79	2.28
	AFTER 6 WEEKS	43.96	21.78	2.02
	AFTER 13 WEEKS	43.11	22.06	1.95
227	AFTER 2 WEEKS	45.70	19.57	2.34
	AFTER 6 WEEKS	48.54	23.44	2.07
	AFTER 13 WEEKS	51.60	24.91	2.07
228	AFTER 2 WEEKS	41.30	19.74	2.09
	AFTER 6 WEEKS	41.95	23.06	1.82
	AFTER 13 WEEKS	43.95	20.43	2.15
229	AFTER 2 WEEKS	43.39	15.69	2.77
	AFTER 6 WEEKS	47.04	20.07	2.34
	AFTER 13 WEEKS	48.63	18.90	2.57
230	AFTER 2 WEEKS	44.28	20.30	2.18
	AFTER 6 WEEKS	45.00	22.10	2.04
	AFTER 13 WEEKS	48.43	22.36	2.17
231	AFTER 2 WEEKS	43.65	18.67	2.34
	AFTER 6 WEEKS	47.02	21.08	2.23
	AFTER 13 WEEKS	50.45	20.23	2.49
232	AFTER 2 WEEKS	40.96	20.02	2.05
	AFTER 6 WEEKS	43.45	22.41	1.94
	AFTER 13 WEEKS	42.25	22.42	1.88
233	AFTER 2 WEEKS	43.07	17.97	2.40
	AFTER 6 WEEKS	46.72	20.30	2.30
	AFTER 13 WEEKS	48.18	18.41	2.62
	AFTER 17 WEEKS	49.94	21.94	2.28
234	AFTER 2 WEEKS	43.23	18.54	2.33
	AFTER 6 WEEKS	45.71	21.09	2.17
	AFTER 13 WEEKS	53.65	19.23	2.79
	AFTER 17 WEEKS	50.69	20.80	2.44
235	AFTER 2 WEEKS	44.03	22.09	1.99
	AFTER 6 WEEKS	46.65	22.12	2.11
	AFTER 13 WEEKS	48.09	22.50	2.14
	AFTER 17 WEEKS	47.62	24.21	1.97
236	AFTER 2 WEEKS	41.34	18.24	2.27
	AFTER 6 WEEKS	45.72	20.86	2.19
	AFTER 13 WEEKS	46.18	19.42	2.38

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL BIOCHEMISTRY
FEMALES

ANIMAL NUMBER		ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
GROUP 4 (2000 MG/KG/DAY)				
236	AFTER 17 WEEKS	47.78	21.67	2.20
237	AFTER 2 WEEKS	41.02	19.35	2.12
	AFTER 6 WEEKS	43.87	22.83	1.92
	AFTER 13 WEEKS	44.85	19.93	2.25
	AFTER 17 WEEKS	46.68	21.69	2.15
238	AFTER 2 WEEKS	43.50	18.65	2.33
	AFTER 6 WEEKS	45.45	23.88	1.90
	AFTER 13 WEEKS	45.13	22.42	2.01
	AFTER 17 WEEKS	46.34	24.37	1.90
239	AFTER 2 WEEKS	45.22	18.83	2.40
	AFTER 6 WEEKS	46.49	20.86	2.23
	AFTER 13 WEEKS	48.90	20.81	2.35
	AFTER 17 WEEKS	50.32	23.08	2.18
240	AFTER 2 WEEKS	42.57	21.16	2.01
	AFTER 6 WEEKS	44.16	25.61	1.72
	AFTER 13 WEEKS	45.87	21.95	2.09
	AFTER 17 WEEKS	46.01	24.19	1.90
241	AFTER 2 WEEKS	45.06	20.30	2.22
	AFTER 6 WEEKS	46.22	21.85	2.12
	AFTER 13 WEEKS	48.06	20.13	2.39
	AFTER 17 WEEKS	46.91	20.16	2.33
242	AFTER 2 WEEKS	44.78	19.00	2.36
	AFTER 6 WEEKS	47.63	22.58	2.11
	AFTER 13 WEEKS	51.65	20.51	2.52
	AFTER 17 WEEKS	51.73	22.17	2.33

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

MALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 1 (0 MG/KG/DAY)								
1	AFTER 2 WEEKS	14.1	1.014	396	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	17.9	1.013	384	YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	10.8	1.027	834	LT.YELLOW	CLEAR	6.5	0
2	AFTER 2 WEEKS	20.3	1.013	376	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	12.7	1.026	782	YELLOW	TURBID	6.0	0
	AFTER 13 WEEKS	7.4	1.054	1621	YELLOW	CLEAR	6.5	0
3	AFTER 2 WEEKS	27.9	1.009	249	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	20.3	1.011	340	YELLOW	CLEAR	7.0	0
	AFTER 13 WEEKS	10.3	1.027	822	LT.YELLOW	CLEAR	6.5	0
4	AFTER 2 WEEKS	27.8	1.009	266	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	25.4	1.013	387	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	14.3	1.029	869	LT.YELLOW	CLEAR	6.0	0
5	AFTER 2 WEEKS	5.9	1.036	992	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	30.2	1.009	266	LT.YELLOW	TURBID	6.5	0
	AFTER 13 WEEKS	4.4	1.045	1343	YELLOW	CLEAR	6.0	1
6	AFTER 2 WEEKS	4.7	1.022	602	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	21.1	1.014	446	YELLOW	TURBID	6.0	0
	AFTER 13 WEEKS	2.2	1.119	3472	YELLOW	CLEAR	6.5	0
7	AFTER 2 WEEKS	17.1	1.012	325	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	3.1	1.045	1317	YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	9.5	1.031	930	LT.YELLOW	CLEAR	6.5	0
8	AFTER 2 WEEKS	16.6	1.013	377	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	20.2	1.016	481	LT.YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	2.3	1.084	2370	YELLOW	CLEAR	6.0	1
9	AFTER 2 WEEKS	26.9	1.009	265	COLORLESS	CLEAR	6.5	1
	AFTER 6 WEEKS	9.6	1.029	892	YELLOW	CLOUDY	6.5	0
	AFTER 13 WEEKS	10.6	1.028	854	LT.YELLOW	CLEAR	6.5	0
10	AFTER 2 WEEKS	29.5	1.010	268	COLORLESS	CLEAR	6.5	1
	AFTER 6 WEEKS	7.2	1.037	1132	YELLOW	CLOUDY	6.0	0
	AFTER 13 WEEKS	4.0	1.061	1901	LT.YELLOW	CLEAR	6.0	0
11	AFTER 2 WEEKS	18.7	1.013	356	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	19.5	1.013	393	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	12.8	1.022	628	LT.YELLOW	CLEAR	6.5	0
12	AFTER 2 WEEKS	7.3	1.013	386	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	17.7	1.016	494	LT.YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	3.7	1.069	2099	YELLOW	CLEAR	6.0	1
13	AFTER 2 WEEKS	21.2	1.012	293	COLORLESS	CLEAR	6.0	1
	AFTER 6 WEEKS	21.6	1.015	464	YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	4.8	1.066	1944	YELLOW	CLEAR	6.0	0
14	AFTER 2 WEEKS	32.6	1.007	193	COLORLESS	CLEAR	6.5	1
	AFTER 6 WEEKS	41.9	1.005	154	COLORLESS	CLEAR	7.0	1
	AFTER 13 WEEKS	14.5	1.024	727	LT.YELLOW	CLEAR	6.5	0
15	AFTER 2 WEEKS	5.0	1.039	1176	YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	15.1	1.015	451	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	16.3	1.018	536	LT.YELLOW	CLOUDY	7.0	0
16	AFTER 2 WEEKS	23.6	1.010	347	COLORLESS	CLEAR	6.5	1
	AFTER 6 WEEKS	16.1	1.020	611	YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	12.3	1.034	1004	LT.YELLOW	CLEAR	7.0	0
17	AFTER 2 WEEKS	19.0	1.013	395	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	28.8	1.007	219	LT.YELLOW	CLEAR	7.0	1

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

MALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 1 (0 MG/KG/DAY)								
17	AFTER 13 WEEKS	3.9	1.051	1634	LT.YELLOW	CLEAR	6.0	1
18	AFTER 2 WEEKS	15.8	1.016	457	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	18.2	1.018	550	YELLOW	CLEAR	7.0	0
	AFTER 13 WEEKS	11.3	1.029	923	LT.YELLOW	CLEAR	6.5	0
19	AFTER 2 WEEKS	14.9	1.018	500	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	7.9	1.046	1407	YELLOW	CLOUDY	6.5	0
	AFTER 13 WEEKS	4.5	1.074	2269	YELLOW	CLEAR	6.0	0
20	AFTER 2 WEEKS	4.8	1.036	1075	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	22.8	1.010	291	LT.YELLOW	CLEAR	7.0	0
	AFTER 13 WEEKS	11.6	1.025	774	LT.YELLOW	CLEAR	7.0	0
21	AFTER 2 WEEKS	14.1	1.021	584	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	10.0	1.026	807	YELLOW	CLEAR	6.5	0
	AFTER 13 WEEKS	6.1	1.031	917	LT.YELLOW	CLEAR	6.0	0
	AFTER 17 WEEKS	9.1	1.033	986	LT.YELLOW	CLEAR	6.0	0
22	AFTER 2 WEEKS	19.8	1.013	369	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	18.1	1.016	529	YELLOW	CLEAR	7.0	1
	AFTER 13 WEEKS	2.8	1.079	2363	YELLOW	CLEAR	6.5	1
	AFTER 17 WEEKS	20.0	1.038	483	COLORLESS	TURBID	6.5	0
23	AFTER 2 WEEKS	6.1	1.037	1035	YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	38.7	1.006	184	LT.YELLOW	CLEAR	7.0	1
	AFTER 13 WEEKS	11.1	1.027	832	LT.YELLOW	CLEAR	6.5	1
	AFTER 17 WEEKS	15.4	1.023	685	LT.YELLOW	CLEAR	6.0	0
24	AFTER 2 WEEKS	17.3	1.018	523	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	17.8	1.018	549	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	5.4	1.068	2266	YELLOW	CLEAR	6.5	1
	AFTER 17 WEEKS	11.2	1.035	1075	LT.YELLOW	CLOUDY	6.5	0
25	AFTER 2 WEEKS	13.8	1.016	499	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	25.2	1.009	305	LT.YELLOW	CLEAR	7.0	0
	AFTER 13 WEEKS	2.3	1.080	2556	YELLOW	CLEAR	6.0	0
	AFTER 17 WEEKS	14.4	1.024	731	LT.YELLOW	CLEAR	6.0	0
26	AFTER 2 WEEKS	18.6	1.014	385	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	12.2	1.028	838	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	7.2	1.074	1381	YELLOW	CLEAR	6.0	0
	AFTER 17 WEEKS	4.3	1.061	1814	YELLOW	CLEAR	6.0	0
27	AFTER 2 WEEKS	16.1	1.014	387	LT.YELLOW	CLEAR	7.0	0
	AFTER 6 WEEKS	21.5	1.011	349	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	16.8	1.019	576	LT.YELLOW	CLEAR	7.0	0
	AFTER 17 WEEKS	19.1	1.014	427	COLORLESS	TURBID	6.5	0
28	AFTER 2 WEEKS	23.6	1.009	251	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	10.3	1.024	731	YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	5.7	1.046	1355	YELLOW	CLEAR	7.0	1
	AFTER 17 WEEKS	5.4	1.052	1482	LT.YELLOW	TURBID	6.5	0
29	AFTER 2 WEEKS	10.0	1.021	636	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	5.1	1.050	513	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	21.0	1.013	390	LT.YELLOW	CLEAR	7.0	1
	AFTER 17 WEEKS	8.9	1.027	825	LT.YELLOW	TURBID	6.0	0
30	AFTER 2 WEEKS	5.5	1.040	1176	YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	16.7	1.014	432	YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	6.6	1.040	1194	YELLOW	CLEAR	6.0	1
	AFTER 17 WEEKS	17.7	1.017	508	COLORLESS	CLEAR	6.0	1

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

MALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 2 (500 MG/KG/DAY)								
37	AFTER 2 WEEKS	26.6	1.009	273	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	9.9	1.031	963	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	9.9	1.031	973	LT.YELLOW	TURBID	6.5	1
38	AFTER 2 WEEKS	32.7	1.006	162	COLORLESS	CLEAR	6.0	1
	AFTER 6 WEEKS	31.6	1.007	227	LT.YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	13.4	1.027	819	LT.YELLOW	CLEAR	6.0	0
39	AFTER 2 WEEKS	33.2	1.006	180	COLORLESS	CLEAR	6.5	1
	AFTER 6 WEEKS	42.4	1.005	157	LT.YELLOW	CLEAR	7.0	1
	AFTER 13 WEEKS	34.6	1.009	290	LT.YELLOW	CLEAR	6.5	0
40	AFTER 2 WEEKS	5.4	1.049	1389	YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	9.8	1.031	957	YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	20.2	1.015	469	LT.YELLOW	CLEAR	7.0	0
41	AFTER 2 WEEKS	21.8	1.010	274	COLORLESS	CLEAR	6.5	1
	AFTER 6 WEEKS	10.0	1.033	1019	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	4.1	1.063	1887	YELLOW	CLEAR	6.0	0
42	AFTER 2 WEEKS	30.4	1.007	191	COLORLESS	CLEAR	7.0	0
	AFTER 6 WEEKS	32.6	1.008	369	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	13.3	1.025	758	LT.YELLOW	TURBID	6.0	0
43	AFTER 2 WEEKS	8.2	1.027	741	YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	5.5	1.048	1460	YELLOW	TURBID	6.0	0
	AFTER 13 WEEKS	9.5	1.037	1111	LT.YELLOW	TURBID	7.0	0
44	AFTER 2 WEEKS	12.1	1.015	412	COLORLESS	CLEAR	6.0	1
	AFTER 6 WEEKS	---	---	---	---	---	---	---
	AFTER 13 WEEKS	---	---	---	---	---	---	---
45	AFTER 2 WEEKS	25.1	1.009	252	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	8.1	1.034	1060	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	15.2	1.021	599	LT.YELLOW	CLEAR	7.0	0
46	AFTER 2 WEEKS	15.6	1.015	423	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	21.7	1.010	358	LT.YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	13.4	1.022	678	LT.YELLOW	CLEAR	7.0	0
47	AFTER 2 WEEKS	26.5	1.009	253	COLORLESS	CLEAR	7.0	0
	AFTER 6 WEEKS	28.9	1.011	369	LT.YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	7.2	1.041	1270	YELLOW	CLEAR	7.0	1
48	AFTER 2 WEEKS	17.8	1.017	485	COLORLESS	CLEAR	6.5	1
	AFTER 6 WEEKS	12.7	1.023	695	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	4.8	1.058	1724	YELLOW	CLEAR	6.5	0
49	AFTER 2 WEEKS	29.4	1.007	193	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	17.1	1.014	433	YELLOW	TURBID	7.0	0
	AFTER 13 WEEKS	12.6	1.023	721	LT.YELLOW	CLEAR	6.5	0
50	AFTER 2 WEEKS	16.6	1.014	399	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	35.6	1.005	151	LT.YELLOW	CLEAR	7.0	1
	AFTER 13 WEEKS	18.1	1.015	516	LT.YELLOW	CLEAR	6.5	0
51	AFTER 2 WEEKS	34.0	1.006	146	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	22.9	1.015	453	YELLOW	TURBID	6.0	0
	AFTER 13 WEEKS	7.2	1.048	1407	YELLOW	CLEAR	6.0	0
52	AFTER 2 WEEKS	14.1	1.015	414	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	5.9	1.048	1370	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	12.2	1.032	945	LT.YELLOW	CLEAR	6.5	0
53	AFTER 2 WEEKS	13.0	1.016	457	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	31.8	1.007	217	LT.YELLOW	CLEAR	6.5	0

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

MALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 2 (500 MG/KG/DAY)								
53	AFTER 13 WEEKS	13.7	1.021	614	LT. YELLOW	CLEAR	6.5	0
54	AFTER 2 WEEKS	27.1	1.008	234	LT. YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	41.9	1.005	184	LT. YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	11.1	1.026	798	LT. YELLOW	CLOUDY	7.0	1
55	AFTER 2 WEEKS	17.0	1.015	351	LT. YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	18.8	1.016	476	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	10.0	1.026	764	LT. YELLOW	CLOUDY	6.0	0
56	AFTER 2 WEEKS	19.2	1.015	430	LT. YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	38.4	1.006	201	LT. YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	11.4	1.028	886	LT. YELLOW	CLOUDY	6.5	1
GROUP 3 (1000 MG/KG/DAY)								
63	AFTER 2 WEEKS	6.7	1.031	873	YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	5.9	1.042	1274	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	1.4	1.084	2460	LT. YELLOW	CLEAR	6.0	1
64	AFTER 2 WEEKS	23.3	1.011	262	COLORLESS	CLEAR	6.5	1
	AFTER 6 WEEKS	10.2	1.031	937	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	10.4	1.033	996	LT. YELLOW	CLEAR	6.5	0
65	AFTER 2 WEEKS	17.7	1.014	367	LT. YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	13.0	1.025	732	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	9.1	1.036	1063	LT. YELLOW	CLEAR	6.0	0
66	AFTER 2 WEEKS	32.3	1.007	146	COLORLESS	CLEAR	7.0	0
	AFTER 6 WEEKS	6.4	1.038	1173	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	8.4	1.032	986	LT. YELLOW	CLEAR	6.5	1
67	AFTER 2 WEEKS	32.8	1.008	215	COLORLESS	CLEAR	6.0	1
	AFTER 6 WEEKS	17.4	1.017	467	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	23.8	1.012	371	LT. YELLOW	CLEAR	6.5	1
68	AFTER 2 WEEKS	2.8	1.064	1746	YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	20.8	1.014	411	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	5.6	1.051	1539	LT. YELLOW	CLEAR	6.0	0
69	AFTER 2 WEEKS	12.7	1.021	536	LT. YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	23.3	1.010	294	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	13.6	1.022	663	LT. YELLOW	CLEAR	6.0	1
70	AFTER 2 WEEKS	23.7	1.012	350	LT. YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	19.2	1.017	526	YELLOW	TURBID	6.5	0
	AFTER 13 WEEKS	8.4	1.039	1174	YELLOW	CLEAR	6.5	0
71	AFTER 2 WEEKS	14.3	1.017	453	LT. YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	22.7	1.011	328	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	4.8	1.038	1172	YELLOW	CLEAR	6.0	0
72	AFTER 2 WEEKS	6.7	1.072	748	LT. YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	10.9	1.021	647	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	18.6	1.016	489	LT. YELLOW	CLEAR	6.5	1
73	AFTER 2 WEEKS	24.2	1.010	258	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	19.8	1.011	396	LT. YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	28.8	1.011	361	LT. YELLOW	CLEAR	7.0	0
74	AFTER 2 WEEKS	5.0	1.041	1071	YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	9.0	1.029	832	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	2.5	1.102	2842	YELLOW	CLEAR	6.5	1

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

MALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 3 (1000 MG/KG/DAY)								
75	AFTER 2 WEEKS	37.1	1.007	149	COLORLESS	CLEAR	7.0	0
	AFTER 6 WEEKS	38.5	1.005	129	LT. YELLOW	CLEAR	7.0	0
	AFTER 13 WEEKS	2.0	1.090	2940	YELLOW	CLEAR	6.5	1
76	AFTER 2 WEEKS	2.2	1.057	1503	YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	10.6	1.018	524	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	7.3	1.028	826	LT. YELLOW	CLEAR	6.5	0
77	AFTER 2 WEEKS	4.7	1.045	1223	YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	37.1	1.009	255	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	5.4	1.052	1518	LT. YELLOW	CLEAR	6.0	0
78	AFTER 2 WEEKS	16.5	1.016	418	LT. YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	18.2	1.014	501	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	5.0	1.076	1332	YELLOW	CLEAR	6.0	1
79	AFTER 2 WEEKS	26.8	1.008	201	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	20.7	1.014	407	YELLOW	TURBID	6.0	0
	AFTER 13 WEEKS	7.5	1.045	1330	YELLOW	CLEAR	6.0	1
80	AFTER 2 WEEKS	28.8	1.006	181	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	7.8	1.020	592	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	5.5	1.050	1504	YELLOW	CLEAR	6.0	0
81	AFTER 2 WEEKS	26.6	1.010	233	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	13.7	1.015	458	YELLOW	TURBID	6.5	0
	AFTER 13 WEEKS	4.1	1.050	1465	YELLOW	CLEAR	6.0	0
82	AFTER 2 WEEKS	7.1	1.026	700	LT. YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	12.2	1.021	630	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	5.9	1.044	1236	YELLOW	CLEAR	6.0	1
GROUP 4 (2000 MG/KG/DAY)								
89	AFTER 2 WEEKS	15.1	1.019	522	LT. YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	9.3	1.031	962	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	5.7	1.044	1305	YELLOW	CLEAR	6.5	0
90	AFTER 2 WEEKS	20.3	1.012	313	LT. YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	12.9	1.021	630	YELLOW	TURBID	7.0	0
	AFTER 13 WEEKS	2.1	1.100	3138	YELLOW	CLEAR	6.0	1
91	AFTER 2 WEEKS	19.7	1.013	334	LT. YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	13.8	1.015	459	YELLOW	TURBID	6.5	0
	AFTER 13 WEEKS	2.4	1.084	2484	YELLOW	CLEAR	5.0	0
92	AFTER 2 WEEKS	16.8	1.015	382	LT. YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	13.8	1.017	501	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	2.9	1.074	2271	YELLOW	CLEAR	6.0	0
93	AFTER 2 WEEKS	24.5	1.013	293	LT. YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	16.3	1.019	582	YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	5.5	1.053	1623	YELLOW	CLEAR	6.0	0
94	AFTER 2 WEEKS	31.6	1.007	194	LT. YELLOW	CLEAR	7.0	0
	AFTER 6 WEEKS	41.0	1.007	201	LT. YELLOW	CLEAR	7.0	0
	AFTER 13 WEEKS	2.8	1.062	1843	YELLOW	CLEAR	6.0	0
95	AFTER 2 WEEKS	32.6	1.006	134	LT. YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	31.6	1.009	291	LT. YELLOW	CLEAR	7.0	0
	AFTER 13 WEEKS	7.3	1.035	1018	LT. YELLOW	CLEAR	6.0	1
96	AFTER 2 WEEKS	18.3	1.015	357	LT. YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	15.2	1.016	508	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	15.7	1.018	526	LT. YELLOW	CLEAR	7.0	0

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

MALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 4 (2000 MG/KG/DAY)								
97	AFTER 2 WEEKS	15.4	1.014	374	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	13.9	1.017	490	YELLOW	TURBID	7.0	0
	AFTER 13 WEEKS	2.4	1.110	3318	YELLOW	CLEAR	6.5	1
98	AFTER 2 WEEKS	19.2	1.015	409	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	12.0	1.021	639	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	2.9	1.090	2650	YELLOW	CLEAR	6.5	0
99	AFTER 2 WEEKS	24.9	1.011	314	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	23.9	1.013	390	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	4.4	1.050	1480	YELLOW	CLEAR	6.0	0
100	AFTER 2 WEEKS	14.0	1.016	459	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	18.9	1.015	434	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	13.7	1.020	642	LT.YELLOW	CLEAR	6.5	1
101	AFTER 2 WEEKS	36.0	1.006	150	COLORLESS	CLEAR	7.0	0
	AFTER 6 WEEKS	18.5	1.016	493	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	19.0	1.017	534	LT.YELLOW	CLEAR	7.0	0
102	AFTER 2 WEEKS	29.8	1.007	176	COLORLESS	CLEAR	7.0	0
	AFTER 6 WEEKS	14.1	1.019	580	YELLOW	CLOUDY	6.5	1
	AFTER 13 WEEKS	20.1	1.015	455	LT.YELLOW	CLEAR	6.5	0
103	AFTER 2 WEEKS	26.7	1.009	242	COLORLESS	CLEAR	6.5	1
	AFTER 6 WEEKS	16.1	1.016	491	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	4.0	1.078	2256	YELLOW	CLEAR	6.0	0
104	AFTER 2 WEEKS	13.1	1.018	489	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	14.7	1.018	528	YELLOW	CLEAR	7.0	1
	AFTER 13 WEEKS	5.1	1.052	1427	YELLOW	TURBID	6.0	0
105	AFTER 2 WEEKS	20.5	1.011	294	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	16.2	1.016	477	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	16.1	1.019	547	LT.YELLOW	TURBID	6.5	0
106	AFTER 2 WEEKS	16.8	1.014	376	LT.YELLOW	CLEAR	7.0	0
	AFTER 6 WEEKS	13.9	1.019	566	YELLOW	CLOUDY	7.0	1
	AFTER 13 WEEKS	8.7	1.032	914	LT.YELLOW	CLEAR	6.0	0
107	AFTER 2 WEEKS	9.4	1.015	433	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	30.9	1.008	231	LT.YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	22.4	1.015	448	LT.YELLOW	CLEAR	6.5	0
108	AFTER 2 WEEKS	25.9	1.008	228	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	7.4	1.037	1089	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	7.9	1.026	771	LT.YELLOW	TURBID	6.5	0
109	AFTER 2 WEEKS	11.1	1.023	655	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	19.5	1.021	552	LT.YELLOW	TURBID	6.5	0
	AFTER 13 WEEKS	11.8	1.026	787	LT.YELLOW	CLEAR	6.5	0
	AFTER 17 WEEKS	35.0	1.011	330	COLORLESS	CLEAR	7.0	0
110	AFTER 2 WEEKS	25.9	1.008	214	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	26.4	1.008	259	YELLOW	CLEAR	7.0	1
	AFTER 13 WEEKS	19.0	1.015	460	LT.YELLOW	CLEAR	6.5	1
	AFTER 17 WEEKS	15.9	1.017	522	COLORLESS	CLEAR	6.0	1
111	AFTER 2 WEEKS	29.4	1.006	183	COLORLESS	CLEAR	6.5	1
	AFTER 6 WEEKS	34.2	1.007	201	LT.YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	16.5	1.016	487	LT.YELLOW	CLEAR	6.5	1
	AFTER 17 WEEKS	16.7	1.016	585	COLORLESS	CLEAR	6.0	0
112	AFTER 2 WEEKS	10.9	1.019	508	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	5.0	1.042	1304	YELLOW	TURBID	6.5	0
	AFTER 13 WEEKS	7.5	1.034	1019	LT.YELLOW	CLEAR	7.0	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 4 (2000 MG/KG/DAY)								
112	AFTER 17 WEEKS	7.2	1.043	1307	LT.YELLOW	CLEAR	6.5	0
113	AFTER 2 WEEKS	13.6	1.017	571	LT.YELLOW	CLEAR	7.0	0
	AFTER 6 WEEKS	5.3	1.047	1413	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	4.9	1.046	1391	YELLOW	CLEAR	7.0	1
	AFTER 17 WEEKS	5.1	1.054	1606	LT.YELLOW	CLEAR	6.0	0
114	AFTER 2 WEEKS	16.7	1.016	436	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	13.0	1.024	720	YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	10.8	1.018	833	LT.YELLOW	TURBID	6.5	1
	AFTER 17 WEEKS	17.0	1.018	554	CLOUDY	TURBID	6.0	1
115	AFTER 2 WEEKS	24.0	1.011	350	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	21.6	1.014	459	LT.YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	8.2	1.045	1396	LT.YELLOW	CLEAR	6.0	1
	AFTER 17 WEEKS	8.9	1.039	1225	YELLOW	CLEAR	6.0	0
116	AFTER 2 WEEKS	30.7	1.007	201	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	19.8	1.012	411	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	7.3	1.037	1068	LT.YELLOW	CLEAR	6.5	0
	AFTER 17 WEEKS	9.9	1.031	907	YELLOW	CLEAR	6.5	0
117	AFTER 2 WEEKS	15.7	1.015	449	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	20.9	1.012	411	YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	20.7	1.018	567	LT.YELLOW	CLEAR	7.0	1
	AFTER 17 WEEKS	4.5	1.053	1554	YELLOW	CLEAR	6.0	0
118	AFTER 2 WEEKS	13.8	1.015	425	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	33.6	1.005	139	LT.YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	20.6	1.014	449	LT.YELLOW	CLEAR	6.5	1
	AFTER 17 WEEKS	15.2	1.020	586	COLORLESS	CLEAR	6.0	1

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS

MALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI µmol/l	BILIRUBIN µmol/l	ERY per µl	LEU per µl
GROUP 1 (0 MG/KG/DAY)								
1	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
2	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.75	0	0.5	0	0	10	25
3	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
4	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
5	AFTER 2 WEEKS	0.25	0	1.5	0	0	10	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	1.5	0	0	10	25
6	AFTER 2 WEEKS	0.25	0	0.5	0	0	25	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.75	0	1.5	0	17	10	25
7	AFTER 2 WEEKS	0.00	0	0.5	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
8	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	1.5	0	0	25	25
9	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
10	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.25	0	1.5	0	0	10	25
11	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
12	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	0.5	0	0	10	25
13	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	17	0	0
14	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
15	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
16	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	25
17	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 1 (0 MG/KG/DAY)								
17	AFTER 13 WEEKS	0.75	0	0.5	0	17	25	25
18	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
19	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.75	0	1.5	0	17	10	25
20	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
21	AFTER 2 WEEKS	0.25	0	0.5	0	0	0	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	25
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 17 WEEKS	0.00	0	0.5	0	0	10	0
22	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.75	0	1.5	0	17	10	25
	AFTER 17 WEEKS	0.25	0	0.0	0	0	10	0
23	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	0.5	0	0	10	25
	AFTER 17 WEEKS	0.00	0	0.0	0	0	10	0
24	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	25	0
	AFTER 13 WEEKS	0.75	0	1.5	0	0	10	25
	AFTER 17 WEEKS	0.25	0	0.5	0	0	10	0
25	AFTER 2 WEEKS	0.25	0	0.5	0	0	0	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.75	0	1.5	0	17	10	25
	AFTER 17 WEEKS	0.25	0	0.0	0	0	10	0
26	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.75	0	0.5	0	0	10	25
	AFTER 17 WEEKS	0.25	0	0.5	0	0	10	25
27	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	10	0
28	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 13 WEEKS	0.25	0	1.5	0	0	10	25
	AFTER 17 WEEKS	0.25	0	1.5	0	0	10	25
29	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.75	0	1.5	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 17 WEEKS	0.25	0	0.5	0	0	10	0
30	AFTER 2 WEEKS	0.25	0	1.5	0	0	250	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	25	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 17 WEEKS	0.00	0	0.0	0	0	10	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 2 (500 MG/KG/DAY)								
37	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
38	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
39	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
40	AFTER 2 WEEKS	0.75	0	1.5	0	17	0	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	25
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	25
41	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	1.5	0	17	25	25
42	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
43	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	25	25
44	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	---	---	---	---	---	---	---
	AFTER 13 WEEKS	---	---	---	---	---	---	---
45	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	25	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	25
46	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	25
47	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
48	AFTER 2 WEEKS	0.25	0	0.5	0	0	0	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	1.5	0	0	10	25
49	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
50	AFTER 2 WEEKS	0.25	0	0.0	0	0	50	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	25
51	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
52	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
53	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 2 (500 MG/KG/DAY)								
53	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
54	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	25
55	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
56	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	25
GROUP 3 (1000 MG/KG/DAY)								
63	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 13 WEEKS	0.75	0	1.5	0	17	25	25
64	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	25
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
65	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
66	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
67	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
68	AFTER 2 WEEKS	0.75	0	1.5	0	0	10	100
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	0.5	0	0	10	25
69	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
70	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
71	AFTER 2 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
72	AFTER 2 WEEKS	0.25	0	1.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	25
73	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
74	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	25
	AFTER 13 WEEKS	0.75	0	5.0	0	0	25	25

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

MALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 3 (1000 MG/KG/DAY)								
75	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.75	0	0.5	0	17	10	25
76	AFTER 2 WEEKS	0.25	0	1.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	0.0	0	0	10	0
77	AFTER 2 WEEKS	0.75	0	1.5	0	0	10	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	0.5	0	0	10	25
78	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
79	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	17	10	25
80	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
81	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
82	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	25
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
GROUP 4 (2000 MG/KG/DAY)								
89	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	25
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	25
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	25
90	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	25	0
	AFTER 13 WEEKS	0.75	0	1.5	0	17	10	25
91	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	1.5	0	17	10	25
92	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	1.5	0	0	10	25
93	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	1.5	0	0	10	25
94	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.75	0	1.5	0	0	10	25
95	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	25
96	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	25	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

MALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 4 (2000 MG/KG/DAY)								
97	AFTER 2 WEEKS	0.25	0	0.5	0	0	25	25
	AFTER 6 WEEKS	0.25	0	0.5	0	0	25	25
	AFTER 13 WEEKS	1.50	0	5.0	0	17	10	25
98	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 13 WEEKS	0.75	0	1.5	0	17	10	25
99	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	50	25
100	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	25	25
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
101	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
102	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
103	AFTER 2 WEEKS	0.25	0	0.0	0	0	25	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.75	0	1.5	0	17	10	25
104	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.75	0	0.5	0	17	10	25
105	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
106	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
107	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
108	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
109	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	25
	AFTER 17 WEEKS	0.00	0	0.0	0	0	10	0
110	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
111	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	10	0
112	AFTER 2 WEEKS	0.25	0	0.0	0	0	25	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 4 (2000 MG/KG/DAY)								
112	AFTER 17 WEEKS	0.25	0	0.5	0	0	10	0
113	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	25
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 13 WEEKS	0.75	0	0.5	0	0	25	25
	AFTER 17 WEEKS	0.75	0	0.5	0	0	10	25
114	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	25
	AFTER 17 WEEKS	0.25	0	0.0	0	0	10	0
115	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	25
	AFTER 17 WEEKS	0.25	0	0.0	0	0	0	0
116	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	25
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
	AFTER 17 WEEKS	0.25	0	0.5	0	0	250	25
117	AFTER 2 WEEKS	0.25	0	0.5	0	0	0	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	25	25
	AFTER 17 WEEKS	0.75	0	0.5	0	0	10	25
118	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 17 WEEKS	0.25	0	0.0	0	0	10	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

MALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 1 (0 MG/KG/DAY)								
1	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	1	0	0	0
2	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	1	0
3	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
4	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
5	AFTER 2 WEEKS	0	0	1	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	1	0	0	0
6	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
7	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	1	1	0	1	0	1	0
	AFTER 13 WEEKS	0	1	0	0	0	0	0
8	AFTER 2 WEEKS	0	0	1	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	1	0
9	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
10	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
11	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
12	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
13	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	1	1	0	0	0
14	AFTER 2 WEEKS	0	0	1	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
15	AFTER 2 WEEKS	1	1	0	0	0	2	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	2	0
16	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	1	0
17	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 1 (0 MG/KG/DAY)								
17	AFTER 13 WEEKS	1	1	1	0	0	0	0
18	AFTER 2 WEEKS	1	0	0	0	0	2	0
	AFTER 6 WEEKS	0	0	0	0	0	1	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
19	AFTER 2 WEEKS	0	1	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	2	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
20	AFTER 2 WEEKS	0	1	0	0	0	1	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	1	0
21	AFTER 2 WEEKS	0	1	1	0	0	0	0
	AFTER 6 WEEKS	0	1	1	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
22	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	1
	AFTER 17 WEEKS	1	0	0	0	0	0	0
23	AFTER 2 WEEKS	1	1	0	0	0	1	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
24	AFTER 2 WEEKS	0	1	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	1	0
	AFTER 17 WEEKS	0	0	0	0	0	1	0
25	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
26	AFTER 2 WEEKS	1	1	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	1	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
27	AFTER 2 WEEKS	1	1	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	1	0
	AFTER 17 WEEKS	1	0	0	0	0	0	0
28	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	1	1	0	0	0	1	0
	AFTER 13 WEEKS	1	1	1	0	0	2	0
	AFTER 17 WEEKS	0	0	0	0	0	1	0
29	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	1	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
30	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 2 (500 MG/KG/DAY)								
37	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	0	0	0	2	1
38	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
39	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
40	AFTER 2 WEEKS	0	1	1	0	0	0	0
	AFTER 6 WEEKS	0	1	0	0	0	1	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
41	AFTER 2 WEEKS	0	0	1	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
42	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
43	AFTER 2 WEEKS	1	1	1	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	1	0
44	AFTER 2 WEEKS	1	1	0	0	0	0	0
	AFTER 6 WEEKS	---	---	---	---	---	---	---
	AFTER 13 WEEKS	---	---	---	---	---	---	---
45	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	2	0
	AFTER 13 WEEKS	1	1	0	0	0	1	0
46	AFTER 2 WEEKS	1	1	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	1	0	0	0	1	0
47	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	1	0
48	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	1	0	0	0
49	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	1	0	0	0
50	AFTER 2 WEEKS	1	1	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
51	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	1	0	0	0
52	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
53	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**URINALYSIS****MALES**

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 2 (500 MG/KG/DAY)								
53	AFTER 13 WEEKS	1	0	1	1	0	0	0
54	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	2	0
55	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	1	0	0	0
56	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
GROUP 3 (1000 MG/KG/DAY)								
63	AFTER 2 WEEKS	0	0	0	0	0	2	0
	AFTER 6 WEEKS	0	1	0	0	0	1	0
	AFTER 13 WEEKS	1	1	0	0	0	0	1
64	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	1	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
65	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
66	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	1	0
	AFTER 13 WEEKS	1	1	1	0	0	2	0
67	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	0	0	0	0	0
68	AFTER 2 WEEKS	0	1	1	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
69	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	0	0	0	0	0
70	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
71	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
72	AFTER 2 WEEKS	1	1	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
73	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	1	0	0	0
74	AFTER 2 WEEKS	1	1	0	0	0	1	0
	AFTER 6 WEEKS	1	1	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	1	0	0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 3 (1000 MG/KG/DAY)								
75	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
76	AFTER 2 WEEKS	1	1	0	0	0	1	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	1	0
77	AFTER 2 WEEKS	1	1	1	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	1	0	0	0
78	AFTER 2 WEEKS	1	1	0	0	0	1	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	1	0	0	0
79	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	1	0	0	0
80	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	1	0	0	0
81	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
82	AFTER 2 WEEKS	1	1	0	0	0	0	0
	AFTER 6 WEEKS	1	1	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
GROUP 4 (2000 MG/KG/DAY)								
89	AFTER 2 WEEKS	0	1	0	0	0	0	0
	AFTER 6 WEEKS	0	1	0	0	0	1	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
90	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	1	0
	AFTER 13 WEEKS	1	1	1	0	0	0	1
91	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	1	0	0	0	0	1
92	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	1
93	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	1
94	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
95	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	1
96	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	0	0
	AFTER 13 WEEKS	0	1	0	0	0	2	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 4 (2000 MG/KG/DAY)								
97	AFTER 2 WEEKS	1	1	0	0	0	1	0
	AFTER 6 WEEKS	1	1	0	0	0	1	0
	AFTER 13 WEEKS	1	1	0	0	0	1	2
98	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	1	1	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
99	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	1	0	0	0
	AFTER 13 WEEKS	2	1	1	0	0	0	0
100	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
101	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
102	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
103	AFTER 2 WEEKS	1	0	1	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	1
	AFTER 13 WEEKS	1	1	1	0	0	1	1
104	AFTER 2 WEEKS	0	0	0	0	0	1	0
	AFTER 6 WEEKS	0	0	0	0	0	1	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
105	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	1	0	0	0
106	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	1	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
107	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
108	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
109	AFTER 2 WEEKS	1	1	0	0	0	0	0
	AFTER 6 WEEKS	1	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
110	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	0	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
111	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	0	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
112	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	3	0
	AFTER 13 WEEKS	1	1	0	1	0	0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 4 (2000 MG/KG/DAY)								
112	AFTER 17 WEEKS	0	0	0	0	0	0	0
113	AFTER 2 WEEKS	0	1	1	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	2	0
	AFTER 13 WEEKS	1	1	0	0	0	2	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
114	AFTER 2 WEEKS	1	1	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	1	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
	AFTER 17 WEEKS	1	0	0	0	0	0	0
115	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
116	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
117	AFTER 2 WEEKS	0	1	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
118	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	1	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0

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URINALYSIS
MALES

		CRYSTALS		CASTS	
ANIMAL		URIC ACID	UNIDENTIFI	CASTS	
NUMBER		score 0/3	score 0/3	score 0/3	
GROUP 1 (0 MG/KG/DAY)					
1	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
2	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
3	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
4	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
5	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
6	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
7	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
8	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
9	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	1	0	
10	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
11	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
12	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
13	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
14	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
15	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
16	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
17	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**URINALYSIS**
MALES

ANIMAL NUMBER	CRYSTALS		CASTS	
	URIC ACID score 0/3	UNIDENTIFI score 0/3	CASTS score 0/3	
GROUP 1 (0 MG/KG/DAY)				
17	AFTER 13 WEEKS	0	0	0
18	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
19	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	1	0
20	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
21	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
22	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
23	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
24	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
25	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
26	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
27	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	1	0
	AFTER 17 WEEKS	0	0	0
28	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	1	0
	AFTER 17 WEEKS	0	0	0
29	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
30	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	1	0	0
	AFTER 17 WEEKS	0	0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

			CRYSTALS		CASTS	
ANIMAL NUMBER			URIC ACID score 0/3	UNIDENTIFI score 0/3	CASTS score 0/3	
<hr/>						
GROUP 2 (500 MG/KG/DAY)						
37	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	1	0		
	AFTER 13 WEEKS	0	0	0		
38	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	0	0		
39	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	0	0		
40	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	0	0		
41	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	0	0		
42	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	0	0		
43	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	1	0		
	AFTER 13 WEEKS	0	0	0		
44	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	---	---	---		
	AFTER 13 WEEKS	---	---	---		
45	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	0	0		
46	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	1	0		
47	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	1	1	0		
48	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	0	0		
49	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	0	0		
50	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	0	0		
51	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	0	0		
52	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		
	AFTER 13 WEEKS	0	1	0		
53	AFTER 2 WEEKS	0	0	0		
	AFTER 6 WEEKS	0	0	0		

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**URINALYSIS**
MALES

ANIMAL NUMBER	CRYSTALS		CASTS	
	URIC ACID score 0/3	UNIDENTIFI score 0/3	CASTS score 0/3	
GROUP 2 (500 MG/KG/DAY)				
53	AFTER 13 WEEKS	0	0	0
54	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
55	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	1	0
56	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
GROUP 3 (1000 MG/KG/DAY)				
63	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
64	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
65	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
66	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
67	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
68	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
69	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
70	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
71	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
72	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
73	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
74	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS

MALES

		CRYSTALS		CASTS	
ANIMAL		URIC ACID	UNIDENTIFI	CASTS	
NUMBER		score 0/3	score 0/3	score 0/3	
GROUP 3 (1000 MG/KG/DAY)					
75	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
76	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
77	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
78	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
79	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
80	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
81	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	1	0	
82	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
GROUP 4 (2000 MG/KG/DAY)					
89	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
90	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
91	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
92	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
93	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
94	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
95	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
96	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	1	0	

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

		CRYSTALS	CASTS	
ANIMAL		URIC ACID	UNIDENTIFI	CASTS
NUMBER		score 0/3	score 0/3	score 0/3
GROUP 4 (2000 MG/KG/DAY)				
97	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
98	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
99	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
100	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
101	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
102	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
103	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
104	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
105	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
106	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
107	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
108	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
109	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
110	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
111	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
112	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
MALES

		CRYSTALS		CASTS	
ANIMAL		URIC ACID	UNIDENTIFI	CASTS	
NUMBER		score 0/3	score 0/3	score 0/3	
GROUP 4 (2000 MG/KG/DAY)					
112	AFTER 17 WEEKS	0	0	0	
113	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	1	0	
	AFTER 17 WEEKS	0	0	0	
114	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
115	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	1	0	
	AFTER 17 WEEKS	0	0	0	
116	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
117	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
118	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

FEMALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 1 (0 MG/KG/DAY)								
125	AFTER 2 WEEKS	21.9	1.012	304	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	20.1	1.008	239	LT.YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	37.9	1.006	167	LT.YELLOW	CLEAR	6.0	0
126	AFTER 2 WEEKS	26.4	1.009	215	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	10.1	1.024	777	LT.YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	5.3	1.044	1369	YELLOW	CLEAR	6.0	0
127	AFTER 2 WEEKS	20.8	1.010	246	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	11.1	1.020	624	LT.YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	9.0	1.024	840	LT.YELLOW	CLEAR	6.0	0
128	AFTER 2 WEEKS	23.1	1.011	275	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	23.0	1.010	317	LT.YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	5.7	1.052	1107	YELLOW	CLEAR	6.0	0
129	AFTER 2 WEEKS	1.4	1.077	2266	YELLOW	CLEAR	5.0	1
	AFTER 6 WEEKS	19.3	1.011	351	LT.YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	5.3	1.035	1604	YELLOW	CLEAR	6.0	0
130	AFTER 2 WEEKS	6.4	1.024	709	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	12.2	1.018	588	LT.YELLOW	TURBID	6.0	0
	AFTER 13 WEEKS	18.9	1.017	554	LT.YELLOW	CLEAR	6.0	0
131	AFTER 2 WEEKS	8.4	1.018	485	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	12.6	1.015	469	LT.YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	7.2	1.026	849	LT.YELLOW	CLEAR	6.0	0
132	AFTER 2 WEEKS	14.5	1.013	340	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	6.1	1.034	1046	YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	2.1	1.044	1379	LT.YELLOW	CLEAR	6.0	0
133	AFTER 2 WEEKS	11.7	1.034	544	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	6.5	1.036	1135	LT.YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	11.9	1.021	887	LT.YELLOW	CLEAR	6.0	0
134	AFTER 2 WEEKS	16.6	1.010	262	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	26.5	1.009	315	COLORLESS	CLEAR	6.5	0
	AFTER 13 WEEKS	9.7	1.018	560	LT.YELLOW	CLEAR	7.0	0
135	AFTER 2 WEEKS	0.9	1.064	1985	YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	4.6	1.046	1456	LT.YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	4.2	1.035	1678	YELLOW	CLEAR	6.0	1
136	AFTER 2 WEEKS	17.7	1.011	297	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	10.4	1.023	713	LT.YELLOW	TURBID	6.5	1
	AFTER 13 WEEKS	5.6	1.018	535	LT.YELLOW	CLEAR	6.0	1
137	AFTER 2 WEEKS	11.4	1.014	395	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	21.2	1.012	385	COLORLESS	CLEAR	6.5	1
	AFTER 13 WEEKS	4.4	1.054	1708	YELLOW	CLEAR	6.0	1
138	AFTER 2 WEEKS	12.9	1.014	378	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	23.6	1.009	303	COLORLESS	CLEAR	7.0	1
	AFTER 13 WEEKS	6.1	1.017	556	LT.YELLOW	CLEAR	6.0	1
139	AFTER 2 WEEKS	4.1	1.040	1158	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	4.5	1.044	1405	YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	3.9	1.064	1961	YELLOW	CLEAR	5.0	1
140	AFTER 2 WEEKS	5.6	1.032	939	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	3.4	1.056	1837	YELLOW	CLEAR	5.0	0
	AFTER 13 WEEKS	9.2	1.023	702	LT.YELLOW	CLEAR	6.0	0
141	AFTER 2 WEEKS	8.3	1.016	463	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	6.5	1.027	921	LT.YELLOW	TURBID	6.0	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 1 (0 MG/KG/DAY)								
141	AFTER 13 WEEKS	7.8	1.027	865	LT.YELLOW	CLEAR	6.0	1
142	AFTER 2 WEEKS	10.8	1.016	475	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	17.8	1.015	561	LT.YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	6.9	1.049	1615	YELLOW	CLEAR	6.0	1
143	AFTER 2 WEEKS	12.5	1.013	362	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	10.9	1.014	493	LT.YELLOW	CLEAR	5.0	1
	AFTER 13 WEEKS	12.3	1.017	548	LT.YELLOW	CLEAR	6.0	1
144	AFTER 2 WEEKS	3.7	1.023	680	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	0.7	1.120	2446	YELLOW	CLEAR	5.0	1
	AFTER 13 WEEKS	3.2	1.045	1414	LT.YELLOW	CLEAR	6.0	1
145	AFTER 2 WEEKS	10.7	1.015	448	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	17.0	1.011	342	LT.YELLOW	CLEAR	7.0	1
	AFTER 13 WEEKS	7.7	1.022	704	LT.YELLOW	CLEAR	6.0	0
	AFTER 17 WEEKS	7.7	1.019	608	COLORLESS	TURBID	6.0	0
146	AFTER 2 WEEKS	7.1	1.018	570	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	14.7	1.012	398	LT.YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	6.6	1.030	983	LT.YELLOW	CLEAR	6.0	0
	AFTER 17 WEEKS	1.8	1.044	1305	LT.YELLOW	CLEAR	5.0	0
147	AFTER 2 WEEKS	6.9	1.021	594	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	13.4	1.016	516	LT.YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	11.9	1.020	631	LT.YELLOW	CLEAR	6.5	0
	AFTER 17 WEEKS	14.0	1.019	556	COLORLESS	TURBID	6.0	1
148	AFTER 2 WEEKS	8.2	1.023	691	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	9.0	1.031	967	YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	6.8	1.046	1418	LT.YELLOW	CLEAR	5.0	0
	AFTER 17 WEEKS	1.7	1.086	2449	YELLOW	CLEAR	5.0	0
149	AFTER 2 WEEKS	9.6	1.016	499	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	11.9	1.018	582	LT.YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	2.3	1.070	2234	LT.YELLOW	CLEAR	5.0	0
	AFTER 17 WEEKS	10.4	1.019	602	COLORLESS	TURBID	6.0	0
150	AFTER 2 WEEKS	8.6	1.019	573	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	24.2	1.008	246	COLORLESS	CLEAR	7.0	1
	AFTER 13 WEEKS	3.2	1.045	1817	LT.YELLOW	CLEAR	5.0	1
	AFTER 17 WEEKS	16.0	1.014	471	COLORLESS	CLEAR	6.0	0
151	AFTER 2 WEEKS	10.3	1.012	338	COLORLESS	CLEAR	7.0	0
	AFTER 6 WEEKS	10.8	1.026	818	LT.YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	9.6	1.030	961	LT.YELLOW	CLEAR	6.0	0
	AFTER 17 WEEKS	17.8	1.017	580	COLORLESS	CLEAR	6.0	0
152	AFTER 2 WEEKS	21.1	1.008	243	COLORLESS	CLEAR	6.0	0
	AFTER 6 WEEKS	15.0	1.012	383	LT.YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	1.4	1.052	1626	LT.YELLOW	CLEAR	6.0	1
	AFTER 17 WEEKS	27.3	1.008	249	COLORLESS	CLEAR	6.0	0
153	AFTER 2 WEEKS	11.9	1.014	400	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	16.2	1.015	1058	LT.YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	6.0	1.028	877	LT.YELLOW	CLEAR	6.0	1
	AFTER 17 WEEKS	1.9	1.064	1971	LT.YELLOW	CLEAR	5.0	0
154	AFTER 2 WEEKS	19.8	1.008	206	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	21.7	1.013	462	LT.YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	14.2	1.019	600	LT.YELLOW	CLEAR	6.0	1
	AFTER 17 WEEKS	14.2	1.017	542	COLORLESS	CLEAR	6.0	1

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

FEMALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 2 (500 MG/KG/DAY)								
161	AFTER 2 WEEKS	15.4	1.014	429	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	21.1	1.013	410	LT.YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	7.5	1.033	1072	LT.YELLOW	CLEAR	5.0	0
162	AFTER 2 WEEKS	3.5	1.034	996	YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	10.2	1.017	544	LT.YELLOW	TURBID	7.0	1
	AFTER 13 WEEKS	12.6	1.016	504	LT.YELLOW	CLEAR	6.5	0
163	AFTER 2 WEEKS	19.1	1.011	319	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	30.4	1.009	303	COLORLESS	CLEAR	6.5	0
	AFTER 13 WEEKS	8.8	1.022	772	LT.YELLOW	CLEAR	5.0	0
164	AFTER 2 WEEKS	2.3	1.056	1710	YELLOW	CLEAR	5.0	0
	AFTER 6 WEEKS	30.5	1.008	297	COLORLESS	CLEAR	6.0	1
	AFTER 13 WEEKS	9.9	1.027	848	LT.YELLOW	CLEAR	6.5	1
165	AFTER 2 WEEKS	7.4	1.021	672	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	16.3	1.015	489	COLORLESS	CLEAR	6.5	1
	AFTER 13 WEEKS	9.0	1.025	795	LT.YELLOW	CLEAR	6.5	0
166	AFTER 2 WEEKS	9.5	1.016	542	LT.YELLOW	CLEAR	5.0	0
	AFTER 6 WEEKS	9.0	1.025	774	LT.YELLOW	CLEAR	5.0	0
	AFTER 13 WEEKS	7.2	1.031	1133	LT.YELLOW	CLEAR	6.0	0
167	AFTER 2 WEEKS	20.4	1.011	326	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	17.2	1.016	578	LT.YELLOW	CLEAR	6.5	0
	AFTER 13 WEEKS	5.8	1.040	1241	LT.YELLOW	CLEAR	6.0	0
168	AFTER 2 WEEKS	15.6	1.013	379	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	8.2	1.020	644	LT.YELLOW	CLEAR	5.0	0
	AFTER 13 WEEKS	19.3	1.014	457	LT.YELLOW	CLEAR	6.0	0
169	AFTER 2 WEEKS	20.2	1.010	275	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	13.6	1.016	547	LT.YELLOW	TURBID	5.0	1
	AFTER 13 WEEKS	2.8	1.064	2037	YELLOW	CLEAR	5.0	0
170	AFTER 2 WEEKS	18.7	1.011	328	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	12.8	1.019	632	LT.YELLOW	TURBID	6.0	1
	AFTER 13 WEEKS	31.8	1.009	276	LT.YELLOW	CLEAR	6.5	1
171	AFTER 2 WEEKS	2.4	1.047	1410	YELLOW	CLEAR	5.0	0
	AFTER 6 WEEKS	14.6	1.015	485	LT.YELLOW	CLEAR	7.0	0
	AFTER 13 WEEKS	14.5	1.021	624	LT.YELLOW	CLEAR	6.0	1
172	AFTER 2 WEEKS	20.9	1.008	248	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	8.1	1.025	816	LT.YELLOW	CLEAR	5.0	1
	AFTER 13 WEEKS	6.6	1.032	1081	LT.YELLOW	CLEAR	6.0	1
173	AFTER 2 WEEKS	6.5	1.019	550	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	12.7	1.014	417	LT.YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	8.0	1.028	906	LT.YELLOW	TURBID	6.5	1
174	AFTER 2 WEEKS	7.7	1.018	313	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	30.6	1.007	221	COLORLESS	CLEAR	6.5	1
	AFTER 13 WEEKS	16.9	1.013	395	LT.YELLOW	CLEAR	6.5	1
175	AFTER 2 WEEKS	33.5	1.006	538	COLORLESS	CLEAR	6.0	0
	AFTER 6 WEEKS	24.7	1.008	254	COLORLESS	CLEAR	7.0	1
	AFTER 13 WEEKS	13.7	1.017	535	LT.YELLOW	CLEAR	6.5	1
176	AFTER 2 WEEKS	3.3	1.038	177	LT.YELLOW	CLEAR	7.0	0
	AFTER 6 WEEKS	2.3	1.046	1383	LT.YELLOW	CLEAR	5.0	1
	AFTER 13 WEEKS	29.3	1.007	239	LT.YELLOW	CLEAR	6.0	0
177	AFTER 2 WEEKS	3.1	1.035	1458	YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	7.1	1.017	565	LT.YELLOW	CLEAR	6.5	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS
FEMALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 2 (500 MG/KG/DAY)								
177	AFTER 13 WEEKS	4.7	1.035	1047	YELLOW	CLEAR	6.5	1
178	AFTER 2 WEEKS	4.1	1.034	1032	YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	15.5	1.012	384	LT. YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	4.5	1.063	1385	YELLOW	CLEAR	6.0	1
179	AFTER 2 WEEKS	4.3	1.038	1149	YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	3.1	1.061	1916	YELLOW	CLEAR	5.0	1
	AFTER 13 WEEKS	1.4	1.124	4082	YELLOW	CLEAR	5.0	1
180	AFTER 2 WEEKS	11.0	1.019	577	LT. YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	23.6	1.011	379	COLORLESS	CLEAR	7.0	1
	AFTER 13 WEEKS	3.7	1.071	2134	YELLOW	CLEAR	5.0	1
GROUP 3 (1000 MG/KG/DAY)								
187	AFTER 2 WEEKS	2.1	1.069	2070	YELLOW	CLEAR	5.0	1
	AFTER 6 WEEKS	18.7	1.012	390	COLORLESS	CLEAR	6.5	1
	AFTER 13 WEEKS	5.9	1.053	1618	YELLOW	CLEAR	6.0	0
188	AFTER 2 WEEKS	19.0	1.010	300	LT. YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	18.6	1.010	320	COLORLESS	CLEAR	6.0	1
	AFTER 13 WEEKS	22.5	1.012	369	LT. YELLOW	CLEAR	6.0	1
189	AFTER 2 WEEKS	13.2	1.012	378	COLORLESS	CLEAR	5.0	1
	AFTER 6 WEEKS	9.7	1.020	643	LT. YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	5.8	1.036	1130	LT. YELLOW	CLEAR	6.0	1
190	AFTER 2 WEEKS	18.2	1.009	259	COLORLESS	CLEAR	6.5	0
	AFTER 6 WEEKS	13.1	1.010	306	LT. YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	15.0	1.014	437	LT. YELLOW	CLEAR	7.0	1
191	AFTER 2 WEEKS	6.4	1.025	772	YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	18.0	1.009	274	COLORLESS	CLEAR	7.0	1
	AFTER 13 WEEKS	2.4	1.062	1893	YELLOW	TURBID	6.5	1
192	AFTER 2 WEEKS	4.8	1.034	1061	YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	8.7	1.025	816	LT. YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	4.2	1.056	1721	YELLOW	CLEAR	5.0	1
193	AFTER 2 WEEKS	24.9	1.008	249	LT. YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	22.6	1.009	302	COLORLESS	CLEAR	6.0	1
	AFTER 13 WEEKS	18.6	1.016	496	LT. YELLOW	CLEAR	6.0	1
194	AFTER 2 WEEKS	14.9	1.007	216	LT. YELLOW	CLEAR	7.0	0
	AFTER 6 WEEKS	17.0	1.011	350	COLORLESS	CLEAR	6.0	0
	AFTER 13 WEEKS	12.6	1.020	631	LT. YELLOW	CLEAR	6.5	0
195	AFTER 2 WEEKS	16.9	1.012	333	LT. YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	24.5	1.009	314	COLORLESS	CLEAR	6.0	1
	AFTER 13 WEEKS	12.6	1.022	687	LT. YELLOW	CLEAR	6.0	0
196	AFTER 2 WEEKS	2.6	1.041	1281	YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	7.0	1.025	812	LT. YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	2.9	1.068	2145	YELLOW	CLEAR	6.0	0
197	AFTER 2 WEEKS	18.5	1.008	246	COLORLESS	CLEAR	5.0	1
	AFTER 6 WEEKS	11.4	1.017	517	LT. YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	15.1	1.015	495	LT. YELLOW	CLEAR	6.0	1
198	AFTER 2 WEEKS	1.4	1.086	2515	YELLOW	CLEAR	5.0	0
	AFTER 6 WEEKS	1.7	1.076	2556	YELLOW	CLEAR	5.0	1
	AFTER 13 WEEKS	6.5	1.035	1092	YELLOW	CLEAR	6.0	0

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

FEMALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 3 (1000 MG/KG/DAY)								
199	AFTER 2 WEEKS	3.6	1.042	1226	YELLOW	CLEAR	5.0	0
	AFTER 6 WEEKS	4.7	1.032	990	YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	11.6	1.019	611	LT. YELLOW	CLEAR	6.5	1
200	AFTER 2 WEEKS	5.5	1.029	886	YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	14.9	1.014	448	LT. YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	10.0	1.022	691	LT. YELLOW	CLEAR	6.5	1
201	AFTER 2 WEEKS	8.2	1.016	449	LT. YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	12.4	1.015	456	LT. YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	4.2	1.048	1494	YELLOW	CLEAR	5.0	1
202	AFTER 2 WEEKS	15.8	1.013	337	LT. YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	20.9	1.010	335	LT. YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	5.6	1.042	1283	YELLOW	CLEAR	6.0	1
203	AFTER 2 WEEKS	4.4	1.027	746	YELLOW	CLEAR	7.0	0
	AFTER 6 WEEKS	13.6	1.014	437	LT. YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	5.6	1.044	1439	YELLOW	CLOUDY	6.0	1
204	AFTER 2 WEEKS	17.1	1.012	299	LT. YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	11.8	1.015	467	LT. YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	7.4	1.023	757	LT. YELLOW	CLEAR	6.5	1
205	AFTER 2 WEEKS	33.5	1.006	177	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	24.3	1.009	255	COLORLESS	CLEAR	6.5	1
	AFTER 13 WEEKS	14.4	1.016	581	LT. YELLOW	CLEAR	6.5	1
206	AFTER 2 WEEKS	11.6	1.014	420	LT. YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	25.1	1.011	350	COLORLESS	CLEAR	6.5	1
	AFTER 13 WEEKS	14.5	1.017	546	LT. YELLOW	CLEAR	6.0	1
GROUP 4 (2000 MG/KG/DAY)								
213	AFTER 2 WEEKS	12.9	1.013	395	LT. YELLOW	CLEAR	7.0	0
	AFTER 6 WEEKS	31.8	1.007	207	COLORLESS	CLEAR	6.5	1
	AFTER 13 WEEKS	3.0	1.068	2102	YELLOW	CLEAR	6.0	0
214	AFTER 2 WEEKS	16.9	1.010	300	LT. YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	16.4	1.014	438	COLORLESS	CLEAR	6.0	1
	AFTER 13 WEEKS	5.1	1.037	1119	YELLOW	CLEAR	6.0	0
215	AFTER 2 WEEKS	1.7	1.072	2082	YELLOW	CLEAR	5.0	0
	AFTER 6 WEEKS	11.5	1.020	611	LT. YELLOW	CLEAR	6.5	0
	AFTER 13 WEEKS	6.6	1.036	1154	YELLOW	CLEAR	6.0	0
216	AFTER 2 WEEKS	20.9	1.011	274	COLORLESS	CLEAR	6.0	1
	AFTER 6 WEEKS	17.6	1.014	432	LT. YELLOW	CLEAR	7.0	1
	AFTER 13 WEEKS	3.5	1.062	1962	YELLOW	TURBID	6.0	0
217	AFTER 2 WEEKS	14.3	1.017	504	YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	17.9	1.014	457	COLORLESS	CLEAR	6.0	1
	AFTER 13 WEEKS	9.5	1.023	719	LT. YELLOW	CLEAR	6.0	0
218	AFTER 2 WEEKS	25.2	1.008	185	COLORLESS	CLEAR	6.5	1
	AFTER 6 WEEKS	20.6	1.010	321	COLORLESS	CLEAR	6.0	1
	AFTER 13 WEEKS	22.7	1.011	362	LT. YELLOW	CLEAR	6.0	0
219	AFTER 2 WEEKS	6.0	1.023	702	YELLOW	CLEAR	5.0	0
	AFTER 6 WEEKS	21.3	1.009	373	COLORLESS	CLEAR	6.5	1
	AFTER 13 WEEKS	10.6	1.022	664	YELLOW	CLEAR	6.0	0
220	AFTER 2 WEEKS	2.3	1.051	1490	YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	2.1	1.057	1818	YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	3.5	1.048	1444	YELLOW	CLEAR	6.5	0

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

FEMALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 4 (2000 MG/KG/DAY)								
221	AFTER 2 WEEKS	27.7	1.008	187	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	5.2	1.033	1000	YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	11.2	1.025	795	LT.YELLOW	CLEAR	6.0	0
222	AFTER 2 WEEKS	7.3	1.018	523	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	3.7	1.039	1215	YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	8.3	1.022	695	LT.YELLOW	CLEAR	6.0	0
223	AFTER 2 WEEKS	13.5	1.015	391	LT.YELLOW	CLEAR	6.5	1
	AFTER 6 WEEKS	1.9	1.074	2227	YELLOW	CLEAR	5.0	1
	AFTER 13 WEEKS	11.6	1.022	690	LT.YELLOW	CLEAR	5.0	0
224	AFTER 2 WEEKS	6.8	1.023	639	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	8.5	1.022	740	LT.YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	6.0	1.037	1145	YELLOW	CLEAR	6.0	1
225	AFTER 2 WEEKS	13.3	1.013	360	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	33.3	1.006	205	COLORLESS	CLEAR	6.5	1
	AFTER 13 WEEKS	21.9	1.010	343	LT.YELLOW	CLEAR	6.0	1
226	AFTER 2 WEEKS	6.3	1.019	537	LT.YELLOW	CLEAR	5.0	0
	AFTER 6 WEEKS	4.1	1.049	1518	YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	5.4	1.039	1265	YELLOW	CLEAR	5.0	1
227	AFTER 2 WEEKS	9.3	1.018	510	LT.YELLOW	CLEAR	5.0	0
	AFTER 6 WEEKS	15.0	1.012	357	COLORLESS	CLEAR	6.0	0
	AFTER 13 WEEKS	21.2	1.013	421	LT.YELLOW	CLEAR	6.0	1
228	AFTER 2 WEEKS	0.9	1.080	2384	YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	1.0	1.123	3868	YELLOW	CLEAR	5.0	1
	AFTER 13 WEEKS	13.6	1.015	489	LT.YELLOW	CLEAR	6.0	0
229	AFTER 2 WEEKS	23.2	1.009	215	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	5.0	1.035	1084	YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	20.1	1.035	392	LT.YELLOW	CLEAR	6.0	1
230	AFTER 2 WEEKS	15.8	1.013	344	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	11.2	1.016	513	LT.YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	6.8	1.035	1000	YELLOW	CLEAR	6.0	1
231	AFTER 2 WEEKS	13.6	1.011	274	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	20.3	1.010	305	COLORLESS	CLEAR	6.5	1
	AFTER 13 WEEKS	14.8	1.017	535	LT.YELLOW	CLEAR	6.0	0
232	AFTER 2 WEEKS	1.5	1.084	2338	YELLOW	CLEAR	5.0	0
	AFTER 6 WEEKS	4.9	1.026	808	LT.YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	6.6	1.045	1367	YELLOW	CLEAR	6.0	1
233	AFTER 2 WEEKS	0.7	1.100	2722	YELLOW	CLEAR	5.0	1
	AFTER 6 WEEKS	14.5	1.013	410	LT.YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	2.9	1.071	2113	YELLOW	CLEAR	5.0	0
	AFTER 17 WEEKS	6.4	1.031	940	LT.YELLOW	CLEAR	6.0	0
234	AFTER 2 WEEKS	18.4	1.013	372	LT.YELLOW	CLEAR	6.0	1
	AFTER 6 WEEKS	10.5	1.025	803	LT.YELLOW	CLEAR	6.0	0
	AFTER 13 WEEKS	4.9	1.053	1718	YELLOW	CLEAR	6.0	1
	AFTER 17 WEEKS	3.0	1.067	2190	LT.YELLOW	CLEAR	5.0	0
235	AFTER 2 WEEKS	4.2	1.039	1160	LT.YELLOW	CLEAR	5.0	1
	AFTER 6 WEEKS	22.3	1.011	353	COLORLESS	CLEAR	6.0	1
	AFTER 13 WEEKS	30.5	1.008	235	LT.YELLOW	CLEAR	6.0	0
	AFTER 17 WEEKS	17.6	1.036	423	COLORLESS	CLOUDY	6.0	1
236	AFTER 2 WEEKS	22.2	1.008	197	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	27.8	1.007	223	COLORLESS	CLEAR	7.0	1
	AFTER 13 WEEKS	2.2	1.060	1963	YELLOW	CLEAR	6.0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

ANIMAL NUMBER		VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	COLOR	APPEARANCE	pH	NITRITE SCORE 0/1
GROUP 4 (2000 MG/KG/DAY)								
236	AFTER 17 WEEKS	42.0	1.006	199	COLORLESS	CLEAR	6.0	0
237	AFTER 2 WEEKS	15.6	1.013	348	LT.YELLOW	CLEAR	7.0	1
	AFTER 6 WEEKS	11.2	1.015	460	LT.YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	9.0	1.023	719	LT.YELLOW	CLEAR	6.0	0
	AFTER 17 WEEKS	7.0	1.032	965	LT.YELLOW	TURBID	6.0	0
238	AFTER 2 WEEKS	10.2	1.015	476	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	13.3	1.017	562	LT.YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	3.8	1.056	1756	YELLOW	CLEAR	5.0	0
	AFTER 17 WEEKS	15.0	1.017	525	COLORLESS	CLOUDY	6.0	0
239	AFTER 2 WEEKS	9.0	1.018	524	LT.YELLOW	CLEAR	6.0	0
	AFTER 6 WEEKS	8.9	1.021	679	LT.YELLOW	CLEAR	6.0	1
	AFTER 13 WEEKS	7.9	1.024	747	YELLOW	CLEAR	6.0	1
	AFTER 17 WEEKS	4.7	1.035	1101	LT.YELLOW	CLEAR	6.0	0
240	AFTER 2 WEEKS	35.3	1.007	197	COLORLESS	CLEAR	7.0	1
	AFTER 6 WEEKS	16.2	1.017	557	LT.YELLOW	CLEAR	6.5	1
	AFTER 13 WEEKS	19.8	1.013	425	LT.YELLOW	CLEAR	6.0	1
	AFTER 17 WEEKS	20.9	1.014	441	COLORLESS	TURBID	6.0	1
241	AFTER 2 WEEKS	16.4	1.011	306	COLORLESS	CLEAR	6.0	0
	AFTER 6 WEEKS	13.9	1.013	446	COLORLESS	CLEAR	6.5	1
	AFTER 13 WEEKS	12.0	1.017	572	LT.YELLOW	CLEAR	6.0	1
	AFTER 17 WEEKS	11.1	1.019	611	COLORLESS	CLEAR	6.0	0
242	AFTER 2 WEEKS	14.3	1.011	340	LT.YELLOW	CLEAR	6.5	0
	AFTER 6 WEEKS	22.0	1.009	270	COLORLESS	CLEAR	6.0	1
	AFTER 13 WEEKS	10.3	1.023	739	LT.YELLOW	CLEAR	6.5	1
	AFTER 17 WEEKS	18.3	1.013	406	COLORLESS	CLEAR	6.0	1

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 1 (0 MG/KG/DAY)								
125	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
126	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
127	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
128	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
129	AFTER 2 WEEKS	0.75	0	0.5	0	17	10	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
130	AFTER 2 WEEKS	0.00	0	0.0	0	0	25	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
131	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
132	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
133	AFTER 2 WEEKS	0.25	0	0.5	0	0	25	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	25	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
134	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
135	AFTER 2 WEEKS	0.75	0	1.5	0	17	10	0
	AFTER 6 WEEKS	0.75	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
136	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
137	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
138	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
139	AFTER 2 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
140	AFTER 2 WEEKS	0.25	0	0.5	0	0	25	0
	AFTER 6 WEEKS	0.25	0	0.5	0	17	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
141	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

FEMALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 1 (0 MG/KG/DAY)								
141	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
142	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
143	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
144	AFTER 2 WEEKS	0.25	0	0.5	0	0	25	0
	AFTER 6 WEEKS	0.75	0	1.5	17	17	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
145	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
146	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
147	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
148	AFTER 2 WEEKS	0.25	0	0.5	0	0	25	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 17 WEEKS	0.25	0	1.5	0	0	10	0
149	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	17	0	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	10	0
150	AFTER 2 WEEKS	0.00	0	0.5	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
151	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
152	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
153	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 17 WEEKS	0.25	0	0.5	0	0	0	0
154	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 2 (500 MG/KG/DAY)								
161	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
162	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
163	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
164	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
165	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	25
166	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
167	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	10	0
168	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
169	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
170	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
171	AFTER 2 WEEKS	0.75	0	0.5	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
172	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
173	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
174	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
175	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
176	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
177	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

URINALYSIS

FEMALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 2 (500 MG/KG/DAY)								
177	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
178	AFTER 2 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
179	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.5	0	17	0	0
	AFTER 13 WEEKS	0.75	0	1.5	0	17	0	25
180	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	17	0	25
GROUP 3 (1000 MG/KG/DAY)								
187	AFTER 2 WEEKS	0.25	0	1.5	0	17	10	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
188	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
189	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
190	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
191	AFTER 2 WEEKS	0.25	0	0.5	0	0	0	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	17	10	25
192	AFTER 2 WEEKS	0.25	0	0.5	0	0	0	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	25
193	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	10	0
194	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	10	0
195	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
196	AFTER 2 WEEKS	0.25	0	0.5	0	17	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	25
197	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
198	AFTER 2 WEEKS	0.25	0	0.5	0	17	10	0
	AFTER 6 WEEKS	0.75	0	0.5	0	17	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 3 (1000 MG/KG/DAY)								
199	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
200	AFTER 2 WEEKS	0.25	0	0.5	0	0	0	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
201	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
202	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
203	AFTER 2 WEEKS	0.25	0	0.5	0	0	25	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
204	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
205	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
206	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
GROUP 4 (2000 MG/KG/DAY)								
213	AFTER 2 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
214	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
215	AFTER 2 WEEKS	0.25	0	1.5	0	0	0	25
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
216	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	17	25	0
217	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	10	0
218	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
219	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
220	AFTER 2 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	17	25	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 4 (2000 MG/KG/DAY)								
221	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
222	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	50	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
223	AFTER 2 WEEKS	0.00	0	0.0	0	0	25	0
	AFTER 6 WEEKS	0.25	0	0.5	0	17	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
224	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
225	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
226	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
227	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
228	AFTER 2 WEEKS	0.25	0	1.5	0	17	10	0
	AFTER 6 WEEKS	0.75	0	0.5	0	17	10	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
229	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
230	AFTER 2 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
231	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
232	AFTER 2 WEEKS	0.25	0	1.5	0	0	10	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
233	AFTER 2 WEEKS	0.75	0	1.5	0	17	0	25
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	1.5	0	17	10	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
234	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0
	AFTER 17 WEEKS	0.25	0	0.5	0	0	0	0
235	AFTER 2 WEEKS	0.75	0	0.5	0	0	25	100
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	10	25
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
236	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	10	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

ANIMAL NUMBER		PROTEIN g/l	GLUCOSE mmol/l	KETONES mmol/l	UROBILI μmol/l	BILIRUBIN μmol/l	ERY per μl	LEU per μl
GROUP 4 (2000 MG/KG/DAY)								
236	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
237	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 17 WEEKS	0.25	0	0.5	0	0	0	0
238	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 13 WEEKS	0.25	0	0.5	0	0	0	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
239	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 17 WEEKS	0.25	0	0.0	0	0	10	0
240	AFTER 2 WEEKS	0.00	0	0.0	0	0	10	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0
241	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	0	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	25	0
242	AFTER 2 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 6 WEEKS	0.00	0	0.0	0	0	0	0
	AFTER 13 WEEKS	0.25	0	0.0	0	0	10	0
	AFTER 17 WEEKS	0.00	0	0.0	0	0	0	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 1 (0 MG/KG/DAY)								
125	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
126	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
127	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
128	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
129	AFTER 2 WEEKS	1	1	1	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
130	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
131	AFTER 2 WEEKS	1	0	1	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
132	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
133	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
134	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
135	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
136	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
137	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
138	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
139	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
140	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
141	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	1	0	0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 1 (0 MG/KG/DAY)								
141	AFTER 13 WEEKS	0	0	1	0	0	0	0
142	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
143	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
144	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	0	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
145	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
146	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
147	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	2	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
	AFTER 17 WEEKS	1	0	0	0	0	0	0
148	AFTER 2 WEEKS	2	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	1	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
149	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
	AFTER 17 WEEKS	1	0	0	0	0	0	0
150	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
151	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
152	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
153	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
154	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 2 (500 MG/KG/DAY)								
161	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
162	AFTER 2 WEEKS	0	0	0	0	0	1	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
163	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
164	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
165	AFTER 2 WEEKS	1	1	1	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
166	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	1	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
167	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
168	AFTER 2 WEEKS	0	1	1	0	0	0	0
	AFTER 6 WEEKS	0	0	1	2	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
169	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
170	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	1	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
171	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
172	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	2	0	0	0
	AFTER 13 WEEKS	2	0	1	0	0	0	0
173	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
174	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
175	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	1	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
176	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
177	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	1	0	0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 2 (500 MG/KG/DAY)								
177	AFTER 13 WEEKS	0	0	1	0	0	0	0
178	AFTER 2 WEEKS	0	0	0	0	0	1	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
179	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	2	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
180	AFTER 2 WEEKS	0	1	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	2
GROUP 3 (1000 MG/KG/DAY)								
187	AFTER 2 WEEKS	1	1	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	2
188	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	1	0	0	0	0	0
189	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	1	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	1
190	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
191	AFTER 2 WEEKS	0	0	1	0	0	2	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	2
192	AFTER 2 WEEKS	0	1	1	0	0	0	0
	AFTER 6 WEEKS	0	0	2	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
193	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	0	0	0	0	0	0
194	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
195	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
196	AFTER 2 WEEKS	1	0	1	0	0	0	0
	AFTER 6 WEEKS	0	0	2	1	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
197	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
198	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	2	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 3 (1000 MG/KG/DAY)								
199	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	1	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
200	AFTER 2 WEEKS	0	0	0	0	0	2	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
201	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
202	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
203	AFTER 2 WEEKS	0	0	0	0	0	2	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
204	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
205	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
206	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
GROUP 4 (2000 MG/KG/DAY)								
213	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	1	1	0	0	0	0
214	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
215	AFTER 2 WEEKS	0	1	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	1	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
216	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	2
217	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	1
218	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
219	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
220	AFTER 2 WEEKS	1	0	0	0	0	1	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0

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URINALYSIS
FEMALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 4 (2000 MG/KG/DAY)								
221	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
222	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	0	0	0	0
	AFTER 13 WEEKS	0	0	0	0	0	0	0
223	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	1	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
224	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	2	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
225	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	1
226	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	0	1	2	0	0	0	0
227	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
228	AFTER 2 WEEKS	0	0	0	0	0	1	0
	AFTER 6 WEEKS	0	0	2	2	0	0	0
	AFTER 13 WEEKS	0	1	2	0	0	0	0
229	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	0	2	0	0	0	0
230	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	1	2	0	0	0	0
231	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
232	AFTER 2 WEEKS	1	1	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
233	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	0	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
234	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
235	AFTER 2 WEEKS	2	2	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	1	1	0	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
236	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	0	0	0	0
	AFTER 13 WEEKS	1	0	0	0	0	0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

		BLOOD CELLS		EPITHELIAL CELLS			CRYSTALS	
ANIMAL NUMBER		RBC score 0/3	WBC score 0/3	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3
GROUP 4 (2000 MG/KG/DAY)								
236	AFTER 17 WEEKS	0	0	0	0	0	0	0
237	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	1	0	0	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
238	AFTER 2 WEEKS	1	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	2	2	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
239	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	1	2	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
240	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	2	0	0	0	0
	AFTER 13 WEEKS	0	1	2	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
241	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	0	0	0	0
	AFTER 13 WEEKS	0	1	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0
242	AFTER 2 WEEKS	0	0	0	0	0	0	0
	AFTER 6 WEEKS	0	0	1	1	0	0	0
	AFTER 13 WEEKS	0	0	1	0	0	0	0
	AFTER 17 WEEKS	0	0	0	0	0	0	0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

ANIMAL NUMBER		CRYSTALS		CASTS	
		URIC ACID	UNIDENTIFI	CASTS	
		score 0/3	score 0/3	score 0/3	
GROUP 1 (0 MG/KG/DAY)					
125	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
126	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
127	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
128	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
129	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
130	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
131	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
132	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
133	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
134	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
135	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
136	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
137	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
138	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
139	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
140	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
141	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

		CRYSTALS		CASTS	
ANIMAL NUMBER		URIC ACID	UNIDENTIFI	CASTS	
		score 0/3	score 0/3	score 0/3	
GROUP 1 (0 MG/KG/DAY)					
141	AFTER 13 WEEKS	0	0	0	
142	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
143	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
144	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
145	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
146	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
147	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
148	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
149	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
150	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
151	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
152	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
153	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
154	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

ANIMAL NUMBER		CRYSTALS		CASTS	
		URIC ACID	UNIDENTIFI	CASTS	
		score 0/3	score 0/3	score 0/3	
GROUP 2 (500 MG/KG/DAY)					
161	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
162	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
163	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
164	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
165	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
166	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
167	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
168	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
169	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
170	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
171	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
172	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	2	0	0	
173	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
174	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
175	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
176	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
177	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**URINALYSIS**
FEMALES

ANIMAL NUMBER	CRYSTALS		CASTS	
	URIC ACID score 0/3	UNIDENTIFI score 0/3	CASTS score 0/3	
GROUP 2 (500 MG/KG/DAY)				
177	AFTER 13 WEEKS	0	0	0
178	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
179	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
180	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
GROUP 3 (1000 MG/KG/DAY)				
187	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
188	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
189	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
190	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
191	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
192	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
193	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
194	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
195	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
196	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
197	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
198	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

ANIMAL NUMBER		CRYSTALS		CASTS	
		URIC ACID	UNIDENTIFI	CASTS	
		score 0/3	score 0/3	score 0/3	
GROUP 3 (1000 MG/KG/DAY)					
199	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
200	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
201	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
202	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
203	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
204	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
205	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
206	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
GROUP 4 (2000 MG/KG/DAY)					
213	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
214	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
215	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
216	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
217	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
218	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
219	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
220	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

		CRYSTALS	CASTS	
ANIMAL		URIC ACID	UNIDENTIFI	CASTS
NUMBER		score 0/3	score 0/3	score 0/3
GROUP 4 (2000 MG/KG/DAY)				
221	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
222	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
223	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
224	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
225	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
226	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
227	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
228	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
229	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
230	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
231	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
232	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
233	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
234	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
235	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	0	0	0
	AFTER 17 WEEKS	0	0	0
236	AFTER 2 WEEKS	0	0	0
	AFTER 6 WEEKS	0	0	0
	AFTER 13 WEEKS	2	0	0

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS
FEMALES

		CRYSTALS		CASTS	
ANIMAL NUMBER		URIC ACID	UNIDENTIFI	CASTS	
		score 0/3	score 0/3	score 0/3	
GROUP 4 (2000 MG/KG/DAY)					
236	AFTER 17 WEEKS	0	0	0	
237	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
238	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
239	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
240	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
241	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	
242	AFTER 2 WEEKS	0	0	0	
	AFTER 6 WEEKS	0	0	0	
	AFTER 13 WEEKS	0	0	0	
	AFTER 17 WEEKS	0	0	0	

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RCC STUDY NUMBER A29553
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

ORGAN WEIGHTS (GRAM)
AFTER 13 WEEKS
MALES**GROUP 1 (0 MG/KG/DAY)**

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
1	412.5	2.26	1.21	0.026	10.91	0.330	2.28	0.070
2	497.4	2.33	1.39	0.022	13.84	0.378	2.79	0.087
3	386.5	2.36	1.19	0.025	8.62	0.295	2.23	0.061
4	429.1	2.28	1.33	0.026	10.69	0.492	2.44	0.070
5	409.6	2.02	1.06	0.017	9.86	0.346	2.13	0.075
6	409.9	2.17	1.16	0.022	9.50	0.410	2.26	0.052
7	386.7	2.29	1.09	0.024	9.17	0.353	2.23	0.063
8	427.5	2.16	1.22	0.028	11.99	0.461	2.76	0.059
9	399.8	2.29	1.19	0.015	10.31	0.356	2.43	0.064
10	384.2	2.25	1.50	0.019	8.34	0.450	2.14	0.071
11	390.9	1.96	1.10	0.021	8.39	0.395	2.05	0.068
12	425.0	2.09	1.18	0.026	9.93	0.414	2.26	0.065
13	400.5	2.06	1.05	0.019	8.79	0.369	2.03	0.059
14	381.4	2.15	1.04	0.021	8.70	0.340	2.19	0.066
15	405.2	2.15	1.32	0.023	10.37	0.230	2.30	0.077
16	449.6	2.16	1.28	0.019	11.07	0.454	2.46	0.090
17	363.7	1.93	0.93	0.017	7.75	0.353	1.85	0.059
18	419.7	2.08	1.08	0.026	9.06	0.395	2.09	0.078
19	431.5	2.08	1.23	0.024	9.46	0.350	2.29	0.066
20	391.9	1.87	1.09	0.026	8.31	0.286	1.85	0.052

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
1	0.78	3.49	1.311
2	0.92	3.75	1.418
3	0.68	3.53	1.258
4	0.92	4.06	1.277
5	0.66	3.55	1.254
6	0.77	3.79	1.319
7	0.79	1.93	1.393
8	0.88	4.56	1.645
9	0.63	4.29	1.553
10	0.67	3.43	1.111
11	0.62	3.54	1.216
12	0.62	4.15	1.377
13	0.72	3.71	1.228
14	0.87	3.79	1.282
15	0.68	3.83	1.240
16	0.70	4.17	1.379
17	0.60	3.35	1.215
18	0.83	2.56	0.769
19	0.89	4.08	1.256
20	0.77	3.81	1.209

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
37	392.1	2.30	1.14	0.026	10.16	0.385	2.48	0.069
38	455.0	2.09	1.31	0.024	12.32	0.381	2.58	0.065
39	379.8	2.21	1.34	0.028	10.40	0.379	2.34	0.070
40	432.1	2.32	1.17	0.030	11.11	0.437	2.41	0.073
41	403.0	2.20	1.34	0.020	11.77	0.493	2.62	0.069
42	458.7	2.32	1.28	0.026	11.78	0.486	2.52	0.070
43	458.8	2.21	1.35	0.020	12.17	0.287	2.64	0.091
44	---	---	---	---	---	---	---	---
45	380.7	2.20	1.33	0.030	10.79	0.387	2.35	0.075
46	381.4	2.13	1.16	0.032	9.44	0.449	2.28	0.064
47	427.4	2.03	1.11	0.025	10.75	0.303	2.34	0.067
48	441.3	2.04	1.19	0.032	10.44	0.368	2.34	0.078

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN WEIGHTS (GRAM)
AFTER 13 WEEKS
MALES**

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
49	347.9	1.90	1.13	0.023	7.85	0.216	1.97	0.066
50	374.4	2.01	0.97	0.027	9.03	0.267	1.91	0.054
51	448.1	2.03	1.26	0.020	11.08	0.341	2.51	0.065
52	442.9	2.16	1.20	0.023	10.20	0.474	2.19	0.048
53	412.9	2.03	1.15	0.025	9.70	0.263	2.35	0.073
54	349.2	2.00	0.92	0.016	7.39	0.219	1.79	0.064
55	385.0	2.05	1.16	0.023	8.77	0.365	2.03	0.064
56	400.3	1.90	1.11	0.027	8.21	0.277	1.89	0.051

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
37	0.86	4.19	1.281
38	0.86	4.64	1.465
39	0.80	2.39	0.669
40	0.73	4.06	1.350
41	0.95	3.99	1.486
42	0.92	3.92	1.245
43	0.88	4.75	1.464
44	---	---	---
45	0.67	3.93	1.275
46	0.76	3.99	1.233
47	0.87	3.77	1.228
48	0.79	3.87	1.414
49	0.76	3.64	1.143
50	0.64	4.25	1.285
51	0.85	4.41	1.551
52	0.88	3.78	1.193
53	0.62	3.76	1.251
54	0.63	3.17	1.032
55	0.78	3.64	1.215
56	0.64	3.66	1.118

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
63	415.7	2.22	1.67	0.028	9.52	0.401	2.19	0.058
64	427.5	2.28	1.15	0.025	11.16	0.353	2.25	0.070
65	401.7	2.21	1.29	0.024	10.53	0.328	2.46	0.068
66	404.3	2.20	1.26	0.031	10.38	0.336	2.40	0.063
67	353.3	2.29	1.18	0.026	10.30	0.281	2.52	0.070
68	413.8	2.28	1.22	0.024	10.47	0.372	2.42	0.069
69	377.2	2.30	1.11	0.020	8.94	0.367	2.44	0.060
70	446.9	2.36	1.47	0.023	11.67	0.350	3.04	0.065
71	416.0	2.42	1.21	0.018	10.83	0.267	2.38	0.077
72	375.0	2.19	1.42	0.019	9.51	0.236	2.25	0.061
73	412.2	2.14	1.25	0.022	10.00	0.216	2.29	0.063
74	418.8	2.01	1.08	0.022	10.29	0.345	2.36	0.061
75	381.6	2.00	0.98	0.017	8.22	0.419	1.85	0.053
76	408.5	2.17	1.06	0.025	9.57	0.288	2.28	0.060
77	428.6	1.97	1.10	0.025	10.56	0.371	2.20	0.058
78	426.8	2.08	1.20	0.032	10.76	0.308	2.47	0.063
79	443.1	2.16	1.19	0.027	11.04	0.369	2.38	0.054
80	412.5	2.04	1.18	0.019	10.99	0.205	2.52	0.074
81	405.6	2.11	1.20	0.026	9.19	0.333	2.25	0.064
82	462.4	1.98	1.18	0.024	11.07	0.327	2.43	0.041

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN WEIGHTS (GRAM)
AFTER 13 WEEKS
MALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYMI
63	0.70	4.18	1.377
64	1.10	4.27	1.418
65	0.88	4.07	1.555
66	0.87	1.86	1.316
67	0.78	3.68	1.366
68	0.80	4.51	1.449
69	0.71	1.83	1.324
70	1.04	4.77	1.576
71	0.91	1.68	0.661
72	0.77	4.06	1.327
73	0.67	4.12	1.262
74	0.65	3.41	1.174
75	0.71	3.64	1.221
76	0.73	3.68	1.248
77	0.96	3.93	1.268
78	0.70	4.20	1.402
79	0.80	4.29	1.492
80	0.63	3.78	1.182
81	0.67	4.14	1.366
82	0.65	4.31	1.322

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
89	345.2	2.02	1.05	0.021	8.51	0.288	1.99	0.050
90	373.6	1.96	1.01	0.029	9.09	0.379	1.94	0.056
91	382.0	2.12	1.13	0.019	9.65	0.336	2.48	0.057
92	337.8	2.19	1.06	0.031	8.44	0.520	2.10	0.064
93	409.3	2.14	1.04	0.025	9.47	0.343	2.29	0.057
94	442.3	2.04	1.26	0.021	11.62	0.326	2.50	0.062
95	374.4	2.05	1.02	0.023	9.27	0.388	1.95	0.064
96	391.7	2.25	1.41	0.035	10.09	0.407	2.37	0.071
97	333.3	2.06	1.11	0.030	9.32	0.249	2.14	0.069
98	400.2	2.21	1.09	0.027	9.73	0.366	2.29	0.079
99	399.4	1.96	1.09	0.025	9.49	0.280	2.11	0.061
100	353.3	2.02	1.10	0.022	8.85	0.313	1.88	0.056
101	380.4	2.18	1.33	0.021	10.21	0.345	2.52	0.089
102	378.7	2.12	1.11	0.018	8.28	0.306	2.09	0.062
103	421.4	2.03	1.08	0.027	10.03	0.363	2.34	0.072
104	417.1	1.95	1.25	0.024	9.98	0.357	2.37	0.075
105	432.6	2.00	1.22	0.025	10.55	0.334	2.46	0.075
106	397.6	2.07	0.95	0.018	10.18	0.364	2.28	0.062
107	423.9	2.08	1.04	0.027	9.02	0.298	2.20	0.063
108	372.8	2.17	1.10	0.021	8.66	0.275	2.27	0.063

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYMI
89	0.60	4.04	1.168
90	0.78	3.91	1.172
91	0.73	3.65	1.342
92	0.76	3.53	1.278
93	0.75	3.47	1.261
94	0.85	3.92	1.328
95	0.76	3.69	1.157
96	0.78	3.82	1.318
97	0.78	3.66	1.214
98	0.67	3.59	1.206
99	0.74	3.80	1.291
100	0.63	3.76	1.306

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN WEIGHTS (GRAM)

AFTER 13 WEEKS

MALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
101	0.67	3.69	1.297
102	0.66	3.56	1.212
103	0.70	3.59	1.245
104	0.80	3.93	1.408
105	0.72	3.43	1.010
106	0.69	3.89	1.354
107	0.74	3.58	1.402
108	0.68	3.65	1.335

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)
AFTER 13 WEEKS
MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
1	412.5	0.55	0.29	0.006	2.64	0.080	0.55	0.017
2	497.4	0.47	0.28	0.004	2.78	0.076	0.56	0.017
3	386.5	0.61	0.31	0.007	2.23	0.076	0.58	0.016
4	429.1	0.53	0.31	0.006	2.49	0.115	0.57	0.016
5	409.6	0.49	0.26	0.004	2.41	0.084	0.52	0.018
6	409.9	0.53	0.28	0.005	2.32	0.100	0.55	0.013
7	386.7	0.59	0.28	0.006	2.37	0.091	0.58	0.016
8	427.5	0.51	0.29	0.006	2.80	0.108	0.65	0.014
9	399.8	0.57	0.30	0.004	2.58	0.089	0.61	0.016
10	384.2	0.58	0.39	0.005	2.17	0.117	0.56	0.019
11	390.9	0.50	0.28	0.005	2.15	0.101	0.52	0.018
12	425.0	0.49	0.28	0.006	2.34	0.097	0.53	0.015
13	400.5	0.52	0.26	0.005	2.20	0.092	0.51	0.015
14	381.4	0.56	0.27	0.006	2.28	0.089	0.57	0.017
15	405.2	0.53	0.32	0.006	2.56	0.057	0.57	0.019
16	449.6	0.48	0.28	0.004	2.46	0.101	0.55	0.020
17	363.7	0.53	0.26	0.005	2.13	0.097	0.51	0.016
18	419.7	0.50	0.26	0.006	2.16	0.094	0.50	0.019
19	431.5	0.48	0.28	0.006	2.19	0.081	0.53	0.015
20	391.9	0.48	0.28	0.007	2.12	0.073	0.47	0.013

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
1	0.19	0.85	0.318
2	0.19	0.75	0.285
3	0.18	0.91	0.325
4	0.21	0.95	0.298
5	0.16	0.87	0.306
6	0.19	0.92	0.322
7	0.20	0.50	0.360
8	0.21	1.07	0.385
9	0.16	1.07	0.389
10	0.18	0.89	0.289
11	0.16	0.91	0.311
12	0.15	0.98	0.324
13	0.18	0.93	0.307
14	0.23	0.99	0.336
15	0.17	0.95	0.306
16	0.15	0.93	0.307
17	0.16	0.92	0.334
18	0.20	0.61	0.183
19	0.21	0.95	0.291
20	0.20	0.97	0.308

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
37	392.1	0.59	0.29	0.007	2.59	0.098	0.63	0.018
38	455.0	0.46	0.29	0.005	2.71	0.084	0.57	0.014
39	379.8	0.58	0.35	0.007	2.74	0.100	0.61	0.018
40	432.1	0.54	0.27	0.007	2.57	0.101	0.56	0.017
41	403.0	0.55	0.33	0.005	2.92	0.122	0.65	0.017
42	458.7	0.51	0.28	0.006	2.57	0.106	0.55	0.015
43	458.8	0.48	0.29	0.004	2.65	0.062	0.58	0.020
44	---	---	---	---	---	---	---	---
45	380.7	0.58	0.35	0.008	2.83	0.102	0.62	0.020
46	381.4	0.56	0.30	0.008	2.47	0.118	0.60	0.017
47	427.4	0.47	0.26	0.006	2.51	0.071	0.55	0.016
48	441.3	0.46	0.27	0.007	2.37	0.083	0.53	0.018

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)

AFTER 13 WEEKS

MALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
49	347.9	0.55	0.32	0.007	2.26	0.062	0.57	0.019
50	374.4	0.54	0.26	0.007	2.41	0.071	0.51	0.014
51	448.1	0.45	0.28	0.004	2.47	0.076	0.56	0.014
52	442.9	0.49	0.27	0.005	2.30	0.107	0.50	0.011
53	412.9	0.49	0.28	0.006	2.35	0.064	0.57	0.018
54	349.2	0.57	0.26	0.005	2.12	0.063	0.51	0.018
55	385.0	0.53	0.30	0.006	2.28	0.095	0.53	0.017
56	400.3	0.47	0.28	0.007	2.05	0.069	0.47	0.013

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
37	0.22	1.07	0.327
38	0.19	1.02	0.322
39	0.21	0.63	0.176
40	0.17	0.94	0.312
41	0.24	0.99	0.369
42	0.20	0.86	0.271
43	0.19	1.04	0.319
44	---	---	---
45	0.18	1.03	0.335
46	0.20	1.05	0.323
47	0.20	0.88	0.287
48	0.18	0.88	0.320
49	0.22	1.05	0.328
50	0.17	1.13	0.343
51	0.19	0.98	0.346
52	0.20	0.85	0.269
53	0.15	0.91	0.303
54	0.18	0.91	0.296
55	0.20	0.95	0.316
56	0.16	0.91	0.279

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
63	415.7	0.53	0.40	0.007	2.29	0.097	0.53	0.014
64	427.5	0.53	0.27	0.006	2.61	0.083	0.53	0.016
65	401.7	0.55	0.32	0.006	2.62	0.082	0.61	0.017
66	404.3	0.54	0.31	0.008	2.57	0.083	0.59	0.016
67	353.3	0.65	0.33	0.007	2.92	0.080	0.71	0.020
68	413.8	0.55	0.30	0.006	2.53	0.090	0.59	0.017
69	377.2	0.61	0.29	0.005	2.37	0.097	0.65	0.016
70	446.9	0.53	0.33	0.005	2.61	0.078	0.68	0.015
71	416.0	0.58	0.29	0.004	2.60	0.064	0.57	0.019
72	375.0	0.58	0.38	0.005	2.54	0.063	0.60	0.016
73	412.2	0.52	0.30	0.005	2.43	0.052	0.56	0.015
74	418.8	0.48	0.26	0.005	2.46	0.082	0.56	0.015
75	381.6	0.52	0.26	0.004	2.15	0.110	0.49	0.014
76	408.5	0.53	0.26	0.006	2.34	0.071	0.56	0.015
77	428.6	0.46	0.26	0.006	2.46	0.087	0.51	0.014
78	426.8	0.49	0.28	0.008	2.52	0.072	0.58	0.015
79	443.1	0.49	0.27	0.006	2.49	0.083	0.54	0.012
80	412.5	0.49	0.29	0.005	2.66	0.050	0.61	0.018
81	405.6	0.52	0.30	0.006	2.26	0.082	0.55	0.016
82	462.4	0.43	0.25	0.005	2.39	0.071	0.52	0.009

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)

AFTER 13 WEEKS

MALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYMI
63	0.17	1.00	0.331
64	0.26	1.00	0.332
65	0.22	1.01	0.387
66	0.21	0.46	0.326
67	0.22	1.04	0.387
68	0.19	1.09	0.350
69	0.19	0.49	0.351
70	0.23	1.07	0.353
71	0.22	0.40	0.207
72	0.20	1.08	0.354
73	0.16	1.00	0.306
74	0.16	0.81	0.280
75	0.19	0.95	0.320
76	0.18	0.90	0.306
77	0.22	0.92	0.296
78	0.17	0.98	0.329
79	0.18	0.97	0.337
80	0.15	0.92	0.287
81	0.17	1.02	0.337
82	0.14	0.93	0.286

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
89	345.2	0.59	0.30	0.006	2.46	0.084	0.58	0.015
90	373.6	0.53	0.27	0.008	2.43	0.101	0.52	0.015
91	382.0	0.55	0.29	0.005	2.53	0.088	0.65	0.015
92	337.8	0.65	0.31	0.009	2.50	0.154	0.62	0.019
93	409.3	0.52	0.25	0.006	2.31	0.084	0.56	0.014
94	442.3	0.46	0.29	0.005	2.63	0.074	0.56	0.014
95	374.4	0.55	0.27	0.006	2.48	0.104	0.52	0.017
96	391.7	0.57	0.36	0.009	2.57	0.104	0.61	0.018
97	333.3	0.62	0.33	0.009	2.80	0.075	0.64	0.021
98	400.2	0.55	0.27	0.007	2.43	0.091	0.57	0.020
99	399.4	0.49	0.27	0.006	2.38	0.070	0.53	0.015
100	353.3	0.57	0.31	0.006	2.50	0.089	0.53	0.016
101	380.4	0.57	0.35	0.006	2.68	0.091	0.66	0.023
102	378.7	0.56	0.29	0.005	2.19	0.081	0.55	0.016
103	421.4	0.48	0.26	0.006	2.38	0.086	0.56	0.017
104	417.1	0.47	0.30	0.006	2.39	0.086	0.57	0.018
105	432.6	0.46	0.28	0.006	2.44	0.077	0.57	0.017
106	397.6	0.52	0.24	0.005	2.56	0.091	0.57	0.016
107	423.9	0.49	0.25	0.006	2.13	0.070	0.52	0.015
108	372.8	0.58	0.29	0.006	2.32	0.074	0.61	0.017

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYMI
89	0.17	1.17	0.338
90	0.21	1.05	0.314
91	0.19	0.96	0.351
92	0.23	1.04	0.378
93	0.18	0.85	0.308
94	0.19	0.89	0.300
95	0.20	0.99	0.309
96	0.20	0.98	0.336
97	0.23	1.10	0.364
98	0.17	0.90	0.301
99	0.19	0.95	0.323
100	0.18	1.06	0.370

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)
AFTER 13 WEEKS
MALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
101	0.18	0.97	0.341
102	0.17	0.94	0.320
103	0.17	0.85	0.295
104	0.19	0.94	0.337
105	0.17	0.79	0.233
106	0.17	0.98	0.341
107	0.17	0.85	0.331
108	0.18	0.98	0.358

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**ORGAN/BRAIN WEIGHT RATIOS (%)****AFTER 13 WEEKS****MALES****GROUP 1 (0 MG/KG/DAY)**

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
1	2.26	53.60	1.132	483.65	14.624	100.99	3.119	34.50
2	2.33	59.70	0.936	593.92	16.203	119.92	3.728	39.53
3	2.36	50.55	1.069	365.87	12.509	94.62	2.596	28.83
4	2.28	58.36	1.155	468.29	21.560	107.01	3.048	40.31
5	2.02	52.49	0.851	487.44	17.099	105.50	3.716	32.65
6	2.17	53.47	1.005	437.22	18.880	104.23	2.411	35.44
7	2.29	47.41	1.043	399.83	15.399	97.22	2.745	34.41
8	2.16	56.31	1.275	553.65	21.275	127.53	2.721	40.81
9	2.29	52.09	0.642	450.48	15.553	106.14	2.797	27.51
10	2.25	66.57	0.833	371.07	20.014	95.15	3.181	30.01
11	1.96	56.25	1.064	428.98	20.190	104.89	3.502	31.59
12	2.09	56.63	1.250	475.22	19.814	108.04	3.095	29.49
13	2.06	50.76	0.929	426.22	17.859	98.50	2.873	34.91
14	2.15	48.28	0.985	405.40	15.831	102.05	3.074	40.62
15	2.15	61.30	1.048	482.85	10.694	107.03	3.601	31.55
16	2.16	59.16	0.863	512.28	21.024	114.02	4.145	32.19
17	1.93	48.09	0.862	401.09	18.286	95.80	3.045	30.94
18	2.08	52.09	1.261	435.89	18.992	100.62	3.750	40.14
19	2.08	59.02	1.150	454.08	16.805	110.20	3.157	42.79
20	1.87	58.14	1.372	443.89	15.285	98.71	2.790	41.01

ANIMAL NUMBER	TESTES	EPIDIDYD
1	154.75	58.122
2	160.79	60.861
3	149.86	53.413
4	177.87	55.923
5	175.60	61.995
6	174.32	60.735
7	84.12	60.694
8	210.43	75.996
9	187.34	67.853
10	152.56	49.459
11	181.24	62.211
12	198.36	65.882
13	179.55	59.487
14	176.53	59.721
15	178.49	57.722
16	193.19	63.837
17	173.26	62.893
18	123.18	37.013
19	196.17	60.318
20	203.63	64.598

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
37	2.30	49.56	1.112	441.66	16.747	107.82	2.999	37.27
38	2.09	62.86	1.162	590.27	18.263	123.42	3.105	41.43
39	2.21	60.54	1.271	470.10	17.114	105.54	3.171	36.31
40	2.32	50.65	1.295	478.95	18.846	103.72	3.168	31.49
41	2.20	60.77	0.884	533.75	22.352	118.65	3.150	43.15
42	2.32	54.99	1.132	507.78	20.948	108.69	3.034	39.67
43	2.21	61.01	0.914	550.26	12.958	119.44	4.122	39.68
44	---	---	---	---	---	---	---	---
45	2.20	60.23	1.382	489.41	17.555	106.83	3.417	30.24
46	2.13	54.23	1.491	442.25	21.047	106.81	2.989	35.39
47	2.03	54.74	1.237	529.77	14.944	115.47	3.304	42.68
48	2.04	58.28	1.577	512.25	18.055	114.59	3.817	38.93

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)

AFTER 13 WEEKS

MALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
49	1.90	59.51	1.236	413.78	11.389	103.73	3.455	40.32
50	2.01	48.39	1.359	448.75	13.287	94.90	2.681	31.93
51	2.03	62.17	0.978	545.17	16.778	123.32	3.184	41.76
52	2.16	55.59	1.051	471.48	21.920	101.41	2.229	40.86
53	2.03	56.66	1.227	478.95	13.003	116.04	3.582	30.52
54	2.00	45.84	0.785	368.97	10.936	89.30	3.192	31.50
55	2.05	56.68	1.107	427.18	17.784	99.05	3.101	38.23
56	1.90	58.25	1.396	431.99	14.593	99.25	2.703	33.64

ANIMAL NUMBER	TESTES	EPIDIDYD
37	182.08	55.678
38	222.07	70.186
39	107.82	30.247
40	175.26	58.198
41	180.83	67.402
42	169.11	53.655
43	214.76	66.216
44	---	---
45	178.31	57.847
46	186.82	57.778
47	185.63	60.503
48	189.92	69.357
49	192.15	60.242
50	211.18	63.855
51	216.99	76.303
52	174.68	55.141
53	185.59	61.771
54	158.08	51.540
55	177.47	59.193
56	192.31	58.787

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
63	2.22	75.29	1.263	429.38	18.097	98.75	2.637	31.55
64	2.28	50.39	1.113	488.51	15.460	98.56	3.083	48.32
65	2.21	58.57	1.075	476.34	14.842	111.20	3.081	39.80
66	2.20	57.12	1.432	472.37	15.263	109.32	2.870	39.41
67	2.29	51.58	1.135	449.42	12.255	110.08	3.037	34.17
68	2.28	53.60	1.072	458.86	16.299	106.12	3.005	35.09
69	2.30	48.39	0.868	388.72	15.976	106.00	2.631	31.08
70	2.36	62.09	0.993	494.54	14.847	128.95	2.761	44.27
71	2.42	50.00	0.764	447.44	11.032	98.40	3.182	37.58
72	2.19	64.85	0.869	433.72	10.773	102.78	2.799	35.03
73	2.14	58.33	1.041	466.42	10.097	106.84	2.917	31.34
74	2.01	53.73	1.104	512.59	17.180	117.73	3.036	32.39
75	2.00	49.08	0.850	410.25	20.942	92.52	2.640	35.26
76	2.17	49.08	1.169	441.23	13.298	105.33	2.781	33.76
77	1.97	55.62	1.253	536.02	18.824	111.53	2.956	48.92
78	2.08	57.60	1.558	516.98	14.810	118.48	3.004	33.85
79	2.16	55.31	1.232	511.49	17.087	110.29	2.489	36.85
80	2.04	58.14	0.957	539.81	10.083	123.85	3.645	31.05
81	2.11	57.12	1.224	436.35	15.805	106.74	3.031	32.02
82	1.98	59.59	1.206	560.11	16.526	122.81	2.087	32.92

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)

AFTER 13 WEEKS

MALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	TESTES	EPIDIDYD
63	188.35	62.079
64	187.08	62.075
65	184.16	70.361
66	84.61	59.884
67	160.37	59.602
68	197.69	63.495
69	79.61	57.592
70	201.94	66.749
71	69.24	35.582
72	185.17	60.492
73	192.17	58.886
74	169.88	58.496
75	181.72	60.962
76	169.43	57.541
77	199.28	64.343
78	201.71	67.398
79	198.75	69.151
80	185.60	58.091
81	196.61	64.883
82	218.25	66.908

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
89	2.02	51.92	1.057	421.19	14.274	98.43	2.499	29.86
90	1.96	51.57	1.462	462.66	19.290	98.98	2.867	39.93
91	2.12	53.27	0.899	456.39	15.874	117.43	2.687	34.75
92	2.19	48.46	1.395	386.00	23.793	95.85	2.918	34.77
93	2.14	48.50	1.149	443.00	16.039	107.03	2.679	35.21
94	2.04	61.87	1.047	569.91	15.999	122.49	3.029	41.78
95	2.05	49.72	1.146	452.11	18.928	95.23	3.144	37.30
96	2.25	62.69	1.537	448.89	18.121	105.55	3.157	34.92
97	2.06	54.08	1.435	453.03	12.123	104.08	3.349	38.00
98	2.21	49.25	1.233	439.36	16.509	103.56	3.587	30.36
99	1.96	55.56	1.283	484.08	14.272	107.50	3.112	37.90
100	2.02	54.53	1.114	438.68	15.544	93.20	2.769	31.33
101	2.18	61.04	0.980	467.30	15.796	115.24	4.070	30.52
102	2.12	52.14	0.833	390.62	14.433	98.70	2.938	30.95
103	2.03	53.16	1.321	494.08	17.872	115.37	3.555	34.39
104	1.95	64.22	1.238	512.23	18.329	121.73	3.868	41.13
105	2.00	60.92	1.235	528.02	16.731	123.29	3.733	36.15
106	2.07	45.86	0.888	491.45	17.561	110.10	2.991	33.21
107	2.08	50.16	1.291	432.78	14.290	105.55	3.035	35.40
108	2.17	50.45	0.953	398.08	12.636	104.38	2.889	31.48

ANIMAL NUMBER	TESTES	EPIDIDYD
89	199.83	57.829
90	199.21	59.651
91	172.56	63.427
92	161.18	58.438
93	162.23	59.006
94	192.01	65.119
95	180.15	56.426
96	170.06	58.646
97	177.88	58.979
98	162.09	54.454
99	193.55	65.810
100	186.36	64.772

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)
AFTER 13 WEEKS
MALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	TESTES	EPIDIDYD
101	169.09	59.382
102	168.11	57.134
103	176.69	61.316
104	201.61	72.239
105	171.53	50.563
106	187.71	65.387
107	172.01	67.311
108	168.04	61.402

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN WEIGHTS (GRAM)
AFTER 13 WEEKS
FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
125	209.9	1.94	0.83	0.017	5.32	0.428	1.27	0.079
126	243.6	1.89	0.81	0.025	6.27	0.365	1.57	0.096
127	248.6	1.88	0.96	0.023	6.53	0.290	1.47	0.082
128	214.6	1.93	0.79	0.021	6.25	0.283	1.57	0.089
129	248.4	1.96	0.77	0.020	6.03	0.279	1.48	0.059
130	198.3	1.85	0.66	0.018	6.91	0.190	1.57	0.098
131	205.1	1.85	0.68	0.016	4.95	0.220	1.21	0.057
132	211.6	1.89	0.73	0.021	5.26	0.282	1.24	0.077
133	234.6	1.93	0.85	0.025	5.99	0.269	1.30	0.064
134	281.6	2.00	0.83	0.024	6.27	0.380	1.52	0.092
135	246.6	1.84	0.89	0.027	5.44	0.401	1.41	0.079
136	251.1	1.88	0.85	0.017	6.24	0.233	1.48	0.068
137	224.9	1.95	0.77	0.018	5.99	0.261	1.46	0.095
138	198.6	1.90	0.72	0.014	5.30	0.233	1.46	0.069
139	279.5	2.04	0.88	0.014	6.62	0.315	1.49	0.076
140	234.5	1.85	0.70	0.011	5.31	0.224	1.24	0.072
141	227.8	1.81	0.76	0.021	5.80	0.210	1.44	0.083
142	227.1	1.99	0.93	0.017	6.13	0.265	1.46	0.102
143	203.1	1.93	0.74	0.021	5.24	0.289	1.31	0.076
144	251.1	1.98	0.76	0.022	6.23	0.297	1.44	0.075

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
125	0.53	0.109	0.63
126	0.51	0.124	0.65
127	0.66	0.138	0.72
128	0.46	0.065	0.92
129	0.47	0.084	1.19
130	0.53	0.145	0.87
131	0.39	0.101	1.10
132	0.47	0.097	0.67
133	0.57	0.105	0.78
134	0.73	0.162	0.94
135	0.63	0.114	0.89
136	0.63	0.104	0.85
137	0.49	0.104	0.67
138	0.49	0.094	0.83
139	0.59	0.122	0.84
140	0.42	0.085	0.72
141	0.48	0.109	1.23
142	0.62	0.153	0.90
143	0.38	0.120	1.03
144	0.57	0.113	0.82

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
161	229.7	2.08	0.88	0.014	6.18	0.317	1.62	0.081
162	222.3	1.98	0.84	0.018	5.95	0.287	1.51	0.094
163	207.1	1.98	1.08	0.025	5.38	0.287	1.16	0.077
164	248.4	1.83	0.82	0.017	6.39	0.376	1.48	0.076
165	254.3	1.95	0.82	0.016	5.88	0.497	1.46	0.086
166	233.6	2.10	0.71	0.008	6.20	0.249	1.48	0.095
167	216.7	1.83	0.90	0.021	5.84	0.269	1.43	0.079
168	245.6	1.87	0.81	0.017	5.86	0.363	1.47	0.103
169	247.9	1.86	0.76	0.026	6.69	0.445	1.50	0.076
170	238.1	1.84	0.69	0.020	5.84	0.372	1.33	0.084
171	212.3	2.07	0.91	0.014	6.11	0.282	1.60	0.103
172	239.2	1.98	0.78	0.015	6.81	0.334	1.51	0.069

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN WEIGHTS (GRAM)
AFTER 13 WEEKS
FEMALES**

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
173	225.1	1.87	0.71	0.021	6.29	0.273	1.52	0.071
174	219.1	1.80	0.66	0.015	5.43	0.329	1.25	0.072
175	219.1	1.89	0.91	0.016	5.74	0.229	1.32	0.066
176	233.0	1.99	0.88	0.020	6.15	0.329	1.54	0.072
177	238.0	1.91	0.83	0.019	5.96	0.248	1.46	0.083
178	214.0	1.83	0.69	0.020	5.81	0.263	1.43	0.076
179	234.1	2.01	0.81	0.021	6.04	0.328	1.58	0.084
180	265.1	1.99	0.95	0.015	6.61	0.350	1.49	0.091

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
161	0.54	0.125	0.72
162	0.44	0.138	0.79
163	0.56	0.093	0.67
164	0.51	0.114	0.60
165	0.59	0.127	0.81
166	0.62	0.111	1.01
167	0.46	0.125	0.83
168	0.73	0.165	0.68
169	0.60	0.112	0.90
170	0.58	0.098	0.71
171	0.53	0.149	1.14
172	0.52	0.125	0.83
173	0.49	0.129	1.05
174	0.43	0.090	0.73
175	0.61	0.096	0.95
176	0.47	0.131	0.85
177	0.67	0.142	1.16
178	0.52	0.118	0.78
179	0.49	0.098	0.77
180	0.74	0.119	0.99

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
187	240.9	1.88	0.95	0.020	6.79	0.304	1.48	0.093
188	220.6	1.79	0.74	0.015	5.67	0.256	1.38	0.070
189	233.8	1.86	0.74	0.018	5.89	0.255	1.39	0.086
190	213.6	1.94	0.65	0.014	5.25	0.323	1.32	0.061
191	254.3	1.79	0.76	0.019	5.70	0.278	1.40	0.072
192	225.3	1.79	0.89	0.014	5.55	0.230	1.45	0.064
193	247.0	2.01	0.89	0.017	6.25	0.455	1.57	0.091
194	192.2	1.88	1.08	0.019	5.36	0.266	1.31	0.090
195	219.9	1.89	0.77	0.016	5.80	0.308	1.52	0.081
196	226.8	1.95	0.86	0.022	7.07	0.314	1.91	0.089
197	234.6	2.05	0.67	0.020	5.79	0.278	1.54	0.063
198	206.1	1.88	0.76	0.016	5.53	0.223	1.31	0.071
199	257.0	1.89	0.84	0.022	6.85	0.301	1.68	0.083
200	240.8	2.02	0.83	0.020	6.80	0.422	1.73	0.105
201	224.5	1.81	0.82	0.023	5.58	0.274	1.43	0.065
202	198.3	1.99	0.66	0.018	5.05	0.312	1.29	0.063
203	213.4	2.14	0.80	0.014	6.06	0.190	1.61	0.087
204	194.1	1.88	0.63	0.016	5.20	0.287	1.42	0.064
205	208.1	1.86	0.81	0.023	5.20	0.337	1.38	0.067
206	248.2	2.01	0.88	0.018	6.59	0.351	1.63	0.082

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN WEIGHTS (GRAM)
AFTER 13 WEEKS
FEMALES**

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
187	0.62	0.155	1.04
188	0.53	0.097	0.65
189	0.57	0.109	0.70
190	0.41	0.095	1.02
191	0.42	0.107	0.57
192	0.37	0.065	0.69
193	0.47	0.136	0.64
194	0.47	0.112	1.20
195	0.54	0.103	0.78
196	0.75	0.134	0.92
197	0.51	0.135	1.23
198	0.44	0.083	0.80
199	0.72	0.108	1.47
200	0.55	0.150	0.84
201	0.49	0.072	1.07
202	0.69	0.081	0.69
203	0.57	0.139	0.75
204	0.41	0.079	0.83
205	0.50	0.112	0.93
206	0.61	0.168	0.75

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
213	230.1	1.97	0.79	0.016	6.57	0.341	1.61	0.068
214	222.9	1.86	0.79	0.024	6.08	0.305	1.45	0.077
215	244.1	1.93	0.96	0.015	6.30	0.264	1.54	0.096
216	231.6	1.98	0.82	0.016	6.72	0.356	1.50	0.096
217	247.2	1.80	0.71	0.022	6.23	0.260	1.41	0.070
218	210.1	1.89	0.76	0.014	5.05	0.224	1.32	0.076
219	238.6	1.97	0.79	0.014	7.37	0.232	1.52	0.086
220	210.7	1.81	0.75	0.016	4.94	0.216	1.35	0.074
221	251.6	1.84	0.84	0.017	6.95	0.376	1.80	0.079
222	207.4	1.84	0.73	0.017	5.19	0.211	1.24	0.063
223	256.5	1.98	0.87	0.029	7.06	0.356	1.48	0.083
224	261.3	1.97	0.83	0.017	6.80	0.405	1.58	0.078
225	192.7	1.84	0.82	0.017	5.79	0.296	1.43	0.087
226	216.5	1.80	0.78	0.022	6.03	0.197	1.28	0.092
227	210.8	1.78	0.68	0.019	6.67	0.202	1.44	0.084
228	213.6	1.99	0.77	0.011	5.61	0.276	1.37	0.077
229	223.5	1.98	0.92	0.018	5.95	0.303	1.49	0.080
230	235.9	2.02	0.83	0.020	6.78	0.367	1.54	0.072
231	222.0	1.81	0.63	0.010	6.40	0.261	1.38	0.089
232	257.8	1.94	0.86	0.014	7.24	0.354	1.72	0.095

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
213	0.55	0.127	0.73
214	0.54	0.133	0.99
215	0.75	0.186	0.71
216	0.51	0.152	0.62
217	0.57	0.136	0.89
218	0.44	0.094	0.99
219	0.62	0.146	0.96
220	0.49	0.104	0.96
221	0.54	0.134	0.73
222	0.42	0.103	0.56
223	0.49	0.105	1.27
224	0.69	0.165	0.77

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN WEIGHTS (GRAM)
AFTER 13 WEEKS
FEMALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
225	0.42	0.090	0.74
226	0.52	0.106	0.84
227	0.60	0.089	1.24
228	0.46	0.089	0.93
229	0.47	0.092	0.78
230	0.62	0.160	0.94
231	0.48	0.125	0.84
232	0.72	0.193	1.21

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)
AFTER 13 WEEKS
FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
125	209.9	0.92	0.40	0.008	2.53	0.204	0.60	0.038
126	243.6	0.78	0.33	0.010	2.57	0.150	0.64	0.039
127	248.6	0.76	0.39	0.009	2.62	0.117	0.59	0.033
128	214.6	0.90	0.37	0.010	2.91	0.132	0.73	0.042
129	248.4	0.79	0.31	0.008	2.43	0.112	0.60	0.024
130	198.3	0.93	0.43	0.009	3.48	0.096	0.79	0.049
131	205.1	0.90	0.33	0.008	2.41	0.107	0.59	0.028
132	211.6	0.89	0.35	0.010	2.48	0.133	0.59	0.036
133	234.6	0.82	0.36	0.011	2.55	0.115	0.55	0.027
134	281.6	0.71	0.30	0.009	2.23	0.135	0.54	0.033
135	246.6	0.75	0.36	0.011	2.20	0.162	0.57	0.032
136	251.1	0.75	0.34	0.007	2.49	0.093	0.59	0.027
137	224.9	0.87	0.34	0.008	2.66	0.116	0.65	0.042
138	198.6	0.96	0.36	0.007	2.67	0.117	0.73	0.035
139	279.5	0.73	0.32	0.005	2.37	0.113	0.53	0.027
140	234.5	0.79	0.30	0.005	2.26	0.095	0.53	0.031
141	227.8	0.79	0.34	0.009	2.55	0.092	0.63	0.036
142	227.1	0.88	0.41	0.008	2.70	0.116	0.64	0.045
143	203.1	0.95	0.36	0.010	2.58	0.142	0.65	0.038
144	251.1	0.79	0.30	0.009	2.48	0.118	0.57	0.030

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
125	0.25	0.052	0.30
126	0.21	0.051	0.27
127	0.27	0.056	0.29
128	0.21	0.030	0.43
129	0.19	0.034	0.48
130	0.27	0.073	0.44
131	0.19	0.049	0.54
132	0.22	0.046	0.32
133	0.24	0.045	0.33
134	0.26	0.057	0.34
135	0.25	0.046	0.36
136	0.25	0.041	0.34
137	0.22	0.046	0.30
138	0.25	0.047	0.42
139	0.21	0.044	0.30
140	0.18	0.036	0.31
141	0.21	0.048	0.54
142	0.27	0.067	0.40
143	0.19	0.059	0.51
144	0.23	0.045	0.33

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
161	229.7	0.90	0.38	0.006	2.69	0.138	0.71	0.035
162	222.3	0.89	0.38	0.008	2.68	0.129	0.68	0.042
163	207.1	0.96	0.52	0.012	2.60	0.139	0.56	0.037
164	248.4	0.74	0.33	0.007	2.57	0.151	0.59	0.031
165	254.3	0.77	0.32	0.006	2.31	0.195	0.58	0.034
166	233.6	0.90	0.30	0.004	2.66	0.107	0.64	0.041
167	216.7	0.84	0.42	0.010	2.70	0.124	0.66	0.037
168	245.6	0.76	0.33	0.007	2.39	0.148	0.60	0.042
169	247.9	0.75	0.31	0.010	2.70	0.179	0.60	0.031
170	238.1	0.77	0.29	0.009	2.45	0.156	0.56	0.035
171	212.3	0.98	0.43	0.007	2.88	0.133	0.75	0.048
172	239.2	0.83	0.32	0.006	2.85	0.139	0.63	0.029

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)
AFTER 13 WEEKS
FEMALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
173	225.1	0.83	0.32	0.009	2.79	0.121	0.68	0.032
174	219.1	0.82	0.30	0.007	2.48	0.150	0.57	0.033
175	219.1	0.86	0.42	0.007	2.62	0.104	0.60	0.030
176	233.0	0.86	0.38	0.009	2.64	0.141	0.66	0.031
177	238.0	0.80	0.35	0.008	2.51	0.104	0.61	0.035
178	214.0	0.85	0.32	0.009	2.71	0.123	0.67	0.035
179	234.1	0.86	0.35	0.009	2.58	0.140	0.68	0.036
180	265.1	0.75	0.36	0.006	2.49	0.132	0.56	0.034

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
161	0.24	0.054	0.31
162	0.20	0.062	0.35
163	0.27	0.045	0.33
164	0.21	0.046	0.24
165	0.23	0.050	0.32
166	0.27	0.047	0.43
167	0.21	0.057	0.38
168	0.30	0.067	0.28
169	0.24	0.045	0.36
170	0.25	0.041	0.30
171	0.25	0.070	0.54
172	0.22	0.052	0.35
173	0.22	0.057	0.46
174	0.20	0.041	0.34
175	0.28	0.044	0.43
176	0.20	0.056	0.36
177	0.28	0.060	0.49
178	0.24	0.055	0.36
179	0.21	0.042	0.33
180	0.28	0.045	0.37

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
187	240.9	0.78	0.39	0.008	2.82	0.126	0.62	0.039
188	220.6	0.81	0.34	0.007	2.57	0.116	0.62	0.032
189	233.8	0.80	0.32	0.008	2.52	0.109	0.60	0.037
190	213.6	0.91	0.30	0.007	2.46	0.151	0.62	0.028
191	254.3	0.70	0.30	0.007	2.24	0.109	0.55	0.028
192	225.3	0.79	0.40	0.006	2.47	0.102	0.64	0.028
193	247.0	0.81	0.36	0.007	2.53	0.184	0.63	0.037
194	192.2	0.98	0.56	0.010	2.79	0.138	0.68	0.047
195	219.9	0.86	0.35	0.007	2.64	0.140	0.69	0.037
196	226.8	0.86	0.38	0.010	3.12	0.138	0.84	0.039
197	234.6	0.87	0.29	0.008	2.47	0.119	0.66	0.027
198	206.1	0.91	0.37	0.008	2.68	0.108	0.64	0.034
199	257.0	0.74	0.33	0.009	2.66	0.117	0.65	0.032
200	240.8	0.84	0.35	0.008	2.82	0.175	0.72	0.044
201	224.5	0.81	0.36	0.010	2.48	0.122	0.64	0.029
202	198.3	1.00	0.33	0.009	2.55	0.157	0.65	0.032
203	213.4	1.00	0.37	0.007	2.84	0.089	0.76	0.041
204	194.1	0.97	0.33	0.008	2.68	0.148	0.73	0.033
205	208.1	0.89	0.39	0.011	2.50	0.162	0.66	0.032
206	248.2	0.81	0.36	0.007	2.66	0.141	0.66	0.033

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)

AFTER 13 WEEKS

FEMALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
187	0.26	0.064	0.43
188	0.24	0.044	0.30
189	0.24	0.047	0.30
190	0.19	0.044	0.48
191	0.16	0.042	0.23
192	0.16	0.029	0.31
193	0.19	0.055	0.26
194	0.25	0.058	0.62
195	0.25	0.047	0.35
196	0.33	0.059	0.41
197	0.22	0.058	0.53
198	0.21	0.041	0.39
199	0.28	0.042	0.57
200	0.23	0.062	0.35
201	0.22	0.032	0.48
202	0.35	0.041	0.35
203	0.27	0.065	0.35
204	0.21	0.041	0.43
205	0.24	0.054	0.45
206	0.24	0.068	0.30

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
213	230.1	0.86	0.34	0.007	2.86	0.148	0.70	0.030
214	222.9	0.84	0.35	0.011	2.73	0.137	0.65	0.035
215	244.1	0.79	0.39	0.006	2.58	0.108	0.63	0.039
216	231.6	0.86	0.36	0.007	2.90	0.154	0.65	0.041
217	247.2	0.73	0.29	0.009	2.52	0.105	0.57	0.028
218	210.1	0.90	0.36	0.006	2.40	0.107	0.63	0.036
219	238.6	0.82	0.33	0.006	3.09	0.097	0.64	0.036
220	210.7	0.86	0.36	0.008	2.34	0.103	0.64	0.035
221	251.6	0.73	0.33	0.007	2.76	0.149	0.72	0.032
222	207.4	0.89	0.35	0.008	2.50	0.102	0.60	0.030
223	256.5	0.77	0.34	0.011	2.75	0.139	0.58	0.032
224	261.3	0.75	0.32	0.007	2.60	0.155	0.61	0.030
225	192.7	0.95	0.43	0.009	3.00	0.154	0.74	0.045
226	216.5	0.83	0.36	0.010	2.78	0.091	0.59	0.043
227	210.8	0.84	0.32	0.009	3.16	0.096	0.68	0.040
228	213.6	0.93	0.36	0.005	2.63	0.129	0.64	0.036
229	223.5	0.89	0.41	0.008	2.66	0.136	0.67	0.036
230	235.9	0.86	0.35	0.009	2.88	0.156	0.65	0.030
231	222.0	0.81	0.28	0.004	2.89	0.117	0.62	0.040
232	257.8	0.75	0.33	0.005	2.81	0.137	0.67	0.037

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
213	0.24	0.055	0.32
214	0.24	0.060	0.45
215	0.31	0.076	0.29
216	0.22	0.066	0.27
217	0.23	0.055	0.36
218	0.21	0.045	0.47
219	0.26	0.061	0.40
220	0.23	0.049	0.45
221	0.22	0.053	0.29
222	0.20	0.050	0.27
223	0.19	0.041	0.49
224	0.26	0.063	0.30

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)
AFTER 13 WEEKS
FEMALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
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225	0.22	0.047	0.38
226	0.24	0.049	0.39
227	0.28	0.042	0.59
228	0.22	0.042	0.43
229	0.21	0.041	0.35
230	0.26	0.068	0.40
231	0.22	0.056	0.38
232	0.28	0.075	0.47

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)
AFTER 13 WEEKS
FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
125	1.94	43.09	0.886	274.50	22.095	65.34	4.097	27.12
126	1.89	42.99	1.321	331.03	19.294	82.94	5.068	27.17
127	1.88	50.90	1.246	346.87	15.437	78.36	4.341	35.27
128	1.93	41.10	1.093	323.97	14.686	81.60	4.631	23.72
129	1.96	39.54	1.028	308.09	14.272	75.67	2.990	23.97
130	1.85	46.42	0.993	373.31	10.267	84.71	5.304	28.79
131	1.85	36.88	0.890	267.64	11.906	65.72	3.068	20.92
132	1.89	38.57	1.099	277.75	14.919	65.62	4.048	25.01
133	1.93	44.39	1.292	311.10	13.957	67.40	3.347	29.83
134	2.00	41.74	1.206	314.07	19.026	76.34	4.632	36.71
135	1.84	48.46	1.467	295.08	21.749	76.75	4.285	34.04
136	1.88	45.28	0.899	332.40	12.417	78.57	3.619	33.58
137	1.95	39.75	0.946	307.69	13.402	74.85	4.873	25.17
138	1.90	37.61	0.746	278.42	12.233	76.49	3.611	25.94
139	2.04	43.21	0.675	323.73	15.400	73.12	3.710	28.92
140	1.85	38.06	0.591	286.81	12.091	67.10	3.884	22.54
141	1.81	42.23	1.154	321.10	11.645	79.49	4.598	26.35
142	1.99	46.62	0.876	307.94	13.279	73.17	5.141	31.12
143	1.93	38.14	1.084	271.08	14.915	67.87	3.951	19.42
144	1.98	38.53	1.134	314.73	15.018	72.50	3.765	28.96

ANIMAL NUMBER	UTERUS	UTERUS
125	5.599	32.38
126	6.532	34.52
127	7.344	38.25
128	3.353	47.57
129	4.290	60.59
130	7.816	47.06
131	5.490	59.58
132	5.142	35.34
133	5.454	40.68
134	8.105	47.33
135	6.180	48.48
136	5.533	45.10
137	5.327	34.35
138	4.934	43.70
139	5.988	41.18
140	4.602	39.08
141	6.015	67.87
142	7.666	45.19
143	6.177	53.37
144	5.711	41.23

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
161	2.08	42.31	0.686	297.88	15.285	78.04	3.909	26.17
162	1.98	42.22	0.926	300.71	14.489	76.51	4.760	22.06
163	1.98	54.37	1.249	271.79	14.511	58.53	3.901	28.44
164	1.83	44.88	0.926	349.56	20.581	80.82	4.154	28.04
165	1.95	41.95	0.828	301.92	25.519	75.12	4.433	30.24
166	2.10	33.73	0.404	296.12	11.880	70.79	4.544	29.62
167	1.83	49.51	1.143	320.01	14.712	78.40	4.341	24.97
168	1.87	43.38	0.916	312.88	19.406	78.45	5.522	39.20
169	1.86	41.07	1.386	359.86	23.907	80.55	4.085	32.22
170	1.84	37.39	1.108	318.40	20.248	72.33	4.583	31.85
171	2.07	43.74	0.674	295.33	13.635	77.30	4.966	25.56
172	1.98	39.19	0.748	343.42	16.813	76.34	3.494	25.98

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)
AFTER 13 WEEKS
FEMALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
173	1.87	38.08	1.110	335.38	14.571	81.26	3.786	26.02
174	1.80	36.73	0.829	302.23	18.309	69.77	3.978	24.19
175	1.89	48.35	0.847	303.48	12.100	69.50	3.493	32.50
176	1.99	44.26	0.997	308.42	16.490	77.27	3.588	23.57
177	1.91	43.39	0.992	311.84	12.979	76.23	4.327	34.84
178	1.83	37.73	1.100	317.64	14.396	78.19	4.135	28.32
179	2.01	40.50	1.051	300.92	16.363	78.99	4.166	24.55
180	1.99	47.84	0.773	332.47	17.582	74.91	4.594	36.97

ANIMAL NUMBER	UTERUS	UTERUS
161	6.030	34.80
162	6.966	39.76
163	4.684	34.05
164	6.222	32.83
165	6.524	41.56
166	5.274	48.37
167	6.824	45.48
168	8.826	36.30
169	6.029	48.17
170	5.366	38.87
171	7.193	55.13
172	6.301	41.93
173	6.878	55.82
174	5.021	40.82
175	5.067	49.96
176	6.586	42.41
177	7.424	60.61
178	6.453	42.62
179	4.902	38.43
180	5.990	49.65

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
187	1.88	50.52	1.063	361.43	16.170	78.91	4.942	32.75
188	1.79	41.50	0.812	316.38	14.286	76.75	3.888	29.69
189	1.86	39.72	0.981	316.27	13.717	74.80	4.615	30.58
190	1.94	33.38	0.744	270.11	16.640	67.80	3.116	21.19
191	1.79	42.33	1.061	318.11	15.516	77.87	4.013	23.18
192	1.79	49.86	0.808	310.88	12.867	81.00	3.593	20.48
193	2.01	44.38	0.857	310.59	22.612	77.88	4.509	23.46
194	1.88	57.29	1.018	285.39	14.150	69.86	4.798	25.12
195	1.89	40.59	0.828	306.60	16.314	80.43	4.293	28.78
196	1.95	44.36	1.148	363.07	16.104	98.14	4.553	38.69
197	2.05	32.94	0.972	282.90	13.596	75.29	3.089	24.74
198	1.88	40.43	0.829	294.44	11.888	70.04	3.769	23.40
199	1.89	44.26	1.157	361.70	15.909	88.66	4.369	38.05
200	2.02	41.28	1.004	336.76	20.913	85.44	5.209	27.18
201	1.81	45.00	1.256	307.57	15.101	78.62	3.593	26.80
202	1.99	33.00	0.886	254.14	15.688	65.05	3.189	34.91
203	2.14	37.15	0.650	283.24	8.858	75.39	4.051	26.80
204	1.88	33.73	0.833	277.13	15.282	75.70	3.415	21.94
205	1.86	43.41	1.237	280.19	18.169	74.44	3.625	27.01
206	2.01	43.92	0.883	328.01	17.469	81.26	4.105	30.12

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)

AFTER 13 WEEKS

FEMALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	UTERUS	UTERUS
187	8.221	55.20
188	5.424	36.48
189	5.864	37.41
190	4.890	52.42
191	5.968	31.99
192	3.666	38.54
193	6.741	32.05
194	5.952	63.76
195	5.444	41.16
196	6.896	47.43
197	6.601	60.30
198	4.448	42.39
199	5.695	77.71
200	7.429	41.77
201	3.976	59.10
202	4.058	34.76
203	6.515	35.12
204	4.196	44.27
205	6.018	50.33
206	8.368	37.18

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
213	1.97	40.03	0.823	332.90	17.263	81.75	3.464	27.63
214	1.86	42.33	1.312	326.05	16.360	77.86	4.134	28.91
215	1.93	49.79	0.756	326.38	13.652	79.85	4.975	38.98
216	1.98	41.54	0.806	338.65	17.954	75.58	4.822	25.55
217	1.80	39.21	1.192	345.20	14.418	78.01	3.868	31.86
218	1.89	40.35	0.721	267.20	11.840	69.67	4.030	23.02
219	1.97	40.42	0.707	374.89	11.782	77.31	4.358	31.75
220	1.81	41.50	0.902	272.74	11.959	74.72	4.083	27.20
221	1.84	45.36	0.920	376.98	20.384	97.71	4.305	29.45
222	1.84	39.74	0.918	282.20	11.468	67.37	3.400	22.75
223	1.98	44.07	1.443	356.10	17.942	74.82	4.179	24.71
224	1.97	42.44	0.875	345.96	20.571	80.44	3.949	34.92
225	1.84	44.67	0.902	314.61	16.103	77.48	4.741	22.60
226	1.80	43.25	1.246	335.79	10.954	71.46	5.150	29.18
227	1.78	38.38	1.062	375.54	11.377	80.83	4.737	33.61
228	1.99	38.94	0.557	282.25	13.893	68.77	3.888	23.35
229	1.98	46.38	0.886	300.66	15.322	75.14	4.045	23.62
230	2.02	40.87	0.996	336.00	18.176	76.35	3.562	30.58
231	1.81	34.98	0.532	354.30	14.412	76.26	4.917	26.52
232	1.94	44.34	0.700	373.26	18.266	88.62	4.883	37.27

ANIMAL NUMBER	UTERUS	UTERUS
213	6.408	37.03
214	7.146	53.37
215	9.648	36.77
216	7.661	31.15
217	7.554	49.30
218	4.963	52.56
219	7.431	48.75
220	5.720	52.81
221	7.289	39.46
222	5.596	30.37
223	5.294	63.81
224	8.405	39.24

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)
AFTER 13 WEEKS
FEMALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	UTERUS	UTERUS
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225	4.874	39.98
226	5.901	46.63
227	5.033	69.63
228	4.473	46.62
229	4.674	39.37
230	7.902	46.74
231	6.895	46.23
232	9.965	62.19

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN WEIGHTS (GRAM)
AFTER 17 WEEKS
MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
21	452.8	2.09	0.97	0.025	10.09	0.324	1.90	0.056
22	406.1	2.02	0.97	0.028	10.26	0.266	2.13	0.063
23	452.1	2.13	1.09	0.019	10.58	0.284	2.34	0.059
24	556.0	2.11	1.20	0.032	12.78	0.227	2.66	0.066
25	436.1	2.14	1.01	0.029	11.03	0.303	2.61	0.077
26	459.9	2.12	1.04	0.015	10.97	0.259	2.41	0.058
27	384.3	1.90	0.91	0.025	8.53	0.277	1.96	0.061
28	422.2	1.97	1.07	0.016	9.18	0.182	1.98	0.060
29	412.4	2.10	1.02	0.027	9.43	0.230	2.18	0.063
30	413.3	1.99	0.95	0.021	10.25	0.336	2.09	0.071

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
21	1.06	3.94	1.423
22	0.72	3.94	1.380
23	0.86	4.30	1.519
24	0.89	4.40	1.472
25	0.77	4.28	1.466
26	0.77	3.84	1.332
27	0.67	3.60	1.210
28	0.68	3.62	1.176
29	0.59	4.08	1.457
30	0.69	3.86	1.266

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
109	473.4	2.09	1.06	0.023	9.94	0.201	2.38	0.068
110	389.8	2.08	1.05	0.023	9.27	0.140	2.41	0.058
111	418.1	2.12	1.06	0.022	8.63	0.282	2.13	0.063
112	439.6	2.02	0.96	0.020	9.55	0.319	2.01	0.053
113	477.6	2.09	1.08	0.026	11.07	0.330	2.62	0.060
114	417.5	2.15	1.13	0.024	9.56	0.230	2.26	0.071
115	467.3	2.14	1.07	0.028	10.99	0.193	2.36	0.076
116	418.1	2.09	1.00	0.021	9.53	0.290	2.28	0.052
117	438.2	2.14	1.07	0.029	10.65	0.307	2.31	0.074
118	408.3	2.15	0.91	0.023	9.84	0.219	2.16	0.058

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
109	0.88	3.77	1.425
110	0.66	4.17	1.482
111	0.63	3.72	1.339
112	0.58	3.91	1.371
113	0.70	4.31	1.425
114	0.77	4.04	1.330
115	0.94	4.27	1.519
116	0.73	4.12	1.422
117	0.60	3.93	1.329
118	0.74	3.98	1.471

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)

AFTER 17 WEEKS

MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
21	452.8	0.46	0.21	0.006	2.23	0.071	0.42	0.012
22	406.1	0.50	0.24	0.007	2.53	0.065	0.53	0.016
23	452.1	0.47	0.24	0.004	2.34	0.063	0.52	0.013
24	556.0	0.38	0.22	0.006	2.30	0.041	0.48	0.012
25	436.1	0.49	0.23	0.007	2.53	0.069	0.60	0.018
26	459.9	0.46	0.23	0.003	2.38	0.056	0.52	0.013
27	384.3	0.49	0.24	0.006	2.22	0.072	0.51	0.016
28	422.2	0.47	0.25	0.004	2.18	0.043	0.47	0.014
29	412.4	0.51	0.25	0.006	2.29	0.056	0.53	0.015
30	413.3	0.48	0.23	0.005	2.48	0.081	0.50	0.017

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
21	0.23	0.87	0.314
22	0.18	0.97	0.340
23	0.19	0.95	0.336
24	0.16	0.79	0.265
25	0.18	0.98	0.336
26	0.17	0.83	0.290
27	0.17	0.94	0.315
28	0.16	0.86	0.278
29	0.14	0.99	0.353
30	0.17	0.93	0.306

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
109	473.4	0.44	0.22	0.005	2.10	0.042	0.50	0.014
110	389.8	0.53	0.27	0.006	2.38	0.036	0.62	0.015
111	418.1	0.51	0.25	0.005	2.06	0.068	0.51	0.015
112	439.6	0.46	0.22	0.005	2.17	0.073	0.46	0.012
113	477.6	0.44	0.23	0.005	2.32	0.069	0.55	0.012
114	417.5	0.52	0.27	0.006	2.29	0.055	0.54	0.017
115	467.3	0.46	0.23	0.006	2.35	0.041	0.50	0.016
116	418.1	0.50	0.24	0.005	2.28	0.069	0.55	0.013
117	438.2	0.49	0.25	0.007	2.43	0.070	0.53	0.017
118	408.3	0.53	0.22	0.006	2.41	0.054	0.53	0.014

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
109	0.19	0.80	0.301
110	0.17	1.07	0.380
111	0.15	0.89	0.320
112	0.13	0.89	0.312
113	0.15	0.90	0.298
114	0.19	0.97	0.319
115	0.20	0.91	0.325
116	0.17	0.98	0.340
117	0.14	0.90	0.303
118	0.18	0.97	0.360

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)

AFTER 17 WEEKS

MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
21	2.09	46.21	1.215	481.77	15.454	90.77	2.666	50.69
22	2.02	47.77	1.405	506.94	13.137	105.43	3.134	35.46
23	2.13	51.13	0.893	496.55	13.322	109.65	2.788	40.32
24	2.11	56.90	1.504	605.35	10.770	126.01	3.137	42.33
25	2.14	47.15	1.360	514.23	14.110	121.53	3.597	35.77
26	2.12	48.95	0.713	518.16	12.245	113.72	2.737	36.40
27	1.90	47.78	1.305	450.07	14.618	103.51	3.219	35.24
28	1.97	54.53	0.821	467.06	9.241	100.78	3.068	34.34
29	2.10	48.87	1.268	449.78	10.959	104.09	3.022	28.28
30	1.99	47.86	1.043	514.89	16.894	104.79	3.563	34.62

ANIMAL NUMBER	TESTES	EPIDIDYD
21	188.06	67.938
22	194.61	68.192
23	201.96	71.306
24	208.37	69.706
25	199.61	68.376
26	181.21	62.950
27	190.05	63.809
28	184.12	59.801
29	194.42	69.486
30	193.94	63.596

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
109	2.09	50.77	1.124	476.36	9.637	114.00	3.273	42.32
110	2.08	50.42	1.108	446.88	6.743	116.03	2.818	32.04
111	2.12	49.84	1.029	406.01	13.288	100.29	2.979	29.74
112	2.02	47.54	0.999	472.57	15.773	99.24	2.602	28.74
113	2.09	51.43	1.220	529.48	15.796	125.52	2.854	33.62
114	2.15	52.48	1.107	443.95	10.693	104.93	3.297	35.87
115	2.14	49.86	1.296	513.70	9.022	110.23	3.566	43.75
116	2.09	48.12	1.006	456.75	13.902	109.53	2.512	34.95
117	2.14	50.24	1.353	497.69	14.332	108.19	3.443	27.89
118	2.15	42.36	1.070	457.47	10.191	100.40	2.714	34.18

ANIMAL NUMBER	TESTES	EPIDIDYD
109	180.60	68.271
110	201.17	71.441
111	175.12	62.997
112	193.58	67.807
113	206.21	68.156
114	187.84	61.767
115	199.44	70.978
116	197.32	68.176
117	183.78	62.090
118	184.92	68.393

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN WEIGHTS (GRAM)
AFTER 17 WEEKS
FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
145	210.1	1.85	0.62	0.020	6.05	0.240	1.18	0.059
146	234.8	1.87	0.62	0.023	6.09	0.258	1.35	0.065
147	258.7	2.01	0.78	0.030	7.33	0.323	1.56	0.079
148	266.6	2.04	0.79	0.018	7.14	0.242	1.56	0.071
149	252.2	1.78	0.76	0.033	6.86	0.307	1.44	0.098
150	254.9	1.83	0.66	0.018	6.18	0.232	1.44	0.089
151	276.7	2.02	0.80	0.027	7.88	0.344	1.59	0.074
152	226.5	1.89	0.61	0.014	6.33	0.246	1.33	0.082
153	301.3	1.97	0.76	0.021	7.48	0.243	1.47	0.094
154	282.8	1.95	0.80	0.024	8.83	0.247	1.71	0.086

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
145	0.39	0.093	0.84
146	0.58	0.115	1.53
147	0.53	0.105	1.14
148	0.52	0.135	0.70
149	0.51	0.098	1.02
150	0.52	0.082	0.91
151	0.53	0.108	1.13
152	0.41	0.096	0.61
153	0.57	0.113	0.86
154	0.63	0.100	1.35

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
233	254.9	1.99	0.71	0.019	6.94	0.207	1.54	0.080
234	267.1	1.95	0.91	0.024	7.87	0.251	1.61	0.097
235	235.9	1.82	0.71	0.023	6.83	0.226	1.47	0.069
236	222.7	1.91	0.67	0.015	5.97	0.210	1.31	0.086
237	265.6	2.13	0.82	0.021	7.69	0.212	1.67	0.105
238	249.3	1.90	0.71	0.022	6.95	0.299	1.53	0.080
239	230.4	1.86	0.67	0.017	6.76	0.183	1.59	0.080
240	290.7	1.94	0.88	0.017	8.18	0.401	1.60	0.081
241	264.7	2.09	0.73	0.021	7.83	0.314	1.62	0.090
242	254.0	1.89	0.80	0.028	7.39	0.281	1.60	0.068

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
233	0.44	0.092	1.24
234	0.49	0.071	1.06
235	0.48	0.087	0.81
236	0.40	0.774	0.11
237	0.47	1.054	0.15
238	0.49	0.097	0.90
239	0.50	0.133	0.92
240	0.67	0.138	0.96
241	0.40	0.132	0.83
242	0.62	0.126	0.73

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)

AFTER 17 WEEKS

FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
145	210.1	0.88	0.30	0.009	2.88	0.114	0.56	0.028
146	234.8	0.79	0.27	0.010	2.60	0.110	0.58	0.028
147	258.7	0.78	0.30	0.012	2.83	0.125	0.60	0.031
148	266.6	0.77	0.30	0.007	2.68	0.091	0.59	0.027
149	252.2	0.70	0.30	0.013	2.72	0.122	0.57	0.039
150	254.9	0.72	0.26	0.007	2.42	0.091	0.56	0.035
151	276.7	0.73	0.29	0.010	2.85	0.124	0.57	0.027
152	226.5	0.83	0.27	0.006	2.80	0.109	0.59	0.036
153	301.3	0.65	0.25	0.007	2.48	0.081	0.49	0.031
154	282.8	0.69	0.28	0.008	3.12	0.087	0.60	0.030

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
145	0.18	0.044	0.40
146	0.25	0.049	0.65
147	0.21	0.041	0.44
148	0.19	0.050	0.26
149	0.20	0.039	0.40
150	0.20	0.032	0.36
151	0.19	0.039	0.41
152	0.18	0.043	0.27
153	0.19	0.038	0.29
154	0.22	0.036	0.48

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
233	254.9	0.78	0.28	0.008	2.72	0.081	0.60	0.032
234	267.1	0.73	0.34	0.009	2.95	0.094	0.60	0.036
235	235.9	0.77	0.30	0.010	2.90	0.096	0.62	0.029
236	222.7	0.86	0.30	0.007	2.68	0.094	0.59	0.038
237	265.6	0.80	0.31	0.008	2.89	0.080	0.63	0.039
238	249.3	0.76	0.29	0.009	2.79	0.120	0.61	0.032
239	230.4	0.81	0.29	0.008	2.93	0.079	0.69	0.035
240	290.7	0.67	0.30	0.006	2.81	0.138	0.55	0.028
241	264.7	0.79	0.28	0.008	2.96	0.119	0.61	0.034
242	254.0	0.75	0.32	0.011	2.91	0.111	0.63	0.027

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
233	0.17	0.036	0.49
234	0.19	0.027	0.40
235	0.20	0.037	0.34
236	0.18	0.347	0.05
237	0.18	0.397	0.06
238	0.20	0.039	0.36
239	0.22	0.058	0.40
240	0.23	0.047	0.33
241	0.15	0.050	0.32
242	0.24	0.050	0.29

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)

AFTER 17 WEEKS

FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
145	1.85	33.59	1.067	327.42	12.998	63.84	3.181	20.88
146	1.87	33.43	1.213	326.61	13.811	72.42	3.485	31.16
147	2.01	38.69	1.481	363.94	16.044	77.67	3.928	26.49
148	2.04	38.74	0.899	349.48	11.828	76.52	3.469	25.42
149	1.78	42.90	1.830	385.87	17.298	80.77	5.522	28.75
150	1.83	36.12	1.006	337.11	12.649	78.58	4.848	28.46
151	2.02	39.42	1.344	390.11	17.016	78.65	3.651	26.34
152	1.89	32.15	0.735	335.30	13.032	70.32	4.319	21.80
153	1.97	38.76	1.080	380.41	12.336	74.52	4.784	28.90
154	1.95	40.79	1.221	452.04	12.657	87.42	4.407	32.01

ANIMAL NUMBER	UTERUS	UTERUS
145	5.036	45.35
146	6.169	81.80
147	5.209	56.73
148	6.585	34.18
149	5.504	57.32
150	4.459	49.42
151	5.332	56.16
152	5.098	32.36
153	5.755	43.92
154	5.141	69.03

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
233	1.99	35.62	0.977	349.68	10.403	77.37	4.047	21.97
234	1.95	46.38	1.229	402.56	12.841	82.46	4.983	25.31
235	1.82	38.83	1.286	376.07	12.409	81.06	3.805	26.56
236	1.91	35.10	0.763	313.50	11.029	68.78	4.494	20.81
237	2.13	38.41	0.993	360.96	9.941	78.29	4.910	21.87
238	1.90	37.43	1.150	364.74	15.686	80.16	4.181	25.91
239	1.86	36.19	0.937	363.18	9.833	85.24	4.318	26.88
240	1.94	45.21	0.878	422.15	20.686	82.55	4.174	34.77
241	2.09	34.93	1.021	374.82	15.057	77.68	4.331	19.31
242	1.89	42.49	1.472	390.14	14.859	84.70	3.575	32.55

ANIMAL NUMBER	UTERUS	UTERUS
233	4.620	62.67
234	3.625	54.39
235	4.802	44.42
236	40.614	5.79
237	49.500	7.12
238	5.090	47.03
239	7.137	49.44
240	7.115	49.35
241	6.332	39.94
242	6.642	38.64

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN WEIGHTS (GRAM)
AFTER 13 WEEKS
MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
31	410.3	2.09	1.11	0.026	11.60	0.287	2.31	0.066
32	413.7	1.98	1.10	0.021	11.68	0.269	2.28	0.075
33	295.7	1.93	0.87	0.015	9.30	0.207	1.91	0.062
34	376.1	2.07	0.98	0.019	10.08	0.285	2.12	0.056
35	440.9	1.98	1.07	0.021	11.15	0.311	2.10	0.050
36	484.0	2.05	1.31	0.022	13.36	0.394	2.35	0.056

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYDYMID
31	0.89	4.02	1.413
32	0.87	4.07	1.370
33	0.48	3.71	1.366
34	0.71	3.37	1.236
35	0.74	4.47	1.684
36	0.98	3.89	1.398

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
57	429.5	2.05	1.24	0.023	12.33	0.402	2.33	0.054
58	462.8	2.03	1.16	0.032	14.71	0.198	2.65	0.070
59	463.1	1.94	1.19	0.026	16.23	0.435	2.56	0.053
60	489.2	2.12	1.23	0.019	15.88	0.300	2.35	0.068
61	425.9	2.06	1.21	0.028	12.29	0.287	2.25	0.052
62	399.7	2.09	1.11	0.019	11.92	0.241	2.11	0.054

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYDYMID
57	0.89	4.23	1.547
58	0.75	3.74	1.446
59	0.98	4.52	1.535
60	0.91	3.96	1.340
61	0.93	3.92	1.333
62	0.96	3.69	1.317

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
83	512.3	2.10	1.24	0.025	15.54	0.408	2.52	0.060
84	370.7	2.07	1.12	0.018	12.36	0.215	2.36	0.051
85	391.7	2.18	1.12	0.022	12.14	0.222	2.26	0.063
86	411.4	2.16	1.10	0.023	11.29	0.331	2.28	0.053
87	---	---	---	---	---	---	---	---
88	384.2	2.07	1.11	0.020	12.68	0.319	2.24	0.059

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN WEIGHTS (GRAM)
AFTER 13 WEEKS
MALES**

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
83	1.10	3.97	1.381
84	0.88	3.85	1.298
85	0.82	4.05	1.485
86	1.03	3.67	1.342
87	---	---	---
88	0.81	3.61	1.272

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
119	437.1	2.11	1.20	0.024	13.41	0.247	2.44	0.082
120	419.7	1.98	1.17	0.025	12.49	0.312	2.41	0.071
121	404.9	1.98	1.10	0.024	12.17	0.397	2.47	0.073
122	380.8	2.14	0.99	0.016	11.19	0.266	2.18	0.069
123	442.6	1.90	1.21	0.026	13.37	0.242	2.34	0.063
124	464.9	2.17	1.44	0.028	16.25	0.471	2.59	0.087

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
119	0.96	3.57	1.276
120	0.95	3.97	1.486
121	0.74	3.78	1.310
122	0.76	3.56	1.323
123	0.94	4.21	1.351
124	0.96	4.06	1.400

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)
AFTER 13 WEEKS
MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROID	LIVER	THYMUS	KIDNEYS	ADRENALS
31	410.3	0.51	0.27	0.006	2.83	0.070	0.56	0.016
32	413.7	0.48	0.26	0.005	2.82	0.065	0.55	0.018
33	295.7	0.65	0.29	0.005	3.15	0.070	0.65	0.021
34	376.1	0.55	0.26	0.005	2.68	0.076	0.56	0.015
35	440.9	0.45	0.24	0.005	2.53	0.071	0.48	0.011
36	484.0	0.42	0.27	0.005	2.76	0.081	0.49	0.011

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYMI
31	0.22	0.98	0.344
32	0.21	0.98	0.331
33	0.16	1.26	0.462
34	0.19	0.90	0.329
35	0.17	1.01	0.382
36	0.20	0.80	0.289

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROID	LIVER	THYMUS	KIDNEYS	ADRENALS
57	429.5	0.48	0.29	0.005	2.87	0.094	0.54	0.013
58	462.8	0.44	0.25	0.007	3.18	0.043	0.57	0.015
59	463.1	0.42	0.26	0.006	3.50	0.094	0.55	0.012
60	489.2	0.43	0.25	0.004	3.25	0.061	0.48	0.014
61	425.9	0.48	0.28	0.006	2.89	0.067	0.53	0.012
62	399.7	0.52	0.28	0.005	2.98	0.060	0.53	0.014

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYMI
57	0.21	0.99	0.360
58	0.16	0.81	0.313
59	0.21	0.98	0.332
60	0.19	0.81	0.274
61	0.22	0.92	0.313
62	0.24	0.92	0.330

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROID	LIVER	THYMUS	KIDNEYS	ADRENALS
83	512.3	0.41	0.24	0.005	3.03	0.080	0.49	0.012
84	370.7	0.56	0.30	0.005	3.33	0.058	0.64	0.014
85	391.7	0.56	0.28	0.006	3.10	0.057	0.58	0.016
86	411.4	0.52	0.27	0.006	2.74	0.080	0.55	0.013
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88	384.2	0.54	0.29	0.005	3.30	0.083	0.58	0.015

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)

AFTER 13 WEEKS

MALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
83	0.22	0.78	0.270
84	0.24	1.04	0.350
85	0.21	1.03	0.379
86	0.25	0.89	0.326
87	---	---	---
88	0.21	0.94	0.331

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
119	437.1	0.48	0.27	0.005	3.07	0.056	0.56	0.019
120	419.7	0.47	0.28	0.006	2.98	0.074	0.57	0.017
121	404.9	0.49	0.27	0.006	3.00	0.098	0.61	0.018
122	380.8	0.56	0.26	0.004	2.94	0.070	0.57	0.018
123	442.6	0.43	0.27	0.006	3.02	0.055	0.53	0.014
124	464.9	0.47	0.31	0.006	3.50	0.101	0.56	0.019

ANIMAL NUMBER	SPLEEN	TESTES	EPIDIDYD
119	0.22	0.82	0.292
120	0.23	0.95	0.354
121	0.18	0.93	0.324
122	0.20	0.93	0.347
123	0.21	0.95	0.305
124	0.21	0.87	0.301

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)
AFTER 13 WEEKS
MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
31	2.09	52.80	1.240	554.08	13.708	110.28	3.154	42.40
32	1.98	55.36	1.042	590.15	13.591	115.21	3.794	44.10
33	1.93	45.20	0.784	482.67	10.724	99.12	3.200	24.85
34	2.07	47.24	0.918	486.71	13.765	102.49	2.724	34.50
35	1.98	54.30	1.038	563.56	15.706	106.05	2.549	37.20
36	2.05	63.76	1.075	651.06	19.205	114.54	2.706	47.69
ANIMAL NUMBER	TESTES	EPIDIDYD						
31	191.89	67.489						
32	205.65	69.222						
33	192.58	70.871						
34	162.82	59.688						
35	225.83	85.095						
36	189.35	68.092						

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
57	2.05	60.19	1.108	600.61	19.581	113.30	2.635	43.44
58	2.03	57.15	1.602	726.19	9.764	130.79	3.438	37.12
59	1.94	61.54	1.356	836.84	22.436	131.97	2.753	50.63
60	2.12	58.16	0.910	749.18	14.166	110.84	3.231	43.12
61	2.06	58.62	1.343	596.19	13.905	109.26	2.546	45.15
62	2.09	52.90	0.910	570.60	11.549	100.99	2.604	45.82
ANIMAL NUMBER	TESTES	EPIDIDYD						
57	206.20	75.341						
58	184.71	71.394						
59	233.38	79.184						
60	186.67	63.196						
61	190.12	64.647						
62	176.39	63.028						

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
83	2.10	58.81	1.178	738.42	19.385	119.62	2.839	52.40
84	2.07	54.35	0.858	596.97	10.407	114.06	2.462	42.28
85	2.18	51.26	1.008	557.84	10.219	103.98	2.901	37.47
86	2.16	50.92	1.074	523.51	15.334	105.60	2.472	47.73
87	---	---	---	---	---	---	---	---
88	2.07	53.83	0.974	612.34	15.406	108.24	2.851	39.16

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)
AFTER 13 WEEKS
MALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	TESTES	EPIDIDYD
83	188.89	65.610
84	185.79	62.730
85	186.20	68.267
86	170.14	62.214
87	---	---
88	174.21	61.407

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
119	2.11	56.64	1.115	635.11	11.683	115.74	3.881	45.61
120	1.98	58.79	1.271	630.16	15.752	121.49	3.559	47.90
121	1.98	55.54	1.222	615.40	20.083	124.87	3.697	37.23
122	2.14	46.19	0.752	522.14	12.425	101.76	3.217	35.59
123	1.90	63.43	1.367	703.88	12.751	123.06	3.339	49.27
124	2.17	66.38	1.305	749.86	21.731	119.62	4.008	44.43

ANIMAL NUMBER	TESTES	EPIDIDYD
119	168.92	60.437
120	200.41	74.995
121	191.29	66.261
122	166.15	61.754
123	221.55	71.073
124	187.46	64.589

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN WEIGHTS (GRAM)
AFTER 13 WEEKS
FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
155	239.6	1.99	0.76	0.022	7.60	0.256	1.56	0.080
156	251.9	1.94	0.89	0.027	8.49	0.356	1.74	0.081
157	263.3	1.87	0.91	0.023	8.23	0.355	1.59	0.080
158	217.3	1.85	0.71	0.020	7.26	0.256	1.41	0.059
159	255.1	1.80	0.92	0.019	8.50	0.318	1.69	0.093
160	243.6	2.03	0.91	0.028	8.37	0.223	1.65	0.081

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
155	0.48	0.086	0.75
156	0.51	0.068	0.75
157	0.66	0.087	0.67
158	0.52	0.119	0.68
159	0.75	0.112	0.99
160	0.69	0.118	0.64

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
181	236.2	2.04	0.89	0.020	8.11	0.254	1.59	0.097
182	244.3	1.99	0.80	0.018	7.64	0.317	1.47	0.094
183	230.0	1.90	0.77	0.011	7.99	0.271	1.62	0.081
184	248.5	1.85	0.85	0.024	8.61	0.291	1.51	0.073
185	259.5	1.81	0.90	0.014	8.46	0.288	1.69	0.081
186	239.8	2.05	0.87	0.028	7.20	0.227	1.56	0.086

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
181	0.56	0.103	2.63
182	0.68	0.102	0.94
183	0.61	0.105	0.87
184	0.54	0.102	0.86
185	0.62	0.094	0.73
186	0.62	0.151	0.72

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
207	235.0	1.91	0.78	0.021	7.33	0.247	1.37	0.074
208	255.4	1.88	1.25	0.019	9.19	0.315	1.62	0.088
209	244.9	2.00	0.72	0.024	6.57	0.243	1.38	0.078
210	238.7	1.76	0.83	0.023	8.63	0.234	1.52	0.072
211	258.3	1.85	0.89	0.016	7.63	0.259	1.52	0.068
212	215.4	1.94	0.77	0.018	7.55	0.284	1.43	0.072

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN WEIGHTS (GRAM)
AFTER 13 WEEKS
FEMALES**

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
207	0.63	0.108	0.79
208	0.75	0.055	1.05
209	0.62	0.101	0.70
210	0.66	0.082	0.87
211	0.67	0.086	0.86
212	0.52	0.115	1.20

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W.	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
243	276.6	1.90	0.87	0.018	8.36	0.535	1.62	0.097
244	228.3	1.99	0.86	0.014	7.47	0.277	1.81	0.100
245	245.1	1.77	0.93	0.021	8.39	0.296	1.87	0.075
246	274.4	1.91	0.90	0.019	9.73	0.383	1.72	0.094
247	284.4	1.92	0.96	0.029	8.56	0.349	1.97	0.102
248	223.2	1.95	0.79	0.019	7.00	0.324	1.41	0.066

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
243	0.85	0.162	0.82
244	0.58	0.102	0.80
245	0.65	0.123	0.62
246	0.90	0.161	0.81
247	0.89	0.127	1.25
248	0.65	0.090	0.70

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)
AFTER 13 WEEKS
FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
155	239.6	0.83	0.32	0.009	3.17	0.107	0.65	0.034
156	251.9	0.77	0.35	0.011	3.37	0.141	0.69	0.032
157	263.3	0.71	0.35	0.009	3.13	0.135	0.61	0.030
158	217.3	0.85	0.33	0.009	3.34	0.118	0.65	0.027
159	255.1	0.71	0.36	0.007	3.33	0.125	0.66	0.036
160	243.6	0.83	0.37	0.012	3.44	0.091	0.68	0.033
ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS					
155	0.20	0.036	0.31					
156	0.20	0.027	0.30					
157	0.25	0.033	0.25					
158	0.24	0.055	0.31					
159	0.29	0.044	0.39					
160	0.28	0.048	0.26					

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
181	236.2	0.86	0.38	0.009	3.43	0.107	0.67	0.041
182	244.3	0.81	0.33	0.007	3.13	0.130	0.60	0.038
183	230.0	0.83	0.34	0.005	3.47	0.118	0.70	0.035
184	248.5	0.75	0.34	0.010	3.47	0.117	0.61	0.029
185	259.5	0.70	0.35	0.006	3.26	0.111	0.65	0.031
186	239.8	0.86	0.36	0.012	3.00	0.095	0.65	0.036
ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS					
181	0.24	0.044	1.11					
182	0.28	0.042	0.39					
183	0.27	0.046	0.38					
184	0.22	0.041	0.34					
185	0.24	0.036	0.28					
186	0.26	0.063	0.30					

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
207	235.0	0.81	0.33	0.009	3.12	0.105	0.58	0.031
208	255.4	0.74	0.49	0.007	3.60	0.123	0.63	0.034
209	244.9	0.82	0.29	0.010	2.68	0.099	0.56	0.032
210	238.7	0.74	0.35	0.009	3.62	0.098	0.63	0.030
211	258.3	0.72	0.35	0.006	2.95	0.100	0.59	0.026
212	215.4	0.90	0.36	0.008	3.51	0.132	0.67	0.034

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BODY WEIGHT RATIOS (%)

AFTER 13 WEEKS

FEMALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
207	0.27	0.046	0.33
208	0.30	0.021	0.41
209	0.26	0.041	0.29
210	0.27	0.034	0.37
211	0.26	0.033	0.33
212	0.24	0.054	0.56

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BODY W. (GRAM)	BRAIN	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS
243	276.6	0.69	0.31	0.007	3.02	0.194	0.58	0.035
244	228.3	0.87	0.37	0.006	3.27	0.121	0.79	0.044
245	245.1	0.72	0.38	0.008	3.42	0.121	0.76	0.031
246	274.4	0.70	0.33	0.007	3.55	0.139	0.63	0.034
247	284.4	0.68	0.34	0.010	3.01	0.123	0.69	0.036
248	223.2	0.87	0.35	0.009	3.14	0.145	0.63	0.030

ANIMAL NUMBER	SPLEEN	UTERUS	UTERUS
243	0.31	0.059	0.30
244	0.25	0.045	0.35
245	0.26	0.050	0.25
246	0.33	0.059	0.30
247	0.31	0.045	0.44
248	0.29	0.040	0.31

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)

AFTER 13 WEEKS

FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
155	1.99	38.36	1.095	382.13	12.859	78.51	4.041	24.31
156	1.94	45.72	1.368	436.67	18.331	89.51	4.173	26.46
157	1.87	48.68	1.221	440.86	19.020	85.38	4.268	35.28
158	1.85	38.45	1.106	392.57	13.834	76.11	3.218	28.39
159	1.80	51.36	1.034	472.73	17.673	94.06	5.165	41.84
160	2.03	44.91	1.386	412.08	10.972	81.48	3.986	34.00
ANIMAL NUMBER	UTERUS	UTERUS						
155	4.331	37.91						
156	3.485	38.63						
157	4.640	35.72						
158	6.453	36.55						
159	6.215	54.88						
160	5.793	31.49						

GROUP 2 (500 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
181	2.04	43.83	0.986	398.07	12.454	78.19	4.751	27.34
182	1.99	40.48	0.918	384.71	15.941	74.02	4.718	34.42
183	1.90	40.53	0.596	420.02	14.269	85.04	4.278	32.18
184	1.85	45.61	1.274	464.45	15.700	81.50	3.948	28.99
185	1.81	49.74	0.796	466.93	15.884	93.21	4.479	34.29
186	2.05	42.29	1.359	351.08	11.089	76.10	4.209	30.16
ANIMAL NUMBER	UTERUS	UTERUS						
181	5.074	129.07						
182	5.150	47.38						
183	5.534	45.57						
184	5.516	46.23						
185	5.174	40.47						
186	7.346	34.95						

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
207	1.91	41.09	1.079	384.06	12.932	71.91	3.872	33.12
208	1.88	66.42	1.000	487.79	16.704	85.95	4.664	40.05
209	2.00	35.81	1.179	328.67	12.137	69.19	3.922	31.27
210	1.76	47.18	1.287	490.80	13.328	86.16	4.087	37.29
211	1.85	48.21	0.877	411.62	14.008	82.15	3.682	36.19
212	1.94	39.93	0.911	389.30	14.655	73.93	3.732	26.97

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ORGAN/BRAIN WEIGHT RATIOS (%)
AFTER 13 WEEKS
FEMALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL NUMBER	UTERUS	UTERUS
207	5.659	41.23
208	2.900	55.80
209	5.065	35.01
210	4.680	49.68
211	4.666	46.40
212	5.949	62.00

GROUP 4 (2000 MG/KG/DAY)

ANIMAL NUMBER	BRAIN (GRAM)	HEART	THYROIDS	LIVER	THYMUS	KIDNEYS	ADRENALS	SPLEEN
243	1.90	45.51	0.955	438.91	28.114	84.80	5.084	44.44
244	1.99	43.00	0.696	375.79	13.929	91.00	5.051	28.96
245	1.77	52.51	1.171	473.23	16.700	105.52	4.233	36.48
246	1.91	47.15	1.004	509.24	20.015	90.13	4.902	47.17
247	1.92	49.75	1.500	446.01	18.182	102.68	5.321	46.26
248	1.95	40.50	0.973	358.85	16.622	72.04	3.379	33.45

ANIMAL NUMBER	UTERUS	UTERUS
243	8.524	43.05
244	5.116	40.13
245	6.952	34.75
246	8.414	42.46
247	6.607	65.10
248	4.616	35.67

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL 1 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 2 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 3 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, ISOLATED, D=1 MM, DARK RED.

ANIMAL 4 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 5 (SCHEDULED NECROPSY, 04-APR-2006)

SKIN..... TIP OF TAIL: DEJECTED.

ANIMAL 6 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 7 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 8 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 9 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 10 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 11 (SCHEDULED NECROPSY, 07-APR-2006)

PROSTATE..... FOCUS/FOCI, SEVERAL, D=2 MM, GRAY WHITE.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL 11 (cont.) (SCHEDULED NECROPSY, 07-APR-2006)

THYMUS..... FOCUS/FOCI, ISOLATED, D=1 MM, DARK RED.

ANIMAL 12 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 13 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 14 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 15 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 16 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 17 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 18 (SCHEDULED NECROPSY, 07-APR-2006)

TESTES..... BOTH SIDES: REDUCED IN SIZE, D=12X8 MM.

EPIDIDYMIDES..... BOTH SIDES: REDUCED IN SIZE.

ANIMAL 19 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 20 (SCHEDULED NECROPSY, 07-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL 21 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 22 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 23 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 24 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 25 (SCHEDULED NECROPSY, 02-MAY-2006)

KIDNEYS..... RIGHT SIDE: PELVIC DILATION.

ANIMAL 26 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 27 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 28 (SCHEDULED NECROPSY, 02-MAY-2006)

EYES..... RIGHT SIDE: DISCOLORATION, GRAY WHITE.

ANIMAL 29 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 30 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 31 (SCHEDULED NECROPSY, 04-APR-2006)

JEJUNUM..... MUCOSA: DISCOLORATION, REDDISH.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL 31 (cont.) (SCHEDULED NECROPSY, 04-APR-2006)

ILEUM..... MUCOSA: DISCOLORATION, REDDISH.

CAECUM..... MUCOSA: DISCOLORATION, REDDISH.

COLON..... MUCOSA: DISCOLORATION, REDDISH.

ANIMAL 32 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 33 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 34 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 35 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 36 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL 37 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 38 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 39 (SCHEDULED NECROPSY, 04-APR-2006)

KIDNEYS..... RIGHT SIDE: REDUCED IN SIZE, D=15X8 MM.

ANIMAL 40 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 41 (SCHEDULED NECROPSY, 04-APR-2006)

KIDNEYS..... RIGHT SIDE: PELVIC DILATION.

ANIMAL 42 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 43 (SCHEDULED NECROPSY, 04-APR-2006)

LYMPH NODES..... ILIAC, RIGHT SIDE: CYST(S), D=6 MM, WATERY-CLEAR.

ANIMAL 44 (KILLED IN EXTREMIS, 02-FEB-2006)

DUODENUM..... CONTENTS BLACK-BROWN.

JEJUNUM..... CONTENTS BLACK-BROWN.

ILEUM..... CONTENTS BLACK-BROWN.
INTUSSUSCEPTION, L=15 MM.

PANCREAS..... DISCOLORATION, GRAY WHITE.

KIDNEYS..... BOTH SIDES: GRANULATED SURFACE, TAN.
BOTH SIDES: ENLARGED, D=30X26 MM.

ANIMAL 45 (SCHEDULED NECROPSY, 04-APR-2006)

STOMACH..... FUNDUS, MUCOSA: FOCUS/FOCI, ISOLATED, D=2 MM, REDDISH.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL 46 (SCHEDULED NECROPSY, 04-APR-2006)

KIDNEYS..... LEFT SIDE: PELVIC DILATION.

SEMINAL VESICLES.... BOTH SIDES: FOCUS/FOCI, ISOLATED, D=1 MM, DARK RED.

ANIMAL 47 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 48 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 49 (SCHEDULED NECROPSY, 07-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 50 (SCHEDULED NECROPSY, 07-APR-2006)

THYMUS..... FOCUS/FOCI, ISOLATED, D=1 MM, DARK RED.

ANIMAL 51 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 52 (SCHEDULED NECROPSY, 07-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 53 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 54 (SCHEDULED NECROPSY, 07-APR-2006)

SKIN..... TIP OF TAIL: DEJECTED.

ANIMAL 55 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL 56

(SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 57

(SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 58

(SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 59

(SCHEDULED NECROPSY, 07-APR-2006)

LIVER..... THICKENED.

ANIMAL 60

(SCHEDULED NECROPSY, 07-APR-2006)

LIVER..... THICKENED.

ANIMAL 61

(SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 62

(SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL 63 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 64 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 65 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 66 (SCHEDULED NECROPSY, 04-APR-2006)

LUNGS..... LEFT LOBE: FOCUS/FOCI, ISOLATED, D=2 MM, REDDISH.

ANIMAL 67 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, D=4 MM, DARK RED.

LYMPH NODES..... MEDIASTINAL: DISCOLORATION, DARK RED.

ANIMAL 68 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 69 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, ISOLATED, D=4 MM, DARK RED.

ANIMAL 70 (SCHEDULED NECROPSY, 04-APR-2006)

KIDNEYS..... RIGHT SIDE: PELVIC DILATION.

ANIMAL 71 (SCHEDULED NECROPSY, 04-APR-2006)

KIDNEYS..... LEFT SIDE: PELVIC DILATION.

TESTES..... RIGHT SIDE: REDUCED IN SIZE, D=14X8 MM.

ANIMAL 72 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL 73 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 74 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 75 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 76 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 77 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 78 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 79 (SCHEDULED NECROPSY, 07-APR-2006)

KIDNEYS..... LEFT SIDE: PELVIC DILATION.

ANIMAL 80 (SCHEDULED NECROPSY, 07-APR-2006)

KIDNEYS..... LEFT SIDE: PELVIC DILATION.

ANIMAL 81 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 82 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 83 (SCHEDULED NECROPSY, 07-APR-2006)

KIDNEYS..... LEFT SIDE: PELVIC DILATION.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL 84 (SCHEDULED NECROPSY, 07-APR-2006)

THYMUS..... FOCUS/FOCI, MANY, D=1 MM, DARK RED.

ANIMAL 85 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 86 (SCHEDULED NECROPSY, 07-APR-2006)

THYMUS..... FOCUS/FOCI, MANY, D=1 MM, DARK RED.

ANIMAL 87 (KILLED IN EXTREMIS, 13-FEB-2006)

EYES..... RIGHT SIDE: ENLARGED, D=9 MM.
RIGHT SIDE: DISCOLORATION, DARK RED.

ANIMAL 88 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL 89 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 90 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 91 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 92 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 93 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 94 (SCHEDULED NECROPSY, 04-APR-2006)

KIDNEYS..... RIGHT SIDE: PELVIC DILATION.

THYMUS..... FOCUS/FOCI, ISOLATED, D=1 MM, REDDISH.

ANIMAL 95 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... DISCOLORATION, REDDISH.

ANIMAL 96 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 97 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 98 (SCHEDULED NECROPSY, 04-APR-2006)

BRONCHIAL L.NODE.... DISCOLORATION, REDDISH.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL 99 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 100 (SCHEDULED NECROPSY, 07-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 101 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 102 (SCHEDULED NECROPSY, 07-APR-2006)

KIDNEYS..... RIGHT SIDE: PELVIC DILATION.

ANIMAL 103 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 104 (SCHEDULED NECROPSY, 07-APR-2006)

KIDNEYS..... PELVIC DILATION.

ANIMAL 105 (SCHEDULED NECROPSY, 07-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 106 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 107 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 108 (SCHEDULED NECROPSY, 07-APR-2006)

NO FINDINGS NOTED

ANIMAL 109 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL 110 (SCHEDULED NECROPSY, 02-MAY-2006)

STOMACH..... FUNDUS, MUCOSA: DISCOLORATION, REDDISH.

THYMUS..... REDUCED IN SIZE.

ANIMAL 111 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 112 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 113 (SCHEDULED NECROPSY, 02-MAY-2006)

SKIN..... AURICLE, LEFT SIDE: RUPTURE(S).

ANIMAL 114 (SCHEDULED NECROPSY, 02-MAY-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 115 (SCHEDULED NECROPSY, 02-MAY-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.
REDUCED IN SIZE.

ANIMAL 116 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 117 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 118 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 119 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

MALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL 120 (SCHEDULED NECROPSY, 04-APR-2006)

KIDNEYS..... LEFT SIDE: PELVIC DILATION.

ANIMAL 121 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, D=5 MM, DARK RED.

ANIMAL 122 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

ANIMAL 123 (SCHEDULED NECROPSY, 04-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 124 (SCHEDULED NECROPSY, 04-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL 125 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 126 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 127 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 128 (SCHEDULED NECROPSY, 05-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 129 (SCHEDULED NECROPSY, 05-APR-2006)

STOMACH..... FUNDUS, MUCOSA: FOCUS/FOCI, ISOLATED, D=2 MM, DARK RED.

OVARIES..... BOTH SIDES: DISCOLORATION, DARK RED.

UTERUS..... BOTH HORNS: DISCOLORATION, DARK RED.

THYMUS..... DISCOLORATION, DARK RED.

MANDIBULAR L.NODE... DISCOLORATION, REDDISH.

ANIMAL 130 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 131 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 132 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 133 (SCHEDULED NECROPSY, 05-APR-2006)

OVARIES..... BOTH SIDES: DISCOLORATION, DARK RED.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL 134 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 135 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 136 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 137 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 138 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 139 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 140 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 141 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 142 (SCHEDULED NECROPSY, 06-APR-2006)

OVARIES..... RIGHT SIDE: DISCOLORATION, DARK RED.

ANIMAL 143 (SCHEDULED NECROPSY, 06-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 144 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL 145 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 146 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 147 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 148 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 149 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 150 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 151 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 152 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 153 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 154 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 155 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL 156 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 157 (SCHEDULED NECROPSY, 05-APR-2006)

THYMUS..... FOCUS/FOCI, ISOLATED, D=1 MM, DARK RED.

ANIMAL 158 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 159 (SCHEDULED NECROPSY, 05-APR-2006)

OVARIES..... BOTH SIDES: DISCOLORATION, DARK RED.

THYMUS..... FOCUS/FOCI, ISOLATED, D=1 MM, DARK RED.

ANIMAL 160 (SCHEDULED NECROPSY, 05-APR-2006)

OVARIES..... BOTH SIDES: DISCOLORATION, REDDISH.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL 161 (SCHEDULED NECROPSY, 05-APR-2006)

KIDNEYS..... RIGHT SIDE: PELVIC DILATION.

ANIMAL 162 (SCHEDULED NECROPSY, 05-APR-2006)

KIDNEYS..... RIGHT SIDE: PELVIC DILATION.

ANIMAL 163 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 164 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 165 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 166 (SCHEDULED NECROPSY, 05-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 167 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 168 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 169 (SCHEDULED NECROPSY, 05-APR-2006)

UTERUS..... BOTH HORNS: DISCOLORATION, REDDISH.

ANIMAL 170 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 171 (SCHEDULED NECROPSY, 06-APR-2006)

THYMUS..... FOCUS/FOCI, ISOLATED, D=1 MM, DARK RED.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL 172 (SCHEDULED NECROPSY, 06-APR-2006)

THYMUS..... DISCOLORATION, DARK RED.

MAMMARY GLANDS..... LEFT SIDE: NODULE(S), D=35X25 MM, GRAY WHITE, FIRM.

ANIMAL 173 (SCHEDULED NECROPSY, 06-APR-2006)

THYMUS..... FOCUS/FOCI, ISOLATED, D=1 MM, DARK RED.

ANIMAL 174 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 175 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 176 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 177 (SCHEDULED NECROPSY, 06-APR-2006)

OVARIES..... RIGHT SIDE: DISCOLORATION, DARK RED.

ANIMAL 178 (SCHEDULED NECROPSY, 06-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 179 (SCHEDULED NECROPSY, 06-APR-2006)

THYMUS..... FOCUS/FOCI, D=4 MM, DARK RED.

ANIMAL 180 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 181 (SCHEDULED NECROPSY, 06-APR-2006)

UTERUS..... BOTH SIDES: DILATION, D=6 MM.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL 182

(SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 183

(SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 184

(SCHEDULED NECROPSY, 06-APR-2006)

THYMUS..... FOCUS/FOCI, ISOLATED, D=1 MM, DARK RED.

ANIMAL 185

(SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 186

(SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL 187 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 188 (SCHEDULED NECROPSY, 05-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 189 (SCHEDULED NECROPSY, 05-APR-2006)

SKIN..... TIP OF TAIL: DEJECTED.

ANIMAL 190 (SCHEDULED NECROPSY, 05-APR-2006)

PANCREAS..... DISCOLORATION, REDDISH.

ANIMAL 191 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 192 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 193 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 194 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 195 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 196 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 197 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL 198 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 199 (SCHEDULED NECROPSY, 06-APR-2006)

KIDNEYS..... LEFT SIDE: PELVIC DILATION.

ANIMAL 200 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 201 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 202 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 203 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 204 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 205 (SCHEDULED NECROPSY, 06-APR-2006)

UTERUS..... RIGHT HORN: DISCOLORATION, REDDISH.

ANIMAL 206 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 207 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 208 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL 209

(SCHEDULED NECROPSY, 06-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 210

(SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 211

(SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 212

(SCHEDULED NECROPSY, 06-APR-2006)

THYMUS..... FOCUS/FOCI, D=4 MM, REDDISH.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL 213 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 214 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 215 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 216 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 217 (SCHEDULED NECROPSY, 05-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

BODY CAVITIES..... UTERINE ADIPOSE TISSUE, RIGHT SIDE: NODULE(S), D=5 MM, YELLOWISH, FIRM.

ANIMAL 218 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 219 (SCHEDULED NECROPSY, 05-APR-2006)

LIVER..... LOBE INFRAPORTALIS: NODULE(S), D=10 MM, DARK RED, FIRM.

PANCREAS..... DISCOLORATION, DARK RED.

OVARIES..... RIGHT SIDE: DISCOLORATION, DARK RED.

ANIMAL 220 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 221 (SCHEDULED NECROPSY, 05-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

ANIMAL 222 (SCHEDULED NECROPSY, 05-APR-2006)

THYMUS..... FOCUS/FOCI, SEVERAL, D=1 MM, DARK RED.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL 223 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 224 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 225 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 226 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 227 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 228 (SCHEDULED NECROPSY, 06-APR-2006)

THYMUS..... FOCUS/FOCI, ISOLATED, D=1 MM, DARK RED.

ANIMAL 229 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 230 (SCHEDULED NECROPSY, 06-APR-2006)

NO FINDINGS NOTED

ANIMAL 231 (SCHEDULED NECROPSY, 06-APR-2006)

THYMUS..... DISCOLORATION, DARK RED.

SKIN..... TIP OF TAIL: DEJECTED.

ANIMAL 232 (SCHEDULED NECROPSY, 06-APR-2006)

SKIN..... FORELEG, BOTH SIDES: ALOPECIA, D=20X10 MM, MARKED.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL 233 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 234 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 235 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 236 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 237 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 238 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 239 (SCHEDULED NECROPSY, 02-MAY-2006)

THYMUS..... REDUCED IN SIZE.

ANIMAL 240 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

ANIMAL 241 (SCHEDULED NECROPSY, 02-MAY-2006)

THYMUS..... DISCOLORATION, DARK RED.

MANDIBULAR L.NODE... DISCOLORATION, REDDISH.

ANIMAL 242 (SCHEDULED NECROPSY, 02-MAY-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MACROSCOPICAL FINDINGS

ALL NECROPSIES

FEMALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL 243 (SCHEDULED NECROPSY, 05-APR-2006)

LIVER..... LOBE INFRAPORTALIS: ENLARGED.

ANIMAL 244 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 245 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

ANIMAL 246 (SCHEDULED NECROPSY, 05-APR-2006)

THYMUS..... FOCUS/FOCI, D=5X2 MM, DARK RED.

ANIMAL 247 (SCHEDULED NECROPSY, 05-APR-2006)

THYMUS..... FOCUS/FOCI, ISOLATED, D=1 MM, DARK RED.

ANIMAL 248 (SCHEDULED NECROPSY, 05-APR-2006)

NO FINDINGS NOTED

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

APPENDIX I: OBSERVATIONS

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

SUMMARY OF PARAMETERS (MINIMUM REQUIREMENT FOR EACH ANIMAL)						
OBSERVATIONS: DAILY CAGE-SIDE (D), PRETEST (P) AND FOB (F)						
	SCORE	PARAMETER	D	P	F	Comments
APPEARANCE	1-3	Piloerection	X	X	X	None
	1-3	Salivation	X	X	X	None
	1	Hunched posture	X	X	X	None
MOTOR	1-3	Ataxia	X	X	X	None
	1-3	Tremor/twitching	X	X	X	None
	1	Prostration	X	X	X	None
	1	Circling		X	X	None
	1-3	Spasm		X	X	None
BEHAVIOR	1-3	Hyperactivity	X	X	X	None
	1-3	Somnolence	X	X	X	None
	1-3	Increased exploration		X	X	None
	1-3	Reduced grooming		X	X	None
	1-3	Vocalisation		X	X	None
RESPIRATION	1	Dyspnea	X	X	X	None
	1	Tachypnea	X	X	X	None
	1	Bradypnea	X	X	X	None
REFLEXES	1	Blink		X	X	None
	1	Pinna		X	X	None
	1	Iridic light reflex		X	X	None
	1	Push-off (hind leg)		X	X	None
	1	Pain response		X	X	None
	1	Startle/hearing		X	X	None
	1	Righting reflex		X	X	None
Miscellaneous	1-3	Lacrimation		X	X	None
	1	Limbs cyanotic		X	X	None
	1	Mydriasis		X	X	None
	1	Miosis		X	X	None
	1	Exophthalmos		X	X	None
	1-3	Reduced muscle tone		X	X	None

NB. Findings described as 'Study-specific' include abnormal findings that were detected during daily observation of the standard parameters and subsequently tracked throughout the study for onset in other animals and progression/regression in the afflicted animals. Parameters marked with 'X' were specifically observed for presence or absence. 'Study specific' findings marked with 'X' were observed in the week noted, and no longer evident if 'X' did not appear in subsequent weeks. 'Cage-specific' findings (if present) refer to observations that could not be ascribed to a single animal in the cage and were therefore ascribed to all individuals in the cage.

X: observed

RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

APPENDIX II: DRINKING WATER ANALYSES

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BACTERIOLOGICAL ASSAY OF DRINKING WATER, ITINGEN

Official Laboratory	Liestal, March 02, 2006
Basel-Landschaft	Ref.no. 200046037
Sampling point:	59.99.N Net water RCC Ltd, Itingen, Room No. 10
Sampled on:	January 25, 2006
Sample:	
Time of sampling	8.40-9.40
Water temperature (°C)	11.9

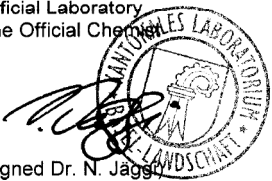
BACTERIOLOGICAL TEST:

Aerobic mesophilic bacteria / ml	4
E.coli / 100 ml	0
Enterococci / 100 ml	0
Coliform Bacteria	0
Clostridium perfringens	0

ASSESSMENT:

At the time of sampling, the tested bacteriological parameters met the requirements for drinking water according to article 275 of the "Eidg. Lebensmittelverordnung".

Official Laboratory
The Official Chemist



(signed Dr. N. Jäger)

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CHEMICAL WATER ANALYSIS, ITINGEN

Official Laboratory
Basel-Landschaft

Liestal, March 02, 2006
Ref.no. 200046038

Sampling point:

59.99.N, Net water
RCC Ltd, Itingen, Room no. 10

Sampled on:

January 25, 2006

Time of sampling

08.40-9.40

Water temperature (°C)

11.9

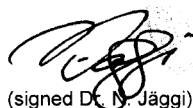
CHEMICAL TEST:

Appearance			clear, colourless
Odor			not remarkable
Taste			not remarkable
UV-absorption at 254 nm/100 cm			1.15
Conductivity		µS/cm	741
Oxygen demand	(KMnO ₄ cons.)	mg/l	2.4
Turbidity	FNU		3.23
Chloride	Cl ⁻	mg/l	25.4
Nitrate	NO ₃ ⁻	mg/l	19.6
Sulphate	SO ₄ ⁻⁻	mg/l	127.3
Nitrite	NO ₂ ⁻	mg/l	<0.005
Total hardness		fr.H°	41.7
Alkaline hardness		fr.H°	27.3
Non carbonate hardness		fr.H°	14.4
Calcium	Ca ⁺⁺	mg/l	146.3
Magnesium	Mg ⁺⁺	mg/l	12.4

ASSESSMENT:

At the time of sampling, the tested chemical parameters met the requirements for drinking water according to article 275 of the "Eidg. Lebensmittelverordnung".

Official Laboratory
The Official Chemist



(signed Dr. N. Jäggi)

RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CONTAMINANT ASSAY OF DRINKING WATER, ITINGEN

RCC Study No.: A54898
Date of Sampling: January 25, 2006
Sample: H₂O, RCC Ltd, Itingen, Room No. 10

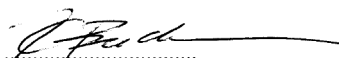
PARAMETER	ASSAY LEVEL µg/l	LIMIT * µg/l
Lindane	< 0.05	0.1
Heptachlor	< 0.05	0.1
Malathion	< 0.05	0.1
DDT, total	< 0.05	0.1
Dieldrin	< 0.05	0.1
Cadmium	< 0.5	5
Arsenic	< 3	50
Lead	29	50
Mercury	< 1	1
Selenium	< 3	10
Copper	< 4	1500
PCBs (28, 52, 101, 138, 153, 180)	< 0.05	0.1
Nitrosamines, total (DMN, DEN, NPIP, NMORPH)	< 0.002	----

< 0.05 = less than 0.05 microgram per liter

* Schweizer Lebensmittelbuch

Issued by K. Biedermann

March 02, 2006



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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CHEMICAL WATER ANALYSIS, ITINGEN

Official Laboratory	Liestal, 26.07.2005
Basel-Landschaft	Ref.no. 200041877
Sampling point:	59.99.N, Net water RCC Ltd, Itingen, Room no. 10
Sampled on:	26.07.2005
Time of sampling	7.45-8.20
Water temperature (°C)	14.8

CHEMICAL TEST:

Appearance		clear, colourless
Odor		not remarkable
Taste		not remarkable
UV-absorption at 254 nm/100 cm		1.12
Conductivity		μS/cm 735.0
Oxygen demand	(KMnO ₄ cons.)	mg/l 3.6
Turbidity	FNU	0.16
Chloride	Cl ⁻	mg/l 22.1
Nitrate	NO ₃ ⁻	mg/l 20.0
Sulphate	SO ₄ ²⁻	mg/l 115.0
Nitrite	NO ₂ ⁻	mg/l <0.005
Total hardness		fr.H° 41.2
Alkaline hardness		fr.H° 27.7
Non carbonate hardness		fr.H° 13.5
Calcium	Ca ⁺⁺	mg/l 145.1
Magnesium	Mg ⁺⁺	mg/l 11.9

ASSESSMENT:

At the time of sampling, the tested chemical parameters met the requirements for drinking water according to article 275 of the "Eidg. Lebensmittelverordnung".

Official Laboratory
The Official Chemist

(signed Dr. 

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BACTERIOLOGICAL ASSAY OF DRINKING WATER, ITINGEN

Official Laboratory	Liestal, 26.07.2005
Basel-Landschaft	Ref.no. 200041876
Sampling point:	59.99.N Net water RCC Ltd, Itingen, Room No. 10
Sampled on:	26.07.05
Sample:	
Time of sampling	7.25
Water temperature (°C)	14.8

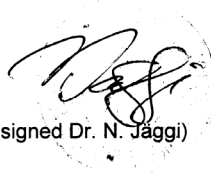
BACTERIOLOGICAL TEST:

Aerobic mesophilic bacteria / ml	0
E.coli / 100 ml	0
Enterococci / 100 ml	0

ASSESSMENT:

At the time of sampling, the tested bacteriological parameters met the requirements for drinking water according to article 275 of the "Eidg. Lebensmittelverordnung".

Official Laboratory
The Official Chemist


(signed Dr. N. Jäggi)

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CONTAMINANT ASSAY OF DRINKING WATER, ITINGEN

RCC Study No.: A26234
Date of Sampling: 26.07.2005
Sample: H₂O, RCC Ltd, Itingen, Room No. 10

PARAMETER	ASSAY LEVEL µg/l	LIMIT * µg/l
Lindane	< 0.05	0.1
Heptachlor	< 0.05	0.1
Malathion	< 0.05	0.1
DDT, total	< 0.05	0.1
Dieldrin	< 0.05	0.1
Cadmium	< 0.5	5
Arsenic	< 3	50
Lead	< 3	50
Mercury	< 1	1
Selenium	< 3	10
Copper	< 4	1500
PCBs (28, 52, 101, 138, 153, 180)	< 0.05	0.1
Nitrosamines, total (DMN, DEN, NPIP, NMORPH)	< 0.002	-----

< 0.05 = less than 0.05 microgram per liter

* Schweizer Lebensmittelbuch

September 06, 2005


signed K. Biedermann

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

APPENDIX III: CHEMICAL ANALYSIS OF FEED

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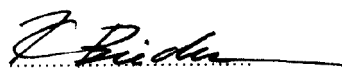
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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ANALYTICAL TEST REPORT

RCC Study A52885
January 24, 2006

Prepared for	PROVIMI KLIBA AG 4303 Kaiseraugst
Attention of	Dr. Dietmar Ranz
Materials tested	KLIBA-NAFAG 3433 Batch 02/06 of January 16, 2006
Test performed	AAS, GC, GC-MS, HPLC
Test results	See attached Table 1
Submitted	E. Dettwiler
Issued by	K. Biedermann


February 07, 2006/sco

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ATTACHMENT

RCC Study A52885
January 24, 2006

Table 1 - Test Results

KLIBA-NAFAG 3433
Batch 02/06 of January 16, 2006

PARAMETER	ASSAY LEVEL mg/kg	LIMIT* mg/kg
Aflatoxins (B1, B2, G1, G2), total	< 0.001	0.005
Estrogens (DES, Hexestrol, Dienestrol), total	< 0.001	0.001
Lindane	< 0.005	0.02
Heptachlor	< 0.005	0.02
Malathion	< 0.5	2.5
DDT, total	< 0.025	0.100
Dieldrin	< 0.005	0.02
Cadmium	0.04	0.160
Arsenic	< 0.15	1.0
Lead	< 0.25	1.5
Mercury	< 0.05	0.1
Selenium	< 0.15	0.6
Copper	14	----
PCBs	< 0.025	0.05
Nitrosamines (DMN, DEN, NPIP, NMORPH), total	< 0.002	0.010

< 0.001 = less than 0.001 milligram per kilogram

* = USP EPA, Federal Register, Vol. 44, No. 91, May 9, 1979

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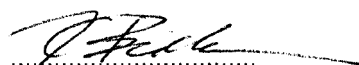
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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ANALYTICAL TEST REPORT

RCC Study 858758
November 21, 2005

Prepared for	PROVIMI KLIBA AG 4303 Kaiseraugst
Attention of	Dr. Dietmar Ranz
Materials tested	KLIBA-NAFAG 3433 Batch 79/05 of November 16, 2005
Test performed	AAS, GC, GC-MS, HPLC
Test results	See attached Table 1
Submitted	E. Dettwiler
Issued by	K. Biedermann


December 19, 2005/sco

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ATTACHMENT

RCC Study 858758
November 21, 2005

Table 1 - Test Results

KLIBA-NAFAG 3433
Batch 79/05 of November 16, 2005

PARAMETER	ASSAY LEVEL mg/kg	LIMIT* mg/kg
Aflatoxins (B1, B2, G1, G2), total	< 0.001	0.005
Estrogens (DES, Hexestrol, Dienestrol), total	< 0.001	0.001
Lindane	< 0.005	0.02
Heptachlor	< 0.005	0.02
Malathion	< 0.5	2.5
DDT, total	< 0.025	0.100
Dieldrin	< 0.005	0.02
Cadmium	0.03	0.160
Arsenic	< 0.15	1.0
Lead	<0.25	1.5
Mercury	< 0.05	0.1
Selenium	< 0.15	0.6
Copper	17	----
PCBs	< 0.025	0.05
Nitrosamines (DMN, DEN, NPIP, NMORPH), total	< 0.002	0.010

< 0.001 = less than 0.001 milligram per kilogram

* = USP EPA, Federal Register, Vol. 44, No. 91, May 9, 1979

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ANALYTICAL TEST REPORT

RCC Study 858758
October 11, 2005

Prepared for	PROVIMI KLIBA AG 4303 Kaiseraugst
Attention of	Dr. Dietmar Ranz
Materials tested	KLIBA-NAFAG 3433 Batch 67/05 of October 03, 2005
Test performed	AAS, GC, GC-MS, HPLC
Test results	See attached Table 1
Submitted	E. Dettwiler
Issued by	K. Biedermann


October 24, 2005/sco

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ATTACHMENT

RCC Study 858758
October 11, 2005

Table 1 - Test Results

KLIBA-NAFAG 3433
Batch of 67/05 of October 03, 2005

PARAMETER	ASSAY LEVEL mg/kg	LIMIT* mg/kg
Aflatoxins (B1, B2, G1, G2), total	< 0.001	0.005
Estrogens (DES, Hexestrol, Dienestrol), total	< 0.001	0.001
Lindane	< 0.005	0.02
Heptachlor	< 0.005	0.02
Malathion	< 0.5	2.5
DDT, total	< 0.025	0.100
Dieldrin	< 0.005	0.02
Cadmium	0.04	0.160
Arsenic	< 0.15	1.0
Lead	< 0.25	1.5
Mercury	< 0.05	0.1
Selenium	< 0.15	0.6
Copper	19	----
PCBs	< 0.025	0.05
Nitrosamines (DMN, DEN, NPIP, NMORPH), total	< 0.002	0.010

< 0.001 = less than 0.001 milligram per kilogram

* = USP EPA, Federal Register, Vol. 44, No. 91, May 9, 1979

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

APPENDIX IV: ANALYSIS OF FEED PREPARATIONS

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

ANALYTICAL PHASE REPORT

Analytical Phase to

**Ultrazine FG-R (Food Grade Lignosulphonate):
13-Week Oral Toxicity (Feeding) Study in the Wistar Rat**

Subtitle

Determination of Content, Homogeneity and Stability of
Ultrazine FG-R in Feed

Study Director

W. H. Braun

Principal Investigator Analytical Phase

Dr. D. Flade

Completion Date of Analytical Phase Report

October 18, 2006

Sponsor:

DSM Nutritional Products AG
Wurmisweg 576
CH 4303 Kaiseraugst/Switzerland

Test Site

RCC Ltd
Environmental Chemistry & Pharamalytics
Zelgliweg 1
CH-4452 Itingen/Switzerland

RCC Study Number

A29553

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GLP CERTIFICATE

The Swiss GLP Monitoring Authorities



Swiss Federal
Office of
Public Health



Swiss Agency for the
Environment, Forests
and Landscape



SWISSmedic

Swissmedic
Swiss Agency for
Therapeutic Products

Statement of GLP Compliance

It is hereby confirmed that

during the period of

April 22, 25 – 29, 2005
May 09 – 13, 2005

the following Facilities of

RCC Ltd
4452 Itingen
Switzerland

were inspected by the Federal Office of Public Health, the Swiss Agency for Therapeutic Products and the Swiss Agency for the Environment, Forests and Landscape with respect to the compliance with the Swiss legislation on Good Laboratory Practice.

Facilities

Areas of expertise *

- Test Facility: Toxicology

**TOX, ACC, OTH (Safety
Pharmacology, Alternative Test
Systems)**

- Test Facility: Environmental Chemistry
& Pharamalytics

**ACC, ECT, ENF, EMN, PCT,
RES, OTH (Animal Metabolism)**

- Archive Facilities

The inspections were performed in agreement with the OECD Guidelines for National GLP Inspections and Audits. It was found that the aforementioned test facilities were operating in compliance with the Swiss Ordinance relating to Good Laboratory Practice [RS 813.016.5] at the time they were inspected.

Federal Office of Public Health
The Director

Bern, November 2005

Prof. Th. Zeltner

* TOX = Toxicology ; ACC = Analytical and Clinical Chemistry ; ECT = Environmental toxicity on aquatic and terrestrial organisms ; ENF = Behaviour in water, soil and air. Bioaccumulation ; EMN = Studies on effects on mesocosms and natural ecosystems ; PCT = Physical-chemical testing ; RES = Residue studies ; OTH = Other, to be specified.

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GOOD LABORATORY PRACTICE


STATEMENT OF COMPLIANCE

RCC Study Number:	A29553
Test Item:	Ultrazine FG-R
Study Director:	W. H. Braun, RCC Ltd, Toxicology, Itingen / Switzerland
Principal Investigator	
Analytical Phase:	Dr. D. Flade
Analytical Phase to:	Ultrazine FG-R (Food Grade Lignosulphonate): 13-Week Oral Toxicity (Feeding) Study in the Wistar Rat

The analytical phase has been performed in compliance with the Swiss Ordinance relating to Good Laboratory Practice, adopted May 18th, 2005 [RS 813.112.1]. This Ordinance is based on the OECD Principles of Good Laboratory Practice, as revised in 1997 and adopted November 26th, 1997 by decision of the OECD Council [C(97)186/Final].

There were no circumstances which may have affected the quality or integrity of the data of the analytical phase.

Principal Investigator	
Analytical Phase:	Dr. D. Flade


Date: *October 18, 2006*



SIGNATURES

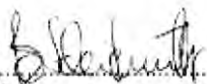
Principal Investigator
Analytical Phase:

Dr. D. Flade


Date: *October 18, 2006*

Management:

Dr. J. Schreitmüller


Date: *October 18, 2006*

QUALITY ASSURANCE

RCC Ltd, Environmental Chemistry & Pharamalytics, CH-4452 Itingen / Switzerland

STATEMENT

RCC Study Number: A29553
Study Director: W. H. Braun, RCC Ltd, Toxicology, Itingen / Switzerland
Test Item: Ultrazine FG-R
Principal Investigator
Analytical Phase: Dr. D. Flade
Analytical Phase to: Ultrazine FG-R (Food Grade Lignosulphonate):
13-Week Oral Toxicity (Feeding) Study in the Wistar Rat

The general facilities and activities are inspected periodically and the results are reported to the responsible person and the management.
Study procedures were periodically inspected. The phase report was audited by the Quality Assurance. The dates are given below.


Dates and Types of QA Inspections		Dates of Reports to the Principal Investigator and to the Management
February 06, 2006	Sample preparation, work-up	February 06, 2006
August 18, 2006	Phase report	August 18, 2006

This statement also confirms that this final phase report reflects the raw data.

Sections of the study plan relating to the phase were reviewed and reported to the study director, lead QA and test facility management on: December 20, 2005

Summary report(s) of study related inspection(s) (if applicable) was/were issued to the study director, lead QA and test facility management.

Quality Assurance:

 A. Güdel


Date: October 18, 2006

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PREFACE

GENERAL

Analytical Phase to:	Ultrazine FG-R (Food Grade Lignosulphonate): 13-Week Oral Toxicity (Feeding) Study in the Wistar Rat
Sponsor:	DSM Nutritional Products AG Wurmisweg 576 CH 4303 Kaiseraugst / Switzerland
Study Monitor:	SCC Scientific Consulting Company Chemisch-Wissenschaftliche Beratung GmbH Dr. C.H. Baehr Mikroforum Ring 1 D-55234 Wendelsheim / Germany
Study Director: (Test Facility)	W. H. Braun RCC Ltd Toxicology Zelgliweg 1 CH-4414 Itingen / Switzerland
Test Site:	RCC Ltd Environmental Chemistry & Pharamalytics Zelgliweg 1 CH-4452 Itingen / Switzerland

RESPONSIBILITIES

Principal Investigator	
Analytical Phase:	Dr. D. Flade
Head of RCC Quality Assurance:	I. Wüthrich

SCHEDULE OF ANALYTICAL PHASE

Experimental Starting Date:	January 10, 2006
Experimental Completion Date:	October 12, 2006
Completion Date of Analytical Phase Report:	October 18, 2006

ARCHIVING

RCC Ltd, CH-4452 Itingen/Switzerland will retain a copy of the study plan, the raw data and the analytical phase report of the present study for at least ten years. No data will be discarded without the sponsor's written consent.

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SUMMARY

This analytical phase was conducted at RCC Ltd, Itingen, Switzerland under GLP-compliant conditions to determine the content, homogeneity and stability of the test item Ultrazine FG-R administered in feed.

Diet samples were prepared at the test facility and representative analytical samples were collected and dispatched to the test site. The test item concentrations were determined by UV/VIS spectrophotometry after derivatisation and quantified by absorbance at 440 nm.

Samples of the control group (group 1) were analysed and found to not contain Ultrazine FG-R. Samples of dose groups 2 (4444/5000 ppm), 3 (8889/10000 ppm) and 4 (17778/20000 ppm) were analysed after each dose adjustment. The test item content in all samples was found to be within the accepted range of ± 20 % nominal content, except in three individual samples (dose group 3 female, middle, prepared 29 December 2005, dose group 2 male, bottom, prepared 10 March 2006, dose group 2 female, top, prepared 22 March 2006).

The homogenous distribution of Ultrazine FG-R in feed was demonstrated for each dose group, after each dose adjustment, with variations in concentration of ≤ 15.2 %. Stability of formulations was confirmed for at least 21 days when kept at room temperature or -20 °C within RCC study number A29992 (deviation ≤ 16.5 % from mean).

In conclusion, the results obtained within this phase confirm the correct preparation and storage of feed during the conduct of this study. Referring to nominal values of feed concentration is thus valid.

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1 PURPOSE

Within this analytical phase the accurate preparation of feed samples before and during the study should be verified. For this purpose representative samples had to be analysed for content and homogenous distribution of Ultrazine FG-R in feed.

2 MATERIALS AND METHODS

2.1 Test Item

Detailed information concerning the test item is provided in the main study report. It was also used as analytical standard.

2.2 Sampling and Storage

Test samples (prepared on 29-Dec-05, 10-Mar-06, 22-Mar-06):
Diet samples with different nominal concentrations (see page 13 ff.) were prepared. These samples for content and homogeneity determination were collected from representative areas of the feed drying shelves (side, middle, side).

At the appropriate time-points samples were dispatched to the test site and stored frozen at approximately -20 °C until analysis.

2.3 Reagents and Material

All reagents used were of analytical grade or higher:

Purified water:	In-house prepared by a Milli-Q water purification system (Millipore)
Acetic acid (99-100%):	Baker no. 6052
Ammonia solution (25%):	Baker no. 6051
Sodium nitrite (99.0%):	Fluka no. 71759
PTFE filter (45 µm):	BGB no. F2504-2
Folded filter 595 1/2 (Ø 150 mm)	Schleicher & Schuell no. 10311645

2.4 Analytical Procedure

2.4.1 Preparation of Standard Solutions

Working standard solutions were prepared for external standard calibration by diluting a stock solution with matrix containing water. This matrix solvent was prepared by shaking several flasks with 2.5 g of blank diet and 250 mL of water for 30 minutes at 170 rpm. Supernatants were filtered through a folded filter and collected.

24.43 mg of test item were precisely weighed in a 50 mL volumetric flask, about 40 mL of matrix solvent were added and the flask was sonicated for 5 minutes. Then, it was filled to volume with matrix solvent to yield a solution with a concentration of 488.6 µg/mL. The stock solution was diluted 15/50 and this working standard was further diluted 16/20, 12/20, 8/20 and 8/50 with matrix solvent to obtain a set of five working standards in a concentration range from 23.45 to 146.6 µg/mL. A 2 mL-aliquot of each standard was filtered through a PTFE filter (0.45 µm) and 40 µL of acetic acid (10%), 40 µL of freshly prepared sodium nitrite aqueous solution (10%) was added to the filtrate. Then, this solution was mixed and left to stand at room temperature for 15 minutes before 80 µL of ammonia solution (2 N) was added.

In addition, a blank standard as reference for control samples was prepared with 2.5 g of blank diet only and treated as described for samples.

For each sample sequence at least five working standard solutions were freshly prepared and used for calibration.

2.4.2 Preparation of Spiked Samples

Spiked samples were freshly prepared before each analysis at content levels, which are similar to nominal test sample contents.

For the first sample series three spiked samples were prepared. An amount of 117.2 mg of Ultrazine FG-R was weighed in a 10 mL volumetric flask and dissolved in water to give a spike stock solution with a concentration of 11.72 mg/mL. An aliquot of 1 mL was added to 2.5 g blank diet placed in a 250 mL glass flask to achieve a test item content of 4688 ppm in diet. Then, 249 mL of water were added and the sample was further treated as described for test samples in the following section. Additional spiked samples were prepared with test item amounts of 21.28 mg and 52.14 mg, which were mixed with 2.5 g of blank diet to obtain contents of 8512 and 20856 ppm. Afterwards, 250 mL of water were added to each spiked sample and further treatment was conducted as described below.

2.4.3 Analysis of Samples

An amount of 2.5 gram of each diet sample was weighed into a 250 mL screw-capped glass flask and 250 mL of water was added. Then, mixtures were subjected to a lab shaker at 170 rpm for 30 minutes. A 2 mL aliquot of supernatant was treated exactly in the same way as aliquots taken from standard solutions and analysed by UV/VIS spectrophotometry. Absorbance values were multiplied by a factor of 10.000 for presentation purposes.

2.4.4 Photometer Conditions

Apparatus: Perkin-Elmer Lambda 2 UV/VIS spectrophotometer
Wavelength: 440 nm
Cuvette: 1 cm (quartz)

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2.4.5 Evaluation of Results

Measured samples were quantified by absorbance with reference to the calibration curve. The latter was obtained by correlation of the absorbance of the standard solutions with their corresponding concentration of test item in µg/ml, using the following equation 1:

$$y = a + b \cdot x \quad (1)$$

where

- y = Response for Ultrazine FG-R
- a = Intercept derived from linear regression of calibration data
- b = Slope derived from linear regression of calibration data
- x = Actual concentration of Ultrazine FG-R in sample aliquot

The concentrations of the test item in the feed were corrected for grade of extraction using spiked samples and, thus, calculated according to equation 2:

$$C_{Actual} = \frac{x \cdot V}{W \cdot R_{Spike}} \quad (2)$$

where

- C_{Actual} = Actual sample concentration [ppm]
- x = Actual concentration of Ultrazine FG-R in sample aliquot according to equation 1 [µg/mL]=
- V = Dilution volume [mL]
- W = Sample weight [g]
- R_{Spike} = Recovery of spiked sample [%]

The sample recovery was determined as follows:

$$R = \frac{C_{Actual}}{C_{Nominal}} \cdot 100 \quad (3)$$

where

- R = Sample recovery [%]
- C_{Actual} = Actual sample concentration [ppm]
- $C_{Nominal}$ = Nominal sample concentration [ppm]

3 RESULTS

The linearity of the analytical systems used for sample analyses was demonstrated with a good relationship between absorbance measured and working standard concentrations. All used calibration points met the acceptance limit of ± 20 % variation from the calibration curve, derived by linear regression analysis. Correlation coefficients calculated were found to be better than 0.99. An example calibration curve is presented in Figure 1.

A reference standard, which contained blank diet only, was used to determine the absence of test item in control samples. The reference solution obtained showed a UV absorbance of 0.145. Measured solutions derived from control samples (group 1) showed UV absorbances of 0.110 (29-Dec-05), 0.109 (10-Mar-06) and 0.123 (22-Mar-06). The control sample results are lower than that of the reference and, thus, it was confirmed that only control feed was applied within the control experiment.

All individual feed samples of dose groups 2, 3 and 4 investigated during the study were found to comprise Ultrazine FG-R in the range from 80.5 % to 118.2 %, except three (dose group 3 female, middle, prepared 29 December 2005, dose group 2 male, bottom, prepared 10 March 2006, dose group 2 female, top, prepared 22 March 2006). Considering the results obtained, the samples with low recovery were considered outliers. Thus, for individual samples and preparation means the required content limit of ± 20 %, with reference to the nominal concentrations, was not exceeded.

The homogenous distribution of Ultrazine FG-R in the preparations was approved, because single samples did not deviate more than 15.2 % from the corresponding mean.

Stability of formulations was confirmed for at least 21 days when kept at room temperature or -20 °C within RCC study number A29992 (deviation ≤ 16.5 % from mean).

4 CONCLUSION

In conclusion, the results clearly indicate accurate dose preparation in feed with test item Ultrazine FG-R and control feed, during the toxicological part of this study. Dose preparations were found to be at acceptable concentration, homogeneously prepared and sufficiently stable under storage conditions. Detailed results are shown in Table 1 on the following page. Thus referring to nominal feed concentrations is valid.

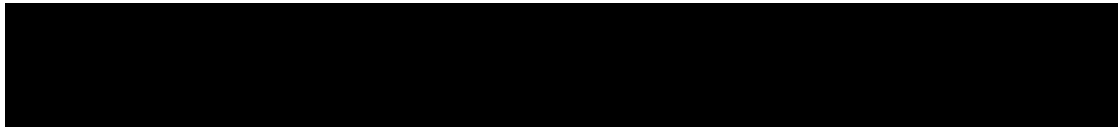


Table 1: Detailed Results of Feed Analyses
(Rounded results presented are based on calculations with exact data)

Dose Group	Sample taken from/after	Date of Analysis	Nominal Concentration [ppm]	Actual Concentration [ppm]	Recovery	Mean Recovery	Maximum Variation from Mean
Date of Preparation: 29-DEC-05							
1 male+female	vehicle	10-JAN-06	0.000	0.000	---	---	---
2 male	spike	10-JAN-06	4688	5631 ¹	120.1% ³	---	---
	top	10-JAN-06	4444	4840 ¹	108.9%	94.8%	15.2%
	middle	10-JAN-06	4444	4227 ¹	95.1%		
	bottom	10-JAN-06	4444	3575 ¹	80.5%		
2 female	spike	10-JAN-06	4688	5631	120.1% ³	---	---
	top	10-JAN-06	5000	5512	110.2%	101.4%	8.7%
	middle	10-JAN-06	5000	4672	93.4%		
	bottom	10-JAN-06	5000	5028	100.6%		
3 male	spike	10-JAN-06	8512	8131	95.5%	---	---
	top	10-JAN-06	8889	7280	81.9%	82.3%	1.9%
	middle	10-JAN-06	8889	7216	81.2%		
	bottom	10-JAN-06	8889	7461	83.9%		
3 female	spike	10-JAN-06	8512	8131	95.5%	---	---
	top	10-JAN-06	10000	8046	80.5%	80.2%	2.7%
	middle	10-JAN-06	10000	7805 ²	78.1%		
	bottom	10-JAN-06	10000	8217	82.2%		
4 male	spike	10-JAN-06	20856	19057	91.4%	---	---
	top	10-JAN-06	17778	15713	88.4%	85.7%	3.7%
	middle	10-JAN-06	17778	14666	82.5%		
	bottom	10-JAN-06	17778	15313	86.1%		
4 female	spike	10-JAN-06	20856	19057	91.4%	---	---
	top	10-JAN-06	20000	16555	82.8%	84.7%	3.7%
	middle	10-JAN-06	20000	17571	87.9%		
	bottom	10-JAN-06	20000	16699	83.5%		

¹ result of repeated measurement

² confirmed by reanalysis

³ exceeds the limit of 120%

continued

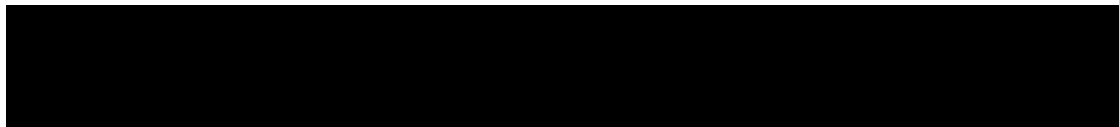


Table 1: *Continued*

Dose Group	Sample taken from/after	Date of Analysis	Nominal Concentration [ppm]	Actual Concentration [ppm]	Recovery	Mean Recovery	Maximum Variation from Mean
Date of Preparation: 10-Mar-06							
1 male+female	vehicle	22-Mar-06	0.000	0.000	---	---	---
2 male	spike	22-Mar-06	7448	7494	100.6%	---	---
	top	22-Mar-06	8430	6840	81.1%	83.0%	6.3%
	middle	22-Mar-06	8430	7434	88.2%		
	bottom	22-Mar-06	8430	6710	79.6%		
2 female	spike	22-Mar-06	7448	7494	100.6%	---	---
	top	22-Mar-06	7040	5769	81.9%	82.8%	3.1%
	middle	22-Mar-06	7040	6010	85.4%		
	bottom	22-Mar-06	7040	5709	81.1%		
3 male	spike	22-Mar-06	16168	14493	89.6%	---	---
	top	22-Mar-06	17161	14127	82.3%	81.8%	0.9%
	middle	22-Mar-06	17161	13919	81.1%		
	bottom	22-Mar-06	17161	14085	82.1%		
3 female	spike	22-Mar-06	16168	14493	89.6%	---	---
	top	22-Mar-06	13699	11128	81.2%	82.1%	1.4%
	middle	22-Mar-06	13699	11212	81.8%		
	bottom	22-Mar-06	13699	11399	83.2%		
4 male	spike	22-Mar-06	29752	26951	90.6%	---	---
	top	22-Mar-06	32946	29381	89.2%	89.5%	2.6%
	middle	22-Mar-06	32946	28825	87.5%		
	bottom	22-Mar-06	32946	30247	91.8%		
4 female	spike	22-Mar-06	29752	26951	90.6%	---	---
	top	22-Mar-06	26703	23755	89.0%	88.9%	1.1%
	middle	22-Mar-06	26703	23487	88.0%		
	bottom	22-Mar-06	26703	24002	89.9%		

continued

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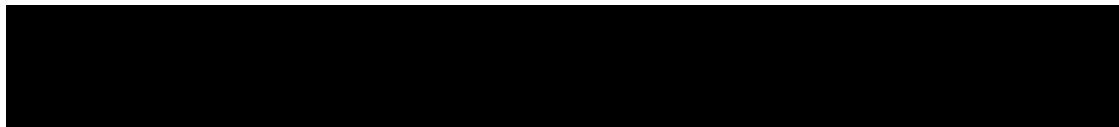


Table 1: *Continued*

Dose Group	Sample taken from/after	Date of Analysis	Nominal Concentration [ppm]	Actual Concentration [ppm]	Recovery	Mean Recovery	Maximum Variation from Mean
Date of Preparation: 22-Mar-06							
1 male+female	vehicle	21-Apr-06	0.000	0.000	---	---	---
2 male	spike	21-Apr-06	9656	7433	77.0% ²	---	---
	top	21-Apr-06	9313	7960	85.5%	90.1%	5.1%
	middle	21-Apr-06	9313	8576	92.1%		
	bottom	21-Apr-06	9313	8636	92.7%		
2 female	spike	21-Apr-06	7692	5933	77.1% ²	---	---
	top	21-Apr-06	7312	8803	120.4% ²	117.3%	3.4%
	middle	21-Apr-06	7312	8280	113.2%		
	bottom	21-Apr-06	7312	8644	118.2%		
3 male	spike	21-Apr-06	18616	15814	84.9%	---	---
	top	21-Apr-06	18462	16227	87.9%	84.3%	4.3%
	middle	21-Apr-06	18462	15326	83.0%		
	bottom	21-Apr-06	18462	15110	81.8%		
3 female	spike	21-Apr-06	14144	11334	80.1%	---	---
	top	21-Apr-06	14220	12006	84.4%	87.4%	3.4%
	middle	21-Apr-06	14220	12457	87.6%		
	bottom	21-Apr-06	14220	12839	90.3%		
4 male	spike	21-Apr-06	35584	30254	85.0%	---	---
	top	21-Apr-06	35660	35164	98.6%	96.3%	2.4%
	middle	21-Apr-06	35660	34294	96.2%		
	bottom	21-Apr-06	35660	33575	94.2%		
4 female	spike	21-Apr-06	28016	28802	102.8%	---	---
	top	21-Apr-06	28287	29603	104.7%	105.2%	10.1%
	middle	21-Apr-06	28287	32761	115.8%		
	bottom	21-Apr-06	28287	26883	95.0% ¹		

¹ result of repeated measurement

² confirmed by reanalysis, exceed limit of 80 - 120% of nominal

continued

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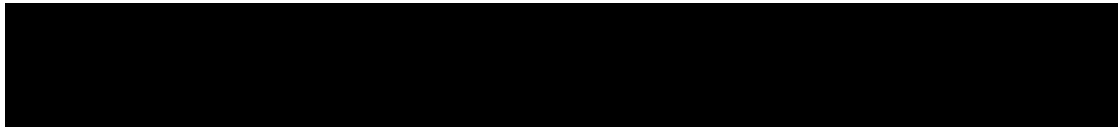


Table 1: Continued

Storage stability results (RCC study number A29992)

Dose Group ¹	Sample taken from/after	Date of Analysis	Nominal Concentration [ppm]	Actual Concentration [ppm]	Recovery	Mean Recovery	Maximum Variation from Mean
Date of Preparation: 25-Oct-05 (Pre-test)							
4	top	04-Nov-05	12000	9601	80.0%	83.6%	6.7%
	middle	04-Nov-05	12000	9655	80.5%		
	bottom	03-Nov-05	12000	10825	90.2%		
	7 days/RT	03-Nov-05	12000	10561	88.0%	—	—
	14 days/RT	11-Nov-05	12000	10748	89.6%	—	—
	21 days/RT	18-Nov-05	12000	10511	87.6%	—	—

¹ Pellets of dose group 2, with a content of 1100 ppm, were not analysed, as the quantitation limit is 3000 ppm.

Dose Group	Sample taken from/after	Date of Analysis	Nominal Concentration [ppm]	Actual Concentration [ppm]	Recovery	Mean Recovery	Maximum Variation from Mean
Date of Preparation: 16-Nov-05 (Administered day 6 p.c.)							
3	top	21-Nov-05	3300	2918	88.4%	96.9%	8.5%
	middle	21-Nov-05	3300	3240	98.2%		
	bottom	21-Nov-05	3300	3435	104.1%		
	21 days/-20 °C	09-Dec-05	3300	2652	80.4%	—	—
4	top	21-Nov-05	11000	9418	85.6%	87.4%	2.8%
	middle	21-Nov-05	11000	9492	86.3%		
	bottom	21-Nov-05	11000	9922	90.2%		
	21 days/-20 °C	09-Dec-05	11000	10051	91.4%	—	—

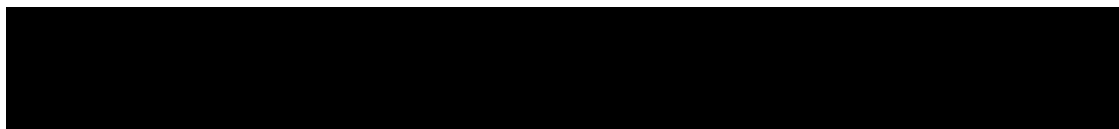
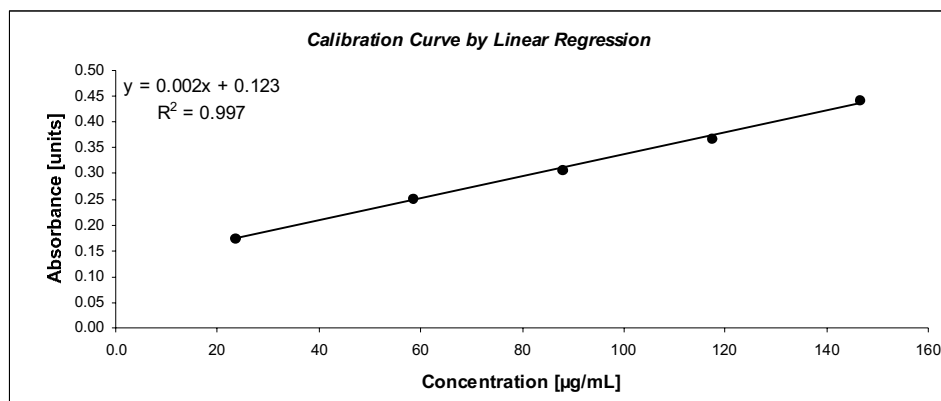


Figure 1: Example of Calibration Curve

Date of analysis: January 10, 2006



Standard Concentration [µg/mL]	Absorbance at 440 nm [counts]	Variation of Peak Area
23.45	0.174	2.1%
58.63	0.252	2.8%
87.95	0.306	-2.4%
117.3	0.367	-2.4%
146.6	0.442	1.9%

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APPENDIX V: CLINICAL LABORATORY INVESTIGATIONS

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL LABORATORY INVESTIGATIONS

Blood and urine sampling:

After 2 weeks: 17 and 18 January 2006 (Allocations A and B)
After 6 weeks: 13 and 14 February 2006 (Allocations A and B)
After 13 weeks: 04 to 07 April 2006 (Allocations A and B)
After 17 weeks (recovery): 02 May 2006 (Allocation B)

Blood samples were drawn from the retro-orbital plexus from all animals under light isoflurane anesthesia. The animals were fasted in metabolism cages for approximately 18 hours before blood sampling but allowed access to water ad libitum. The samples were collected early in the working day to reduce biological variation caused by circadian rhythms.

Analyses were carried out for each animal individually, i.e. samples were not pooled.

Urine was collected during the 18 hours fasting period into a specimen vial, using a metabolism cage.

In the summary and individual tables the names of some parameters have been abbreviated. Any abbreviation has been defined in this section. Clinical laboratory data are expressed, with a few exceptions, in general accordance with the International System of Units (SI).

Key to abbreviations of units:

l	liter	g	gram	m	milli (10^{-3})
mol	mole	k	kilo (10^3)	μ	micro (10^{-6})
sec	second	G	giga (10^9)	f	femto (10^{-15})
U	Unit	T	tera (10^{12})		
osm	osmol				

HEMATOLOGY

The following anticoagulants were used during blood collection:

Complete blood cell count Tri-potassium-EDTA
Methemoglobin Lithium heparin
Coagulation Sodium citrate, 3.2% (1 part anticoagulant to 9 parts blood)

Complete blood cell count

Parameter	Abbreviation	Unit	Instrumentation
Erythrocyte count	RBC	T/l	Advia 120 ¹
Hemoglobin	HB	mmol/l	Advia 120
Hematocrit	HCT	rel.1	Advia 120
Mean corpuscular volume	MCV	fl	Advia 120
Red cell volume distribution width	RDW	rel.1	Advia 120
Mean corpuscular hemoglobin	MCH	fmol	Advia 120
Mean corpuscular hemoglobin concentration	MCHC	mmol/l	Advia 120

¹ ADVIA 120 hematology system (Bayer)

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Complete blood cell count

Parameter	Abbreviation	Unit		Instrumentation
Hemoglobin concentration distribution width	HDW	mmol/l		Advia 120
Reticulocyte count	RETI	relative	absolute	Advia 120
		rel.1	G/l	
Reticulocyte maturity index	L RETI	rel.1		
(low, medium, high fluorescence)	M RETI	rel.1		
	H RETI	rel.1		Advia 120
Leukocyte count, total	WBC	G/l		Advia 120
Differential leukocyte count		relative	absolute	Advia 120
Neutrophils	NEUT	rel.1	G/l	Advia 120
Eosinophils	EOS	rel.1	G/l	Advia 120
Basophils	BASO	rel.1	G/l	Advia 120
Lymphocytes	LYMPH	rel.1	G/l	Advia 120
Monocytes	MONO	rel.1	G/l	Advia 120
Large unstained cells	LUC	rel.1	G/l	Advia 120
Platelet count	PLATELETS	G/l		Advia 120

Hemoglobin derivatives

Parameter	Abbreviation	Unit	Method	Instrumentation
Methemoglobin	MET-HB	rel. 1	Spectrometry, results given as ratio of total hemoglobin	OSM3 ²
Heinz bodies	HEINZ BOD	rel.1	Microscopic examination of New Methylene Blue stained films, results given as ratio of total RBC	Microscope

Coagulation

Parameter	Abbreviation	Unit	Method	Instrumentation
Prothrombin time (=Thromboplastin time)	PT	rel. 1	Clotting assay, thromboplastin from rabbit brain tissue, results as ratio of normal activity	STA ³
Activated partial thromboplastin time	PTT	sec	Clotting assay, cephalin from rabbit cerebral tissue, silica surface activator	STA

² Hemoximeter OSM3

³ STA-compact analyzer (Roche Diagnostics)

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CLINICAL BIOCHEMISTRY

Lithium heparin was used as anticoagulant during blood collection.

Parameter	Abbreviation	Unit	Method	Instrumentation
Glucose		mmol/l	Hexokinase/G6P-DH	Hitachi 917 ⁴
Urea		mmol/l	Urease/GLDH	Hitachi 917
Blood urea nitrogen	BUN	µmol/l	Urease/GLDH	Hitachi 917
Creatinine	CREAT	µmol/l	Enzymatic colorimetric test	Hitachi 917
Bilirubin, total	BILI-T	µmol/l	Reaction with 2,5-Dichloro-phenyl-diazonium salt	Hitachi 917
Cholesterol, total	CHOLEST	mmol/l	Enzymatic, CHOD/PAP	Hitachi 917
Triglycerides	TRIGLY	mmol/l	Glycerol-Kinase GPO/PAP method	Hitachi 917
Phospholipids	PHOS-LIP	mmol/l	Phospholipase-Cholinoxidase-Peroxidase-reaction	Hitachi 917
Aspartate aminotransferase EC 2.6.1.1 ⁵	ASAT	U/l 37°C	MDH/NADH coupled reaction	Hitachi 917
Alanine aminotransferase EC 2.6.1.2	ALAT	U/l 37°C	LDH/NADH coupled reaction	Hitachi 917
Lactate dehydrogenase EC 1.1.1.27	LDH	U/l 37°C	NADH/LDH coupled reaction using pyruvate as substrate	Hitachi 917
Glutamate dehydrogenase EC 1.4.1.3	GLDH	U/l 37°C	Standard method, optimized (DGKC)	Hitachi 917
Alkaline phosphatase EC 3.1.3.1	ALP	U/l 37°C	p-Nitrophenyl-phosphate as substrate	Hitachi 917
Gamma-glutamyl transferase EC 2.3.2.2	GGT	U/l 37°C	Substrate: L-gamma-glutamyl-3-carboxy-4-nitroanilide	Hitachi 917
Creatine kinase EC 2.7.3.2	CK	U/l 37°C	HK/ATP and G6P-DH/NADPH coupled reaction method	Hitachi 917

⁴ Hitachi 917 analyzer, Roche Diagnostics

⁵ Identification of enzymes with EC-Number (Enzyme Commission) according to Enzyme Nomenclature, Recommendations (1972) of the IUPAC and IUB, Elsevier Scient. Publ. Comp., Amsterdam, 1973

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Parameter	Abbreviation	Unit	Method	Instrumentation
Sodium		mmol/l	Ion selective electrode	Hitachi 917
Potassium		mmol/l	Ion selective electrode	Hitachi 917
Chloride		mmol/l	Ion selective electrode	Hitachi 917
Calcium		mmol/l	o-Cresolphthalein complexone method	Hitachi 917
Phosphorus		mmol/l	Phosphomolybdate reaction	Hitachi 917
Protein, total	PROTEIN	g/l	Biuret reaction	Hitachi 917
Albumin		g/l	Bromocresol green method	Hitachi 917
Globulin		g/l	Calculated value (Total protein minus Albumin)	
Albumin/Globulin Ratio	A/G RATIO	rel.1	Calculated value (Albumin/Globulin)	

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

URINALYSIS

Physical examination

Parameter	Abbreviation	Unit	Method / Instrumentation
Urine volume (18-hour)		ml	Gravimetric ⁶
Relative Density (= Specific gravity)	REL DENS	rel.1	Refractometer ⁷
Osmolality		mosm/kg	Freezing point depression ⁸
Color			Visual inspection
Appearance			Visual inspection

The following urine components were investigated using a semi-automated test strip analyzer Mditron (Roche Diagnostics) applying reflectance spectroscopy. Results are given as discrete values representing a concentration range (semi-quantitative results).

Chemical examination

Parameter	Abbreviation	Unit	Set points	Instrumentation
pH-value	pH		5.0, 6.0, 6.5, 7.0, 8.0, 9.0	Mditron ⁹
Nitrite		score	0 (negative), 1 (positive)	Mditron
Protein		g/l	0, 0.25, 0.75, 1.50, 5.00	Mditron
Glucose		mmol/l	0, 3, 6, 17, 56	Mditron
Ketones		mmol/l	0, 0.5, 1.5, 5.0, 15.0	Mditron
Urobilinogen	UROBILI	µmol/l	0, 17, 68, 135, 203	Mditron
Bilirubin		µmol/l	0, 17, 50, 100	Mditron
Erythrocytes	ERY	per µl	0, 10, 25, 50, 150, 250	Mditron
Leukocytes	LEU	per µl	0, 25, 100, 500	Mditron

⁶ Mettler balance

⁷ Clinical Refractometer SU-202, Kernco

⁸ Osmometer Fiske Typ 2400, IG-Instrumenten Gesellschaft

⁹ Mditron semi-automated urine chemistry analyzer and reagent test strips, Roche Diagnostics

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Microscopic examination

After centrifugation of the urine specimen, the sediment was examined microscopically. Results of microscopic estimates for formed elements (cells, casts, crystals) were classified in the following categories:

	0	no abnormalities observed
	1	few
	2	moderate number
	3	many
Blood cells	RBC WBC	Erythrocytes Leukocytes
Epithelial cells	SQUAM TRANS RENAL	Squamous epithelial cells Transitional epithelial cells Renal epithelial cells
Crystals	TRIP PHOS CA OXALATE URIC ACID UNIDENTIFI	Triple phosphate crystals Calcium oxalate crystals Uric acid crystals Unidentified crystals
Casts	CASTS	Casts

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - HEMATOLOGY

STRAIN: RAT / HanRcc:WIST (MALES) AGE: FROM 8 TO 12 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS
ERYTHROCYTES (RBC)	T/l	1110	8.34	0.43	7.51 9.19
HEMOGLOBIN (HB)	mmol/l	1110	9.9	0.5	9.2 10.7
HEMATOCRIT (HCT)	rel. l	1110	0.46	0.02	0.42 0.50
MEAN CELL VOLUME (MCV)	fl	1110	55.6	2.4	51.1 60.7
RED CELL VOL. DISTR. WIDTH (RDW)	rel. l	1110	0.129	0.032	0.104 0.223
MEAN CELL HEMOGLOBIN (MCH)	fmol	1110	1.19	0.06	1.10 1.29
MEAN CELL HEMOGLOBIN CONC. (MCHC)	mmol/l	1110	21.46	0.96	20.04 22.96
HEMOGLOBIN CONC. DISTR. WIDTH	mmol/l	1110	1.55	0.20	1.18 1.92
RETICULOCYTE COUNT					
RETICULOCYTE (REL)	rel. l	1090	0.031	0.120	0.019 0.047
RETICULOCYTE (ABS)	G/l	1090	227	43	163 348
MATURITY INDEX (L-RETI)	rel. l	1090	0.532	0.143	0.307 0.800
MATURITY INDEX (M-RETI)	rel. l	1090	0.330	0.061	0.186 0.413
MATURITY INDEX (H-RETI)	rel. l	1090	0.138	0.119	0.008 0.423
LEUKOCYTES, TOTAL (WBC)	G/l	1110	7.19	1.63	4.59 10.96
DIFF WBC COUNT (REL)					
NEUTROPHILS (NEUT)	rel. l	109	0.147	0.035	0.079 0.226
EOSINOPHILS (EOS)	rel. l	1105	0.012	0.005	0.006 0.027
BASOPHILS (BASO)	rel. l	1105	0.006	0.005	0.001 0.020
LYMPHOCYTES (LYMPH)	rel. l	1105	0.806	0.048	0.699 0.882
MONOCYTES (MONO)	rel. l	1105	0.018	0.006	0.009 0.030
LARGE UNSTAINED CELLS (LUC)	rel. l	1105	0.008	0.004	0.003 0.016
DIFF WBC COUNT (ABS)					
NEUTROPHILS (NEUT)	G/l	109	1.02	0.29	0.58 1.74
EOSINOPHILS (EOS)	G/l	1105	0.09	0.04	0.04 0.18
BASOPHILS (BASO)	G/l	1105	0.04	0.04	0.01 0.15
LYMPHOCYTES (LYMPH)	G/l	1105	5.81	1.46	3.44 9.31
MONOCYTES (MONO)	G/l	1105	0.13	0.05	0.06 0.25
LARGE UNSTAINED CELLS (LUC)	G/l	1105	0.06	0.03	0.02 0.14
THROMBOCYTES (PLATELETS)	G/l	1110	1020	137	782 1299
MEAN PLATELET VOLUME (MPV)	fl	10	7.0	0.4	--- ---
PLATELET DISTRIBUTION WIDTH (PDW)	rel. l	10	0.61	0.07	--- ---
METHEMOGLOBIN (MET-HB)	rel. l	765	0.008	0.002	0.005 0.012
HEINZ BODIES	rel. l	65	0.000	0.000	--- ---
COAGULATION					
PROTHROMBIN TIME (PT)	rel. l	1101	0.83	0.07	0.72 0.98
PARTIAL THROMBOPLASTIN TIME (PTT)	sec	1098	19.4	3.8	13.1 27.9
FIBRINOGEN	g/l	11	2.8	0.3	--- ---

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - HEMATOLOGY

STRAIN: RAT / HanRcc:WIST (MALES) AGE: FROM 13 TO 18 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS	
ERYTHROCYTES (RBC)	T/l	481	8.50	0.43	7.60	9.35
HEMOGLOBIN (HB)	mmol/l	481	9.9	0.4	9.2	10.6
HEMATOCRIT (HCT)	rel. 1	481	0.46	0.02	0.41	0.49
MEAN CELL VOLUME (MCV)	fl	481	53.8	2.5	48.3	58.2
RED CELL VOL. DISTR. WIDTH (RDW)	rel. 1	481	0.138	0.033	0.111	0.239
MEAN CELL HEMOGLOBIN (MCH)	fmo1	481	1.17	0.06	1.06	1.28
MEAN CELL HEMOGLOBIN CONC. (MCHC)	mmol/l	481	21.79	0.81	20.41	23.43
HEMOGLOBIN CONC. DISTR. WIDTH	mmol/l	461	1.66	0.20	1.33	2.09
RETICULOCYTE COUNT						
RETICULOCYTE (REL)	rel. 1	481	0.024	0.004	0.017	0.033
RETICULOCYTE (ABS)	G/l	481	206	33	147	278
MATURITY INDEX (L-RETI)	rel. 1	461	0.546	0.119	0.346	0.790
MATURITY INDEX (M-RETI)	rel. 1	461	0.337	0.053	0.196	0.408
MATURITY INDEX (H-RETI)	rel. 1	461	0.117	0.100	0.010	0.346
LEUKOCYTES, TOTAL (WBC)	G/l	481	6.74	1.48	4.12	9.89
DIFF WBC COUNT (REL)						
NEUTROPHILS (NEUT)	rel. 1	24	0.141	0.025	---	---
EOSINOPHILS (EOS)	rel. 1	481	0.014	0.006	0.007	0.032
BASOPHILS (BASO)	rel. 1	481	0.004	0.004	0.001	0.015
LYMPHOCYTES (LYMPH)	rel. 1	481	0.796	0.049	0.679	0.872
MONOCYTES (MONO)	rel. 1	481	0.019	0.006	0.010	0.032
LARGE UNSTAINED CELLS (LUC)	rel. 1	481	0.008	0.004	0.003	0.018
DIFF WBC COUNT (ABS)						
NEUTROPHILS (NEUT)	G/l	24	0.99	0.22	---	---
EOSINOPHILS (EOS)	G/l	481	0.09	0.04	0.04	0.18
BASOPHILS (BASO)	G/l	481	0.03	0.03	0.00	0.10
LYMPHOCYTES (LYMPH)	G/l	481	5.39	1.32	3.10	8.43
MONOCYTES (MONO)	G/l	481	0.13	0.04	0.06	0.22
LARGE UNSTAINED CELLS (LUC)	G/l	481	0.05	0.03	0.02	0.15
THROMBOCYTES (PLATELETS)	G/l	481	955	119	749	1201
METHEMOGLOBIN (MET-HB)	rel. 1	292	0.008	0.002	0.004	0.012
HEINZ BODIES	rel. 1	10	0.000	0.000	---	---
COAGULATION						
PROTHROMBIN TIME (PT)	rel. 1	473	0.80	0.07	0.67	0.95
PARTIAL THROMBOPLASTIN TIME (PTT)	sec	473	19.6	3.6	13.1	27.7

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - HEMATOLOGY

STRAIN: RAT / HanRcc:WIST (MALES) AGE: FROM 19 TO 40 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS	
ERYTHROCYTES (RBC)	T/l	813	8.81	0.42	7.94	9.56
HEMOGLOBIN (HB)	mmol/l	813	9.9	0.4	9.1	10.6
HEMATOCRIT (HCT)	rel. 1	813	0.45	0.02	0.42	0.49
MEAN CELL VOLUME (MCV)	fl	813	51.6	2.2	47.8	56.0
RED CELL VOL. DISTR. WIDTH (RDW)	rel. 1	783	0.144	0.039	0.116	0.274
MEAN CELL HEMOGLOBIN (MCH)	fmo1	813	1.12	0.05	1.04	1.25
MEAN CELL HEMOGLOBIN CONC. (MCHC)	mmol/l	813	21.77	0.84	20.33	23.48
HEMOGLOBIN CONC. DISTR. WIDTH	mmol/l	783	1.71	0.20	1.35	2.09
RETICULOCYTE COUNT						
RETICULOCYTE (REL)	rel. 1	813	0.021	0.004	0.014	0.029
RETICULOCYTE (ABS)	G/l	813	182	34	124	256
MATURITY INDEX (L-RETI)	rel. 1	783	0.538	0.126	0.359	0.802
MATURITY INDEX (M-RETI)	rel. 1	783	0.324	0.053	0.189	0.400
MATURITY INDEX (H-RETI)	rel. 1	783	0.138	0.101	0.010	0.340
LEUKOCYTES, TOTAL (WBC)	G/l	813	6.14	1.44	3.75	9.23
DIFF WBC COUNT (REL)						
NEUTROPHILS (NEUT)	rel. 1	30	0.215	0.047	---	---
EOSINOPHILS (EOS)	rel. 1	813	0.020	0.007	0.010	0.035
BASOPHILS (BASO)	rel. 1	813	0.004	0.003	0.001	0.013
LYMPHOCYTES (LYMPH)	rel. 1	813	0.749	0.058	0.631	0.846
MONOCYTES (MONO)	rel. 1	813	0.022	0.008	0.011	0.038
LARGE UNSTAINED CELLS (LUC)	rel. 1	813	0.008	0.004	0.002	0.020
DIFF WBC COUNT (ABS)						
NEUTROPHILS (NEUT)	G/l	30	1.46	0.43	---	---
EOSINOPHILS (EOS)	G/l	813	0.12	0.04	0.06	0.23
BASOPHILS (BASO)	G/l	813	0.02	0.02	0.00	0.09
LYMPHOCYTES (LYMPH)	G/l	813	4.61	1.20	2.62	7.26
MONOCYTES (MONO)	G/l	813	0.14	0.05	0.06	0.25
LARGE UNSTAINED CELLS (LUC)	G/l	813	0.05	0.03	0.01	0.12
THROMBOCYTES (PLATELETS)	G/l	813	885	107	700	1104
METHEMOGLOBIN (MET-HB)	rel. 1	233	0.009	0.002	0.005	0.012
COAGULATION						
PROTHROMBIN TIME (PT)	rel. 1	823	0.79	0.07	0.68	0.94
PARTIAL THROMBOPLASTIN TIME (PTT)	sec	822	20.1	4.0	13.3	31.2

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - HEMATOLOGY

STRAIN: RAT / HanRcc:WIST (FEMALES) AGE: FROM 8 TO 12 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS
ERYTHROCYTES (RBC)	T/l	1061	7.96	0.39	7.21 8.69
HEMOGLOBIN (HB)	mmol/l	1061	9.5	0.4	8.7 10.3
HEMATOCRIT (HCT)	rel. l	1061	0.44	0.02	0.40 0.47
MEAN CELL VOLUME (MCV)	fl	1061	54.8	2.1	51.0 59.2
RED CELL VOL. DISTR. WIDTH (RDW)	rel. l	1061	0.124	0.035	0.099 0.234
MEAN CELL HEMOGLOBIN (MCH)	fmol	1061	1.19	0.05	1.11 1.30
MEAN CELL HEMOGLOBIN CONC. (MCHC)	mmol/l	1061	21.80	0.74	20.32 23.25
HEMOGLOBIN CONC. DISTR. WIDTH	mmol/l	1061	1.43	0.17	1.12 1.75
RETICULOCYTE COUNT					
RETICULOCYTE (REL)	rel. l	1042	0.029	0.005	0.020 0.040
RETICULOCYTE (ABS)	G/l	1042	227	39	158 308
MATURITY INDEX (L-RETI)	rel. l	1042	0.524	0.134	0.311 0.781
MATURITY INDEX (M-RETI)	rel. l	1042	0.326	0.055	0.200 0.422
MATURITY INDEX (H-RETI)	rel. l	1042	0.150	0.126	0.007 0.415
LEUKOCYTES, TOTAL (WBC)	G/l	1059	4.98	1.24	2.87 7.90
DIFF WBC COUNT (REL)					
NEUTROPHILS (NEUT)	rel. l	100	0.140	0.052	0.074 0.272
EOSINOPHILS (EOS)	rel. l	1054	0.015	0.010	0.006 0.036
BASOPHILS (BASO)	rel. l	1054	0.005	0.005	0.001 0.019
LYMPHOCYTES (LYMPH)	rel. l	1054	0.793	0.063	0.641 0.888
MONOCYTES (MONO)	rel. l	1054	0.017	0.006	0.008 0.030
LARGE UNSTAINED CELLS (LUC)	rel. l	1054	0.008	0.003	0.003 0.015
DIFF WBC COUNT (ABS)					
NEUTROPHILS (NEUT)	G/l	100	0.68	0.27	0.30 1.30
EOSINOPHILS (EOS)	G/l	1054	0.07	0.04	0.03 0.17
BASOPHILS (BASO)	G/l	1054	0.02	0.02	0.00 0.10
LYMPHOCYTES (LYMPH)	G/l	1054	3.97	1.11	2.18 6.43
MONOCYTES (MONO)	G/l	1054	0.09	0.03	0.04 0.17
LARGE UNSTAINED CELLS (LUC)	G/l	1054	0.04	0.02	0.01 0.08
THROMBOCYTES (PLATELETS)	G/l	1061	1071	142	803 1353
MEAN PLATELET VOLUME (MPV)	fl	10	8.2	0.7	---
PLATELET DISTRIBUTION WIDTH (PDW)	rel. l	10	0.66	0.05	---
METHEMOGLOBIN (MET-HB)	rel. l	776	0.008	0.002	0.005 0.012
HEINZ BODIES	rel. l	95	0.000	0.000	0.000 0.000
COAGULATION					
PROTHROMBIN TIME (PT)	rel. l	1061	0.88	0.09	0.72 1.06
PARTIAL THROMBOPLASTIN TIME (PTT)	sec	1059	20.6	6.9	13.0 36.8
FIBRINOGEN	g/l	5	2.5	0.2	---

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - HEMATOLOGY

STRAIN: RAT / HanRcc:WIST (FEMALES) AGE: FROM 13 TO 18 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS
ERYTHROCYTES (RBC)	T/l	476	7.86	0.41	7.03 8.63
HEMOGLOBIN (HB)	mmol/l	476	9.6	0.4	8.9 10.4
HEMATOCRIT (HCT)	rel. 1	476	0.44	0.02	0.39 0.48
MEAN CELL VOLUME (MCV)	fl	476	55.7	2.5	51.0 61.2
RED CELL VOL. DISTR. WIDTH (RDW)	rel. 1	457	0.138	0.030	0.106 0.238
MEAN CELL HEMOGLOBIN (MCH)	fmol	476	1.22	0.05	1.13 1.34
MEAN CELL HEMOGLOBIN CONC. (MCHC)	mmol/l	476	21.97	0.81	20.61 23.52
HEMOGLOBIN CONC. DISTR. WIDTH	mmol/l	457	1.40	0.15	1.15 1.70
RETICULOCYTE COUNT					
RETICULOCYTE (REL)	rel. 1	476	0.025	0.006	0.015 0.037
RETICULOCYTE (ABS)	G/l	476	199	41	124 288
MATURITY INDEX (L-RETI)	rel. 1	457	0.540	0.114	0.338 0.773
MATURITY INDEX (M-RETI)	rel. 1	457	0.340	0.054	0.210 0.432
MATURITY INDEX (H-RETI)	rel. 1	457	0.120	0.099	0.009 0.371
LEUKOCYTES, TOTAL (WBC)	G/l	476	4.38	1.10	2.52 6.90
DIFF. WBC COUNT (REL)					
NEUTROPHILS (NEUT)	rel. 1	33	0.131	0.042	---
EOSINOPHILS (EOS)	rel. 1	476	0.016	0.009	0.006 0.040
BASOPHILS (BASO)	rel. 1	476	0.004	0.004	0.000 0.016
LYMPHOCYTES (LYMPH)	rel. 1	476	0.800	0.063	0.635 0.884
MONOCYTES (MONO)	rel. 1	476	0.018	0.005	0.009 0.030
LARGE UNSTAINED CELLS (LUC)	rel. 1	476	0.008	0.004	0.002 0.015
DIFF. WBC COUNT (ABS)					
NEUTROPHILS (NEUT)	G/l	33	0.64	0.19	---
EOSINOPHILS (EOS)	G/l	476	0.07	0.04	0.03 0.15
BASOPHILS (BASO)	G/l	476	0.02	0.02	0.00 0.08
LYMPHOCYTES (LYMPH)	G/l	476	3.54	1.04	1.87 5.90
MONOCYTES (MONO)	G/l	476	0.08	0.03	0.03 0.14
LARGE UNSTAINED CELLS (LUC)	G/l	476	0.03	0.02	0.01 0.07
THROMBOCYTES (PLATELETS)	G/l	476	1015	123	776 1256
METHEMOGLOBIN (MET-HB)	rel. 1	298	0.009	0.002	0.005 0.012
HEINZ BODIES	rel. 1	10	0.000	0.000	---
COAGULATION					
PROTHROMBIN TIME (PT)	rel. 1	469	0.85	0.09	0.70 1.02
PARTIAL THROMBOPLASTIN TIME (PTT)	sec	469	20.1	5.2	12.6 33.6

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - HEMATOLOGY

STRAIN: RAT / HanRcc:WIST (FEMALES) AGE: FROM 19 TO 40 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS	
ERYTHROCYTES (RBC)	T/l	827	8.03	0.40	7.22	8.79
HEMOGLOBIN (HB)	mmol/l	827	9.6	0.4	8.8	10.4
HEMATOCRIT (HCT)	rel. 1	827	0.44	0.02	0.40	0.47
MEAN CELL VOLUME (MCV)	fl	827	54.5	2.2	50.3	58.9
RED CELL VOL. DISTR. WIDTH (RDW)	rel. 1	795	0.125	0.030	0.105	0.221
MEAN CELL HEMOGLOBIN (MCH)	fmol	827	1.19	0.05	1.10	1.29
MEAN CELL HEMOGLOBIN CONC. (MCHC)	mmol/l	827	21.89	0.77	20.48	23.43
HEMOGLOBIN CONC. DISTR. WIDTH	mmol/l	795	1.39	0.14	1.14	1.68
RETICULOCYTE COUNT						
RETICULOCYTE (REL)	rel. 1	827	0.024	0.006	0.014	0.035
RETICULOCYTE (ABS)	G/l	827	192	44	114	276
MATURITY INDEX (L-RETI)	rel. 1	795	0.516	0.132	0.317	0.785
MATURITY INDEX (M-RETI)	rel. 1	795	0.316	0.052	0.198	0.408
MATURITY INDEX (H-RETI)	rel. 1	795	0.167	0.128	0.010	0.421
LEUKOCYTES, TOTAL (WBC)	G/l	827	3.68	1.09	1.93	6.09
DIFF WBC COUNT (REL)						
NEUTROPHILS (NEUT)	rel. 1	30	0.190	0.046	---	---
EOSINOPHILS (EOS)	rel. 1	827	0.021	0.011	0.009	0.046
BASOPHILS (BASO)	rel. 1	827	0.003	0.003	0.000	0.012
LYMPHOCYTES (LYMPH)	rel. 1	827	0.759	0.069	0.598	0.861
MONOCYTES (MONO)	rel. 1	827	0.020	0.007	0.010	0.036
LARGE UNSTAINED CELLS (LUC)	rel. 1	827	0.007	0.004	0.002	0.017
DIFF WBC COUNT (ABS)						
NEUTROPHILS (NEUT)	G/l	30	0.70	0.28	---	---
EOSINOPHILS (EOS)	G/l	827	0.08	0.04	0.03	0.16
BASOPHILS (BASO)	G/l	827	0.01	0.01	0.00	0.05
LYMPHOCYTES (LYMPH)	G/l	827	2.81	0.91	1.30	4.83
MONOCYTES (MONO)	G/l	827	0.07	0.03	0.03	0.15
LARGE UNSTAINED CELLS (LUC)	G/l	827	0.03	0.02	0.01	0.08
THROMBOCYTES (PLATELETS)	G/l	827	948	126	730	1210
METHEMOGLOBIN (MET-HB)	rel. 1	232	0.008	0.002	0.001	0.012
HEINZ BODIES	rel. 1	30	0.000	0.000	---	---
COAGULATION						
PROTHROMBIN TIME (PT)	rel. 1	835	0.83	0.08	0.69	1.00
PARTIAL THROMBOPLASTIN TIME (PTT)	sec	825	19.9	4.8	12.5	32.7

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - CLINICAL BIOCHEMISTRY

STRAIN: RAT / HanRcc:WIST (MALES) AGE: FROM 8 TO 12 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS
GLUCOSE	mmol/l	1117	4.81	0.92	3.25 6.78
UREA	mmol/l	1117	5.96	1.28	3.90 9.00
URIC ACID	µmol/l	70	28.2	17.5	---
CREATININE	µmol/l	1117	23.1	2.7	17.7 28.5
BILIRUBIN, TOTAL	µmol/l	1117	1.53	0.39	0.81 2.37
BILIRUBIN, DIRECT	µmol/l	15	0.00	0.00	---
BILE ACIDS	µmol/l	29	34.67	20.00	---
CHOLESTEROL, TOTAL	mmol/l	1117	1.69	0.33	1.10 2.39
HDL-CHOLESTEROL	mmol/l	60	1.39	0.20	---
LDL-CHOLESTEROL	mmol/l	59	0.21	0.06	---
TRIGLYCERIDES	mmol/l	1117	0.52	0.27	0.19 1.20
PHOSPHOLIPIDS	mmol/l	1111	1.52	0.24	1.09 2.05
LACTATE	mmol/l	5	4.13	0.49	---
ASPARTATE AMINOTRANSFERASE (ASAT)	U/l	1117	76.4	10.1	62.2 98.2
ALANINE AMINOTRANSFERASE (ALAT)	U/l	1117	32.7	11.0	20.7 64.0
LACTATE DEHYDROGENASE (LDH)	U/l	1097	173.0	96.4	87.1 362.0
GLUTAMATE-DEHYDROGENASE (GLDH)	U/l	888	6.3	5.8	4.0 9.3
ALKALINE PHOSPHATASE (ALP)	U/l	1117	121.2	34.1	76.7 205.2
GAMMA-GLUTAMYLTRANSFERASE (GGT)	U/l	1112	0.0	0.1	0.0 0.0
CREATINE KINASE (CK)	U/l	1102	208.2	82.5	117.9 440.8
ALPHA-AMYLASE	U/l	10	1786	187	---
SODIUM	mmol/l	1116	143.3	2.5	138.5 148.2
POTASSIUM	mmol/l	1117	3.63	0.30	3.09 4.28
CHLORIDE	mmol/l	1117	102.6	2.8	96.8 107.9
CALCIUM	mmol/l	1117	2.83	0.09	2.64 3.01
PHOSPHORUS	mmol/l	1117	2.37	0.23	1.95 2.86
IRON	µmol/l	5	18.31	2.91	---
MAGNESIUM	mmol/l	5	0.93	0.03	---
PROTEIN, TOTAL	g/l	1117	65.46	2.60	60.42 70.16
ALBUMIN	g/l	1062	42.22	1.88	38.73 45.68
GLOBULIN	g/l	1062	23.26	1.95	19.42 27.11
A/G RATIO	-	1062	1.83	0.18	1.52 2.22

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - CLINICAL BIOCHEMISTRY

STRAIN: RAT / HanRcc:WIST (MALES) AGE: FROM 13 TO 18 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS
GLUCOSE	mmol/l	484	5.16	1.07	3.13 7.61
UREA	mmol/l	484	5.48	0.79	4.13 7.14
URIC ACID	µmol/l	30	28.1	18.0	---
CREATININE	µmol/l	484	25.3	3.0	19.8 31.1
BILIRUBIN, TOTAL	µmol/l	484	1.56	0.35	0.94 2.31
BILIRUBIN, DIRECT	µmol/l	5	0.00	0.00	---
BILE ACIDS	µmol/l	14	25.97	13.55	---
CHOLESTEROL, TOTAL	mmol/l	484	1.66	0.32	1.11 2.34
HDL-CHOLESTEROL	mmol/l	10	1.43	0.19	---
LDL-CHOLESTEROL	mmol/l	10	0.18	0.06	---
TRIGLYCERIDES	mmol/l	484	0.52	0.27	0.20 1.16
PHOSPHOLIPIDS	mmol/l	484	1.49	0.22	1.07 1.93
LACTATE	mmol/l	5	1.61	0.15	---
ASPARTATE AMINOTRANSFERASE (ASAT)	U/l	484	75.3	11.0	60.5 101.3
ALANINE AMINOTRANSFERASE (ALAT)	U/l	484	30.6	6.3	20.4 46.2
LACTATE DEHYDROGENASE (LDH)	U/l	397	167.8	128.6	78.7 427.8
GLUTAMATE-DEHYDROGENASE (GLDH)	U/l	405	7.0	2.9	4.1 14.9
ALKALINE PHOSPHATASE (ALP)	U/l	483	86.9	20.3	52.1 130.6
GAMMA-GLUTAMYLTRANSFERASE (GGT)	U/l	462	0.0	0.0	0.0 0.0
CREATINE KINASE (CK)	U/l	464	181.4	153.5	95.8 496.0
SODIUM	mmol/l	484	143.1	2.8	135.7 147.4
POTASSIUM	mmol/l	484	3.66	0.32	3.07 4.45
CHLORIDE	mmol/l	484	102.9	3.4	95.3 109.4
CALCIUM	mmol/l	484	2.79	0.09	2.60 2.97
PHOSPHORUS	mmol/l	484	2.14	0.24	1.62 2.61
PROTEIN, TOTAL	g/l	484	66.13	2.50	60.69 70.81
ALBUMIN	g/l	463	42.18	1.84	38.90 45.37
GLOBULIN	g/l	463	23.91	2.07	19.83 27.99
A/G RATIO	-	463	1.78	0.17	1.46 2.13

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - CLINICAL BIOCHEMISTRY

STRAIN: RAT / HanRcc:WIST (MALES) AGE: FROM 19 TO 40 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS	
GLUCOSE	mmol/l	826	5.68	1.20	3.83	8.68
UREA	mmol/l	825	5.36	0.78	4.04	7.03
URIC ACID	µmol/l	50	27.5	18.7	---	---
CREATININE	µmol/l	825	27.1	2.9	21.9	33.4
BILIRUBIN, TOTAL	µmol/l	825	1.66	0.34	1.02	2.37
CHOLESTEROL, TOTAL	mmol/l	825	1.84	0.37	1.19	2.67
HDL-CHOLESTEROL	mmol/l	10	1.50	0.17	---	---
LDL-CHOLESTEROL	mmol/l	20	0.22	0.07	---	---
TRIGLYCERIDES	mmol/l	825	0.50	0.27	0.19	1.17
PHOSPHOLIPIDS	mmol/l	813	1.57	0.25	1.11	2.10
ASPARTATE AMINOTRANSFERASE (ASAT)	U/l	826	75.2	10.5	58.6	100.1
ALANINE AMINOTRANSFERASE (ALAT)	U/l	826	33.1	6.4	22.2	48.2
LACTATE DEHYDROGENASE (LDH)	U/l	706	151.0	67.7	80.3	335.3
GLUTAMATE-DEHYDROGENASE (GLDH)	U/l	519	8.4	3.8	4.0	18.2
ALKALINE PHOSPHATASE (ALP)	U/l	825	58.4	13.2	37.5	87.1
GAMMA-GLUTAMYLTRANSFERASE (GGT)	U/l	803	0.0	0.2	0.0	0.0
CREATINE KINASE (CK)	U/l	773	147.0	92.3	78.8	343.8
SODIUM	mmol/l	826	143.6	3.8	136.7	155.1
POTASSIUM	mmol/l	826	3.79	0.33	3.23	4.54
CHLORIDE	mmol/l	826	104.2	2.9	99.1	109.3
CALCIUM	mmol/l	826	2.76	0.11	2.55	2.94
PHOSPHORUS	mmol/l	825	1.75	0.19	1.37	2.14
MAGNESIUM	mmol/l	10	0.85	0.05	---	---
PROTEIN, TOTAL	g/l	825	67.33	2.75	61.87	72.93
ALBUMIN	g/l	670	41.89	1.79	38.36	45.53
GLOBULIN	g/l	670	25.41	2.27	21.13	29.98
A/G RATIO	-	670	1.66	0.17	1.35	2.05

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - CLINICAL BIOCHEMISTRY

STRAIN: RAT / HanRcc:WIST (FEMALES) AGE: FROM 8 TO 12 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS
GLUCOSE	mmol/l	1073	4.80	0.79	3.31 6.39
UREA	mmol/l	1072	6.71	1.16	4.66 9.28
URIC ACID	µmol/l	70	26.4	16.5	---
CREATININE	µmol/l	1073	26.2	3.1	20.8 33.2
BILIRUBIN, TOTAL	µmol/l	1073	1.73	0.43	1.00 2.65
BILIRUBIN, DIRECT	µmol/l	15	0.00	0.00	---
BILE ACIDS	µmol/l	30	27.67	17.29	---
CHOLESTEROL, TOTAL	mmol/l	1073	1.43	0.35	0.78 2.19
HDL-CHOLESTEROL	mmol/l	60	1.27	0.24	---
LDL-CHOLESTEROL	mmol/l	58	0.13	0.04	---
TRIGLYCERIDES	mmol/l	1073	0.28	0.17	0.14 0.63
PHOSPHOLIPIDS	mmol/l	1072	1.46	0.30	0.88 2.07
LACTATE	mmol/l	5	3.74	0.79	---
ASPARTATE AMINOTRANSFERASE (ASAT)	U/l	1073	73.5	10.2	58.1 98.1
ALANINE AMINOTRANSFERASE (ALAT)	U/l	1073	25.5	8.9	15.6 51.5
LACTATE DEHYDROGENASE (LDH)	U/l	1053	169.8	94.6	78.5 364.7
GLUTAMATE-DEHYDROGENASE (GLDH)	U/l	889	6.3	4.8	3.6 15.4
ALKALINE PHOSPHATASE (ALP)	U/l	1073	58.5	18.8	33.7 108.2
GAMMA-GLUTAMYLTRANSFERASE (GGT)	U/l	1068	0.0	0.0	0.0 0.0
CREATINE KINASE (CK)	U/l	1058	178.4	106.4	96.2 370.2
ALPHA-AMYLASE	U/l	10	977	219	---
SODIUM	mmol/l	1073	143.6	2.6	138.5 148.7
POTASSIUM	mmol/l	1073	3.33	0.31	2.80 3.90
CHLORIDE	mmol/l	1073	104.9	2.9	98.7 110.5
CALCIUM	mmol/l	1072	2.79	0.09	2.62 2.98
PHOSPHORUS	mmol/l	1073	1.92	0.24	1.44 2.36
IRON	µmol/l	5	39.81	7.92	---
MAGNESIUM	mmol/l	5	0.94	0.03	---
PROTEIN, TOTAL	g/l	1073	66.71	3.25	60.67 73.84
ALBUMIN	g/l	1018	46.09	2.63	41.44 51.83
GLOBULIN	g/l	1018	20.66	2.02	16.76 24.43
A/G RATIO	-	1018	2.25	0.27	1.82 2.82

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - CLINICAL BIOCHEMISTRY

STRAIN: RAT / HanRcc:WIST (FEMALES) AGE: FROM 13 TO 18 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS
GLUCOSE	mmol/l	482	5.00	1.04	2.91 7.14
UREA	mmol/l	482	6.69	0.90	5.13 8.59
URIC ACID	µmol/l	25	20.7	10.9	---
CREATININE	µmol/l	482	29.1	3.6	22.7 37.5
BILIRUBIN, TOTAL	µmol/l	482	1.79	0.46	1.05 2.75
BILIRUBIN, DIRECT	µmol/l	5	0.00	0.00	---
BILE ACIDS	µmol/l	15	31.54	12.33	---
CHOLESTEROL, TOTAL	mmol/l	482	1.49	0.38	0.84 2.39
HDL-CHOLESTEROL	mmol/l	10	1.39	0.31	---
LDL-CHOLESTEROL	mmol/l	10	0.11	0.05	---
TRIGLYCERIDES	mmol/l	482	0.32	0.14	0.16 0.57
PHOSPHOLIPIDS	mmol/l	482	1.57	0.34	0.98 2.28
LACTATE	mmol/l	5	2.63	2.02	---
ASPARTATE AMINOTRANSFERASE (ASAT)	U/l	482	70.2	12.9	55.7 96.9
ALANINE AMINOTRANSFERASE (ALAT)	U/l	482	23.8	5.8	15.5 38.4
LACTATE DEHYDROGENASE (LDH)	U/l	405	164.2	122.6	77.7 477.7
GLUTAMATE-DEHYDROGENASE (GLDH)	U/l	397	7.4	7.3	3.2 25.5
ALKALINE PHOSPHATASE (ALP)	U/l	482	39.6	14.0	18.4 75.0
GAMMA-GLUTAMYLTRANSFERASE (GGT)	U/l	470	0.0	0.1	0.0 0.0
CREATINE KINASE (CK)	U/l	462	166.7	207.4	82.6 453.1
SODIUM	mmol/l	482	142.8	2.9	136.1 147.4
POTASSIUM	mmol/l	482	3.35	0.34	2.76 4.11
CHLORIDE	mmol/l	482	104.5	2.6	98.9 109.3
CALCIUM	mmol/l	482	2.77	0.10	2.57 2.98
PHOSPHORUS	mmol/l	482	1.65	0.25	1.14 2.09
PROTEIN, TOTAL	g/l	482	68.91	3.60	62.22 76.82
ALBUMIN	g/l	467	47.47	2.89	42.68 53.94
GLOBULIN	g/l	467	21.43	2.03	17.30 25.07
A/G RATIO	-	467	2.24	0.26	1.81 2.82

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - CLINICAL BIOCHEMISTRY

STRAIN: RAT / HanRcc:WIST (FEMALES) AGE: FROM 19 TO 40 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS
GLUCOSE	mmol/l	841	5.37	1.04	3.70 7.61
UREA	mmol/l	841	6.73	0.93	5.17 8.73
URIC ACID	µmol/l	55	25.7	16.0	---
CREATININE	µmol/l	841	31.5	3.9	24.6 39.9
BILIRUBIN, TOTAL	µmol/l	841	2.11	0.56	1.22 3.43
CHOLESTEROL, TOTAL	mmol/l	841	1.65	0.44	0.91 2.57
HDL-CHOLESTEROL	mmol/l	10	1.29	0.32	---
LDL-CHOLESTEROL	mmol/l	20	0.09	0.05	---
TRIGLYCERIDES	mmol/l	841	0.34	0.12	0.18 0.61
PHOSPHOLIPIDS	mmol/l	829	1.75	0.39	1.09 2.62
ASPARTATE AMINOTRANSFERASE (ASAT)	U/l	841	80.0	28.5	56.1 154.9
ALANINE AMINOTRANSFERASE (ALAT)	U/l	841	30.2	14.0	16.6 68.4
LACTATE DEHYDROGENASE (LDH)	U/l	711	153.0	81.8	78.7 348.8
GLUTAMATE-DEHYDROGENASE (GLDH)	U/l	531	14.4	22.9	3.4 70.4
ALKALINE PHOSPHATASE (ALP)	U/l	840	20.8	5.9	11.9 35.1
GAMMA-GLUTAMYLTRANSFERASE (GGT)	U/l	808	0.0	0.2	0.0 0.0
CREATINE KINASE (CK)	U/l	789	131.7	80.6	68.3 325.0
SODIUM	mmol/l	841	142.5	2.8	136.7 147.6
POTASSIUM	mmol/l	841	3.33	0.35	2.74 3.98
CHLORIDE	mmol/l	841	105.2	2.7	99.8 110.8
CALCIUM	mmol/l	841	2.77	0.11	2.56 2.98
PHOSPHORUS	mmol/l	841	1.38	0.25	0.86 1.84
MAGNESIUM	mmol/l	10	0.92	0.05	---
PROTEIN, TOTAL	g/l	841	71.01	3.84	63.68 78.79
ALBUMIN	g/l	680	48.78	3.14	42.78 54.92
GLOBULIN	g/l	680	22.34	2.24	18.41 26.99
A/G RATIO	-	680	2.21	0.26	1.77 2.81

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - URINALYSIS

STRAIN: RAT / HanRcc:WIST (MALES) AGE: FROM 8 TO 12 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS	
VOLUME/18h	ml	956	8.7	5.5	2.0	24.2
RELATIVE DENSITY	rel. 1	85	1.030	0.017	1.007	1.064
OSMOLALITY	mosmol/kg	215	1142	480	308	2291
pH	-	956	6.5	0.5	5.0	7.0
PROTEIN	g/l	956	0.36	0.31	0.00	0.75
GLUCOSE	mmol/l	956	0	0	0	0
KETONES	mmol/l	956	0.5	0.6	0.0	1.5
UROBILINOGEN	µmol/l	956	0	2	0	0
BILIRUBIN	µmol/l	956	1	4	0	17
ERYTHROCYTES	per µl	956	10	21	0	25
LEUCOCYTES	per µl	956	28	27	0	100

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - URINALYSIS

STRAIN: RAT / HanRcc:WIST (MALES) AGE: FROM 13 TO 18 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS
VOLUME/18h	ml	479	8.3	4.6	2.5 20.5
RELATIVE DENSITY	rel. 1	19	1.025	0.030	---
OSMOLALITY	mosmol/kg	107	1265	426	167 2163
pH	-	473	6.6	0.4	6.0 7.0
PROTEIN	g/l	473	0.32	0.22	0.00 0.75
GLUCOSE	mmol/l	473	0	0	0 0
KETONES	mmol/l	473	0.6	0.6	0.0 1.5
UROBILINOGEN	μmol/l	473	0	2	0 0
BILIRUBIN	μmol/l	473	2	5	0 17
ERYTHROCYTES	per μl	473	11	22	0 25
LEUCOCYTES	per μl	473	31	30	0 100

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - URINALYSIS

STRAIN: RAT / HanRcc:WIST (MALES) AGE: FROM 19 TO 40 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS	
VOLUME/18h	ml	814	7.3	3.2	2.2	14.0
RELATIVE DENSITY	rel. 1	30	1.032	0.012	---	---
OSMOLALITY	mosmol/kg	320	1266	324	725	2076
pH	-	814	6.6	0.5	6.0	7.0
PROTEIN	g/l	814	0.34	0.24	0.00	0.75
GLUCOSE	mmol/l	814	0	0	0	0
KETONES	mmol/l	814	0.6	0.6	0.0	1.5
UROBILINOGEN	μmol/l	814	0	2	0	0
BILIRUBIN	μmol/l	814	1	4	0	17
ERYTHROCYTES	per μl	814	12	19	0	25
LEUCOCYTES	per μl	814	31	47	0	100

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - URINALYSIS

STRAIN: RAT / HanRcc:WIST (FEMALES) AGE: FROM 8 TO 12 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS
VOLUME/18h	ml	933	6.6	4.9	1.3 21.5
RELATIVE DENSITY	rel. 1	75	1.028	0.016	1.007 1.078
OSMOLALITY	mosmol/kg	193	1241	451	364 2286
pH	-	932	6.0	0.5	5.0 7.0
PROTEIN	g/l	932	0.26	0.20	0.00 0.75
GLUCOSE	mmol/l	932	0	0	0 0
KETONES	mmol/l	932	0.3	0.3	0.0 1.5
UROBILINOGEN	µmol/l	932	0	2	0 0
BILIRUBIN	µmol/l	932	2	5	0 17
ERYTHROCYTES	per µl	932	5	9	0 25
LEUCOCYTES	per µl	932	9	15	0 25

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - URINALYSIS

STRAIN: RAT / HanRcc:WIST (FEMALES) AGE: FROM 13 TO 18 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS	
VOLUME/18h	ml	477	6.6	4.2	2.0	18.9
RELATIVE DENSITY	rel. 1	29	1.027	0.015	---	---
OSMOLALITY	mosmol/kg	113	1314	382	309	2133
pH	-	472	6.0	0.4	5.0	7.0
PROTEIN	g/l	472	0.20	0.14	0.00	0.75
GLUCOSE	mmol/l	472	0	0	0	0
KETONES	mmol/l	472	0.2	0.3	0.0	0.5
UROBILINOGEN	μmol/l	472	0	0	0	0
BILIRUBIN	μmol/l	472	1	5	0	17
ERYTHROCYTES	per μl	472	4	6	0	25
LEUCOCYTES	per μl	472	4	10	0	25

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REFERENCE VALUES - URINALYSIS

STRAIN: RAT / HanRcc:WIST (FEMALES) AGE: FROM 19 TO 40 WEEKS
DATA COLLECTION PERIOD: 29-JAN-02 TO 23-AUG-05

PARAMETER	UNIT	N	MEAN	STAND.DEV	95% TOLERANCE LIMITS	
VOLUME/18h	ml	830	5.8	3.9	1.5	16.2
RELATIVE DENSITY	rel. 1	30	1.031	0.016	---	---
OSMOLALITY	mosmol/kg	325	1352	383	677	2259
pH	-	831	6.0	0.4	5.0	7.0
PROTEIN	g/l	831	0.23	0.18	0.00	0.75
GLUCOSE	mmol/l	831	0	0	0	0
KETONES	mmol/l	831	0.3	0.3	0.0	1.5
UROBILINOGEN	µmol/l	831	0	4	0	0
BILIRUBIN	µmol/l	831	2	5	0	17
ERYTHROCYTES	per µl	831	3	14	0	25
LEUCOCYTES	per µl	831	7	23	0	25

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

APPENDIX VI: IMMUNOTOXICOLOGICAL INVESTIGATIONS

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

IMMUNOTOXICOLOGY PHASE REPORT

Study Title:

**Ultrazine FG-R (Food Grade Lignosulfonate):
13-Week Oral Toxicity (Feeding) Study in the Wistar
Rat**

Subtitle:

Analysis of the Immunotoxic Potential

Test Site: RCC Cytotest Cell Research GmbH
 In den Leppsteinswiesen 19
 D-64380 Rossdorf
 Germany

Sponsor: DSM Nutritional Products AG
 Wurmisweg 576
 CH-4303 Kaiseraugst / Switzerland

Study Identification: RCC Study Number : A29553
 RCC-CCR Phase Number: 917300

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

1 COPY OF GLP-CERTIFICATE

Hessisches Ministerium für Umwelt, ländlichen Raum und Verbraucherschutz	
<hr/>	
Gute Laborpraxis/Good Laboratory Practice	
GLP-Bescheinigung/Statement of GLP Compliance (gemäß/according to § 19b Abs. 1 Chemikaliengesetz)	
Eine GLP-Inspektion zur Überwachung der Einhaltung der GLP-Grundsätze gemäß Chemikaliengesetz bzw. Richtlinie 88/320/EG wurde durchgeführt in	Assessment of conformity with GLP according to Chemikaliengesetz and Directive 88/320/EEC at:
<input checked="" type="checkbox"/> Prüfeinrichtung/Test facility	<input type="checkbox"/> Prüfstandort/Test site
RCC Cytotest Cell Research GmbH RCC Cytotest Cell Research GmbH In den Leppsteinwiesen 19 64380 Roßdorf	
(Unverwechselbare Bezeichnung und Adresse/Unequivocal name and address)	
Prüfungen nach Kategorien/Areas of Expertise (gemäß/according chemVwV-GLP Nr. 5.3/OECD guidance)	
2 Prüfungen zur Bestimmung der toxikologischen Eigenschaften	2 Toxicity studies
3 Prüfungen zur Bestimmung der erbgutverändernden Eigenschaften (in vitro und in vivo)	3 Mutagenicity studies
8 Analytische Prüfungen an biologischen Materialien	8 Analytical studies on biological materials
9 Virussicherheitsprüfungen	9 Virus validation studies
03.06.; 19.07.-22.07.2004 Datum der Inspektion/Date of Inspection (Tag Monat Jahr/day month year)	
Die genannte Prüfeinrichtung befindet sich im nation- alen GLP-Überwachungsverfahren und wird regel- mäßig auf Einhaltung der GLP-Grundsätze überwacht.	The above mentioned test facility is included in the national GLP Compliance Programme and is inspected on a regular basis.
Auf der Grundlage des Inspektionsberichtes wird hiermit bestätigt, dass in dieser Prüfeinrichtung die oben ge- nannten Prüfungen unter Einhaltung der GLP- Grund- sätze durchgeführt werden können.	Based on the inspection report it can be confirmed, that this test facility is able to conduct the aforementioned studies in compliance with the Principles of GLP.
Im Auftrag  Th. Zimmermann, Referent, Wiesbaden, den Wiesbaden, den 06. Januar 2008 (Name und Funktion der verantwortlichen Person/ Name and function of responsible person)	
Hess. Ministerium für Umwelt, ländlichen Raum und Verbraucherschutz, Mainzer Straße 80 D65189 Wiesbaden (Name und Adresse der GLP-Überwachungsbehörde/Name and address of the GLP Monitoring Authority)	
	
D-65189 Wiesbaden, Mainzer Straße 80 Telefon: 0611. 81 50 Telefax: 0611. 81 51 94 1 E-Mail: poststelle@hmulv.hessen.de	D-65187 Wiesbaden, Hölderlinstraße 1-3 Telefon: 0611. 81 70 Telefax: 0611. 81 72 18 1

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

3 PREFACE

3.1 General

Study Title: Ultrazine FG-R (Food Grade Lignosulfonate):
 13-Week Oral Toxicity (Feeding) Study in the Wistar
 Rat

Subtitle: Analysis of the immunotoxic potential

Sponsor: DSM Nutritional Products AG
 Wurmisweg 576
 CH-4303 Kaiseraugst / Switzerland

Study Monitor: W. H. Braun

Test Facility: RCC Ltd. ; Toxicology
 CH-4452 Itingen, Switzerland

Test Site: RCC
 Cytotest Cell Research GmbH
 In den Leppsteinswiesen 19
 D-64380 Rossdorf
 Germany

3.2 Responsibilities

Principal Investigator: Dr. Naveed Honarvar

Deputy Principal Investigator: Dipl. Biol. Krista Meurer

Management: Dr. Wolfgang Völkner

Head of
Quality Assurance Unit: Frauke Hermann

3.3 Schedule

Experimental Starting Date: April 04, 2006

Experimental Completion Date: May 03, 2006

Date of Draft Phase Report: May 05, 2006

Date of Final Phase Report: October 20, 2006

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

3.4 Project Staff Signatures

Principal Investigator:

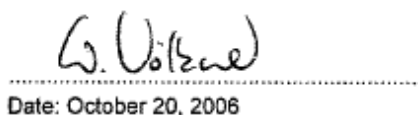
Dr. Naveed Honarvar



Date: October 20, 2006

Management:

Dr. Wolfgang Volkner



Date: October 20, 2006

3.5 Good Laboratory Practice

The study phase was performed in compliance with:

„Chemikaliengesetz“ (Chemicals Act) of the Federal Republic of Germany, „Anhang 1“ (Annexe 1), dated July 25, 1994 („BGBl. I“ 1994, pp. 1703), last revision: June 27, 2002.

OECD Principles of Good Laboratory Practice, as revised in 1997 [C(97)186/Final]

3.6 Guidelines

This study phase followed the procedures indicated by the following internationally accepted guidelines and recommendations:

EMA; Note for Guidance on Repeated Dose Toxicity (3BS2a), CPMP/SWP/1042/99; Last revised on July 27, 2000.

“Immunotoxicity Studies”, Section V.C., Toxicological Principles for the Safety Assessment of Food Ingredients, Office of Food Additive Safety, Redbook 2000, US Food and Drug Administration, USA.

3.7 Archiving

RCC Cytotest Cell Research GmbH will archive the following data for 15 years:

Raw data, and final immunotoxicology phase report.

No data will be discarded without the sponsor’s consent.

3.8 Deviations from the Study Plan

There were no deviations from the study plan.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

4 STATEMENT OF COMPLIANCE

RCC-CCR Phase Number: 917300
Test Item: Ultrazine FG-R (Food Grade Lignosulfonate)
Principal Investigator: Dr. Naveed Honarvar
Study Title: Ultrazine FG-R (Food Grade Lignosulfonate):
13-Week Oral Toxicity (Feeding) Study in the Wistar
Rat
Subtitle: Analysis of the immunotoxic potential

This study phase performed in the test site of RCC Cytotest Cell Research GmbH was conducted in compliance with Good Laboratory Practice Regulations.

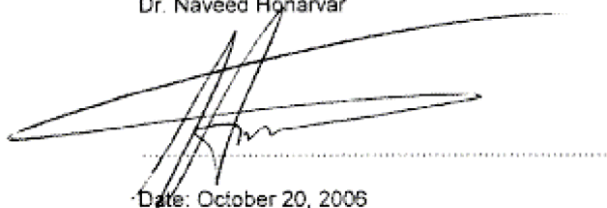
„Chemikaliengesetz“ (Chemicals Act) of the Federal Republic of Germany, „Anhang 1“ (Annexe 1), dated July 25, 1994 („BGBl. I“ 1994, pp. 1703), last revision: June 27, 2002.

OECD Principles of Good Laboratory Practice, as revised in 1997 [C(97)186/Final]

There were no circumstances that may have affected the quality or integrity of the study phase.

Principal Investigator

RCC - CCR
Dr. Naveed Honarvar



Date: October 20, 2006

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

5 STATEMENT OF QUALITY ASSURANCE UNIT

RCC-CCR Phase Number: 917300

Test Item: Ultrazine FG-R (Food Grade Lignosulfonate)

Principal Investigator: Dr. Naveed Honarvar

Study Title: Ultrazine FG-R (Food Grade Lignosulfonate):
13-Week Oral Toxicity (Feeding) Study in the Wistar
Rat

Subtitle: Analysis of the immunotoxic potential



The general facilities and activities of RCC Cytotest Cell Research GmbH are inspected periodically and the results are reported to the responsible person and the management.

Study procedures were inspected periodically and this immunotoxicology phase report was audited by the Quality Assurance Unit. The dates are given below.

Phases and Dates of QAU Inspections / Audits	Dates of Reports to	
	Principal Investigator and Test Site Management	Study Director, Lead QA and Test Facility Management
Study Plan (Draft): December 20, 2005	December 20, 2005	December 20, 2005
Study Inspection: April 04, 2006	April 04, 2006	April 04, 2006
Immunotoxicology Phase Report (Draft): July 20, 2006	July 20, 2006	July 20, 2006

This statement is to confirm that the present immunotoxicology phase report reflects the raw data.

Head of Quality Assurance Unit

 Frauke Hermann

Date: October 20, 2006

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RCC STUDY NUMBER A29553 REPORT
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6 OBJECTIVE

6.1 Aims of the Study

The aim of this study was the analysis of the immunotoxic potential of the test item, which can elicit a modulation of the morphology of the leukocyte population distribution in the blood of the treated rats as well as an alteration of a primary immune response to an immunogen such as sheep red blood cells (SRBC).

6.2 Introduction

In this study 2 different tests were used to analyse the immune status of the animals treated with the test item, namely a test of the immune function (the analysis of the primary immune response to SRBC) and test for the morphological status of the immune system (distribution of the leukocyte populations).

6.2.1 Functional analysis (SRBC-ELISA):

The immunotoxic potential of xenobiotics can lead to malfunction of cells involved in the immune responses. In the first part of the study the primary humoral response against a known immunogen (SRBC) was used for the analysis of the functional integrity of the pertinent cells.

Under normal conditions, confrontation of the immune system with SRBC leads to a strong immune response against the immunogen. This involves the recognition of the immunogen by an Antigen Presenting CELL (APC) and its presentation to specific T_{helper} cells. The T-cells are thus activated and provide help to SRBC-specific B-lymphocytes, which are in turn activated and secrete anti-SRBC antibodies. In the primary immune response the secreted antibodies are of the IgM type.

In the present study the test animals were treated with the test item over a certain period of time. A few days prior to the termination of the treatment the animals were immunised with SRBC. On the preparation day serum samples of the treated (and immunised) animals were isolated and their IgM titer to SRBC was determined using a SRBC-specific ELISA.

6.2.2 Morphological analysis (flow cytometry):

Changes in the leukocyte populations can reflect modulations in the immune status of an organism. This morphological assessment can be done using any of the immune organs such as the blood, the lymph nodes, the spleen etc..

The cell population analysis is done using a flow cytometer. Cells of interest are labeled using fluorescent conjugated antibodies against specific surface markers of the individual cell type. In this study the following cell types are analysed:

T-cells: the T-lymphocytes are analysed using the CD3 marker. Furthermore, the T-cell subpopulations (T_{helper} and T_{cytotoxic} cells) are investigated using the surface markers CD4 for T_{helper} and CD8 for T_{cytotoxic} cells.

B-cells: B-lymphocytes are analysed using the surface marker CD45RA.

Monocytes/Neutrophiles: these cells are stained with an antibody against CD11b.

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7 MATERIALS AND REAGENTS

7.1 Analysis of the primary immune response to SRBC

The following materials were used for the SRBC-ELISA:

Name:	Sheep blood
Supplier:	Harlan Winkelmann GmbH (33176 Borcheln, Germany)
Name:	Carbonate-Bicarbonate Buffer Capsules
Supplier:	Sigma-Aldrich (Deisenhofen, Germany)
Catalogue No.:	C-3041
Name:	Goat α -Rat IgM Biotin conjugate
Producer:	Southern Biotechnology Associates, Inc. (Birmingham, USA)
Supplier:	Biozol Diagnostic Vertriebs GmbH
Catalogue no.:	3020-08
Name:	Streptavidine- Horseradish Peroxidase
Producer:	Southern Biotechnology Associates, Inc. (Birmingham, USA)
Supplier:	Biozol Diagnostic Vertriebs GmbH
Catalogue no.:	7100-05
Name:	3,3',5,5'-Tetramethylbenzidine liquid substrate for ELISA
Supplier:	Sigma-Aldrich (Deisenhofen, Germany)
Catalogue no.:	T-8665

7.2 Analysis of the leukocyte populations by flow cytometry

Antibodies and other Materials used for flow cytometry:

Name:	Fluorescein Isothiocyanate (FITC) coupled α -rat CD3
Supplier:	BD Biosciences (Heidelberg, Germany)
Catalogue no.:	554832
Name:	Phycoerythrin (PE) coupled α -rat CD4
Supplier:	BD Biosciences (Heidelberg, Germany)
Catalogue no.:	554838
Name:	Phycoerythrin (PE) coupled α -rat CD8
Supplier:	BD Biosciences (Heidelberg, Germany)
Catalogue no.:	554857
Name:	PE coupled α -rat CD45RA
Supplier:	BD Biosciences (Heidelberg, Germany)
Catalogue no.:	554884
Name:	FITC coupled α -rat CD11b
Supplier:	BD Biosciences (Heidelberg, Germany)
Catalogue no.:	554982

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Name:	PharMlyse
Supplier:	BD Biosciences (Heidelberg, Germany)
Catalogue no.:	35221E
Name:	CellFix
Supplier:	BD Biosciences (Heidelberg, Germany)
Catalogue no.:	340181

8 METHODS

This study was performed in conjunction with a 13 week oral toxicity (feeding) study (RCC Study No.: A29553). The blood and serum samples analysed in this project were supplied from the animals treated in the subacute study.

8.1 Analysis of the primary immune response to SRBC

8.1.1 SRBC preparation

Sheep blood was washed twice with 0.9% NaCl centrifuged at 750 x g for 20 minutes and the count adjusted to 4×10^6 erythrocytes per ml. This erythrocyte suspension was sent to RCC Ltd. at 4 °C.

5 days prior to the preparation of the animals allocation C animals were immunised i.v. with 0.5 ml of the SRBC preparation. On the preparation days serum samples of the immunised rats were taken and shipped to RCC-CCR. The samples were kept at -80 °C until analysis.

8.1.2 ELISA

A SRBC-specific IgM-ELISA was used to measure the antibody titre in the serum samples. For this purpose, 96 well maxisorp plates (NUNC, Roskilde, Denmark) were coated at 4 °C overnight with a SRBC-antigen preparation. The plates were then blocked for 1-2 hours at room temperature (RT) with 5% blocking buffer (Biorad, Munich, Germany). The plates were washed 5 times with PBS/0.01% Tween. Serial dilutions of the serum samples were then made and incubated in the plates for 2 hours at room temperature. The plates were washed 5 times with PBS/0.01% Tween and treated for 1 h at room temperature with the anti rat IgM biotin conjugate. The plates were washed 5 times with PBS/0.01% Tween and treated for 30 minutes at room temperature with horseradish peroxidase/streptavidin. The plates were finally washed 9 times with PBS/0.01% Tween and TMB were used for detecting the bound SRBC specific IgM antibodies. The enzyme mediated reaction was stopped using 1 N H₂SO₄ and the O.D. values were measured at 450 nm. A standard anti-SRBC serum was used for better comparison of the serum samples with each other.

8.1.3 Data Calculation

The antibody titer of each serum sample was calculated. This is defined as the dilution factor by which either O.D._{max}/2 or a set O.D. near to that value is achieved. The titer of the standard serum was then set to 100% and the titers of the serum samples from the treated animals are given as a percentage value as compared to the standard.

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8.2 Analysis of the leukocyte populations by flow cytometry

8.2.1 Preparation of stained blood samples

After each delivery the blood samples were immediately used for the population analysis. For this purpose three 70 µl aliquotes were taken from each sample. The first aliquote was stained with 10 µl antibody mix containing α-CD3-antibody (1:20 diluted), α-CD4-antibody (1:10 diluted). The second aliquote was stained with 10 µl antibody mix containing α-CD3-antibody (1:20 diluted) and α-CD8-antibody (1:10 diluted in PBS). The third aliquote was stained with 10 µl antibody mix containing α-CD45RA antibody (1:10 diluted) and α-CD11b antibody (1:10 diluted).

The blood samples were incubated for 15-30 minutes at room temperature. After the staining the erythrocytes of the blood samples were lysed using PharMlyse and washed once using CellWash (BD Biosciences). Finally the samples were then fixed using Cellfix and analysed with a flow cytometer (FACScalibur, BD Biosciences). Control single stained samples were made in parallel for adjusting the instrument settings.

8.2.2 Analysis of the stained blood samples

For the analysis of the samples the cells were gated according to their size and granularity. Gates were set for the small ungranular cell population (lymphocytes; gate 2) as well as all nucleated cells including the larger more granular cells (monocytes/granulocytes; gate 1).

For each sample around 10000 gated cells were counted and their fluorescence intensity for FITC and PE measured.

8.2.3 Data Calculation

The following data were obtained from each blood sample:

- 1) The percentage of the CD3⁺/CD4⁺ population within gate 2.
- 2) The percentage of the CD3⁺/CD8⁺ population within gate 2.
- 3) The percentage of the CD45RA⁺ population within gate 2.
- 4) The percentage of the CD11b⁺ population within gate 1.

8.3 Data Recording

The data generated were recorded in the laboratory protocol. The results are presented in tabular form, including experimental groups and vehicle control.

8.4 Evaluation of Results

The mean of the individual populations of each dose group was compared to the corresponding controls.

Statistical analysis of the data was carried out using ANOVA followed by Dunnett test for multiple comparison.

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10 DISCUSSION

Blood samples of animals treated with Ultrazine FG-R (Food Grade Lignosulfonate) in a 13 week repeated dose toxicity assay were analysed for their leukocyte population distribution. Additionally, satellite animals treated with the test item were immunised with SRBC and their serum analysed quantitatively for the induction of an IgM response to the immunogen.

10.1 Analysis of the leukocyte populations

The analysis of the leukocyte populations showed that neither the treatment of the animals with the vehicle nor the treatment of the animals with the indicated doses of the test item affected the distribution of the CD3⁺/CD4⁺, CD45 RA⁺ and the CD11b⁺ cell populations in the blood. The obtained values for the treated animals were near to those treated with the vehicle. The variation in the values between the dose groups were statistically not significant. All obtained values were within the historical control range. The analysis of the CD3⁺/CD8⁺ population showed in both allocations A and B a slight but statistically significant decrease of the test item treated group (mean value =14.82±3.09% and 15.63±3.17% for allocation A and B animals, respectively) as compared to the corresponding controls (mean value =17.42±3.19% and 17.7±2.97% for allocation A and B animals, respectively). These values were, however, within the historical control range for the CD3⁺/CD8⁺ population (range = 12.8 – 35.2%). The biological relevance of this slight drop is most probably insignificant, since the values are within the historical range.

10.2 Analysis of the primary immune response

The data show that the primary immune response of the test item treated animals to SRBC were similar to untreated immunised animals. The mean relative titers of the animals treated with 500, 1000 and 2000 mg/kg/day was 396.10±265.88, 440.33±189.33 and 333.21±119.44%, respectively. The mean relative titer of the control animals was 437.03±250.73%. The values are within the historical range and not statistically significant.

10.3 Conclusion

The data obtained show that under the described conditions the test item did not induce any biologically relevant immunomodulatory effects.

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11 REFERENCES

1. Klonz A., Wonigeit K., Pabst R. & Westermann J. (1996)
Scandinavian Journal of Immunology, **44**, 461-469.
2. Allebban Z., Ichiki A., Gibson L., Jones J., Congdon C. & Lange R. (1994)
Journal of Leukocyte Biology, **55**, 209-213
3. Pahlavani M., Richardson A. (1994)
Mechanisms of Ageing and Development, **74**, 171-176.
4. Thompson S., Bowen K., Burton R. (1986)
Cytometry, **7**, 184-193.

12 DISTRIBUTION OF THE PHASE REPORT

Contracting Institute:	1x copy
Principal Investigator:	1x original

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13.2 Analysis of the blood leukocyte populations

Analysis from April 04, 05, 06 and 07, 2006

Cell Population Distribution (%)							Cell Population Distribution (%)						
Dose group	Animal	Sex	CD3 ⁺	CD4 ⁺	CD8 ⁺	CD 45RA ⁺ CD 11b ⁺	Dose group	Animal	Sex	CD3 ⁺	CD4 ⁺	CD8 ⁺	CD 45RA ⁺ CD 11b ⁺
Control	21	m	53.85	36.87	16.84	22.55 37.36	109	m	47.95	33.22	15.06	31.81 27.40	
	22	m	48.32	29.91	19.28	26.66 42.16	110	m	48.47	35.44	12.87	30.38 38.08	
	23	m	56.32	35.15	21.76	24.98 35.38	111	m	37.01	27.52	9.60	34.09 40.13	
	24	m	45.87	30.66	14.62	33.29 20.25	112	m	41.04	29.31	12.44	37.22 25.11	
	25	m	53.52	41.40	12.87	29.29 30.78	113	m	65.08	44.56	21.26	20.27 38.03	
	26	m	66.08	51.18	15.87	19.86 30.97	114	m	52.57	34.52	17.76	27.73 38.41	
	27	m	70.74	49.26	21.22	14.85 37.92	115	m	49.83	37.09	12.74	29.21 31.06	
	28	m	42.83	26.28	16.16	31.66 40.12	116	m	57.84	40.90	17.32	26.40 29.35	
	29	m	46.33	36.32	10.30	29.13 46.64	Test Item	117	m	50.33	38.02	12.75	25.87 31.06
	30	m	61.97	43.09	19.11	20.13 37.73	High Dose	118	m	41.51	28.53	12.41	45.54 25.27
	145	f	66.10	45.26	20.48	22.62 14.86	233	f	79.71	65.36	14.90	14.59 38.11	
	146	f	60.69	44.52	16.92	25.07 22.02	234	f	72.80	58.00	15.73	20.35 35.07	
	147	f	55.29	32.13	22.43	24.77 39.57	235	f	65.52	49.06	16.87	20.24 26.66	
	148	f	75.67	54.29	21.84	15.19 24.46	236	f	63.34	51.74	12.64	25.81 30.54	
	149	f	67.99	50.68	16.96	25.93 24.51	237	f	65.11	50.57	14.03	26.49 28.47	
	150	f	53.48	37.06	15.46	26.94 34.24	238	f	50.27	39.49	11.47	33.43 24.24	
	151	f	56.60	39.85	17.21	26.25 40.26	239	f	52.05	37.71	14.09	29.90 32.39	
	152	f	51.90	38.92	14.00	34.68 25.59	240	f	71.32	48.61	21.72	16.67 19.85	
	153	f	51.06	32.77	18.00	33.89 29.58	241	f	49.79	32.47	16.59	24.04 69.58	
	154	f	65.90	49.09	17.08	21.11 28.34	242	f	57.96	43.94	14.20	28.49 29.99	

Analysis from May 02, 2006

Cell Population Distribution (%)							Cell Population Distribution (%)						
Dose group	Animal	Sex	CD3 ⁺	CD4 ⁺	CD8 ⁺	CD 45RA ⁺ 11b ⁺	Dose group	Animal	Sex	CD3 ⁺	CD4 ⁺	CD8 ⁺	CD 45RA ⁺ 11b ⁺
Control	21	m	55.85	38.09	17.97	28.72 31.22	109	m	44.66	29.89	14.63	36.23 26.43	
	22	m	55.10	35.71	19.47	31.67 32.21	110	m	54.25	36.25	17.22	24.81 34.38	
	23	m	52.85	32.16	20.62	31.89 31.11	111	m	45.81	33.12	12.57	28.36 34.61	
	24	m	50.89	32.92	17.63	36.79 31.58	112	m	48.74	34.39	13.82	39.02 27.63	
	25	m	52.54	38.61	13.43	28.06 24.81	113	m	67.60	47.35	20.10	25.07 32.29	
	26	m	60.01	43.99	15.47	24.12 27.87	114	m	48.14	32.46	16.31	27.81 41.49	
	27	m	70.79	48.25	22.80	19.18 37.19	115	m	55.11	38.07	17.20	25.35 32.99	
	28	m	44.29	28.06	15.65	42.12 32.50	116	m	62.43	43.29	18.16	28.30 28.08	
	29	m	50.53	39.43	11.43	25.65 38.47	Test Item	117	m	53.27	38.99	12.85	29.71 25.23
	30	m	57.77	39.24	19.13	22.16 30.82	High Dose	118	m	42.85	28.87	13.45	45.88 20.89
	145	f	69.63	50.99	19.48	22.34 17.52	233	f	63.26	47.56	15.58	23.94 20.38	
	146	f	63.71	45.90	17.37	24.51 20.99	234	f	62.11	47.35	15.12	22.61 31.70	
	147	f	62.07	37.75	23.48	20.55 30.32	235	f	58.14	42.33	15.34	25.30 19.65	
	148	f	66.36	46.11	20.23	20.76 27.03	236	f	51.31	42.24	9.12	28.27 35.82	
	149	f	66.65	49.88	17.00	23.89 24.62	237	f	59.27	47.58	11.34	27.91 35.18	
	150	f	61.37	44.12	16.58	20.50 33.66	238	f	61.76	47.55	14.55	25.03 22.91	
	151	f	61.09	42.97	16.87	23.65 38.55	239	f	55.48	40.23	15.60	26.91 24.71	
	152	f	58.11	44.56	14.03	26.18 27.39	240	f	74.93	51.34	23.17	15.89 14.65	
	153	f	56.89	37.70	19.07	24.69 27.17	241	f	60.78	42.71	18.72	20.73 59.69	
	154	f	72.73	54.88	17.65	12.68 28.30	242	f	63.84	45.22	17.82	22.82 24.33	

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**1st Amendment to Immunotoxicology Phase
Report
(8 pages)**

Study Title:

**Ultrazine FG-R (Food Grade Lignosulphonate):
13-Week Oral Toxicity (Feeding) Study in the Wistar
Rat**

Subtitle:

Analysis of the Immunotoxic Potential

Test Site: RCC Cytotest Cell Research GmbH
In den Leppsteinswiesen 19
D-64380 Rossdorf
Germany

Sponsor: DSM Nutritional Products AG
Wurmisweg 576
CH-4303 Kaiseraugst / Switzerland

Study Identification: RCC Study Number : A29553
RCC-CCR Phase Number: 917300



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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RCC-CCR Study Number 917300 1st Amendment to Immunotoxicology Phase Report
Ultrasine FG-R (Food Grade Lignosulphonate) Page 2 of 8

A.) CONCERNING: Test Item Name

PRESENT:

Identity Ultrasine FG-R (Food Grade Lignosulfonate)

NEW:

Identity Ultrasine FG-R (Food Grade Lignosulphonate)

B.) CONCERNING: General
- page 4 -

PRESENT:

Study Monitor: W. H. Braun

NEW:

Study Monitor: **SCC Scientific Consulting Company**
Chemisch-Wissenschaftliche Beratung GmbH
Mikroforum Ring 1
D-55234 Wendelsheim / Germany
Attn: Dr. W. Köhl
Phone: 0049 67 34 919 0
Fax: 0049 67 34 919 191

eMail: scc@scc-gmbh.de

Study Director: W. H. Braun

C.) CONCERNING: Functional analysis (SRBC-ELISA)
- page 8 -

PRESENT:

This involves the recognition of the immunogen by an Antigen Presenting CELL (APC) and its presentation to specific T_{helper} cells.

NEW:

This involves the recognition of the immunogen by an Antigen Presenting Cell (APC) and its presentation to specific T_{helper} cells.

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D.) CONCERNING: Morphological analysis (flow cytometry)
- page 8 -

PRESENT:

Cells of interest are labeled using fluorescent conjugated antibodies against specific surface markers of the individual cell type.

NEW:

Cells of interest are labeled using fluorescent conjugated antibodies against specific surface markers of the individual cell type.

E.) CONCERNING: Methods
- page 10 -

PRESENT:

The blood and serum samples analysed in this project were supplied from the animals treated in the subacute study.

NEW:

The blood and serum samples analysed in this project were supplied from the animals treated in the subchronic study.

F.) CONCERNING: Preparation of stained blood samples
- page 11 -

PRESENT:

After each delivery the blood samples were immediately used for the population analysis.

NEW:

After each delivery the blood sample aliquots were immediately used for the population analysis.

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G.) CONCERNING: Data Recording
- page 11 -

PRESENT:

The results are presented in tabular form, including experimental groups and vehicle control.

NEW:

The results are presented in tabular form, including experimental groups and control.

H.) CONCERNING: Evaluation of Results
- page 11 -

PRESENT:

Statistical analysis of the data was carried out using using ANOVA followed by Dunnett test for multiple comparison.

NEW:

Statistical analysis of the data was carried out using ANOVA followed by Dunnett test for multiple comparison.

I.) CONCERNING: Discussion
- page 14 -

PRESENT:

Blood samples of animals treated with Ultrazine FG-R (Food Grade Lignosulphonate) in a 13 week repeated dose toxicity assay were analysed for their leukocyte population distribution.

NEW:

Blood samples of animals treated with Ultrazine FG-R (Food Grade Lignosulphonate) in a 13 week repeated dose toxicity study were analysed for their leukocyte population distribution.

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UltraZine FG-R (Food Grade Lignosulphonate) Page 5 of 8

J.) CONCERNING: Analysis of the leukocyte population
- page 14 -

PRESENT:

The analysis of the leukocyte populations showed that neither the treatment of the animals with the vehicle nor the treatment of the animals with the indicated doses of the test item affected the distribution of the CD3⁺/CD4⁺, CD45 RA⁺ and the CD11b⁺ cell populations in the blood.

The analysis of the CD3⁺/CD8⁺ population showed in both allocations A and B a slight but statistically significant decrease of the test item treated group (mean value =14.82±3.09% and 15.63±3.17% for allocation A and B animals, respectively) as compared to the corresponding controls (mean value =17.42±3.19% and 17.7±2.97% for allocation A and B animals, respectively).

NEW:

The analysis of the leukocyte populations showed that neither the **control animals** nor the treatment of the animals with the indicated doses of the test item affected the distribution of the CD3⁺/CD4⁺, CD45 RA⁺ and the CD11b⁺ cell populations in the blood.

The analysis of the CD3⁺/CD8⁺ population showed in both allocations **B (April 04, 05, 06 and 07, 2006) and B (May 02, 2006)** a slight but statistically significant decrease of the test item treated group (mean value =14.82±3.09% and 15.63±3.17% for allocation B (April 04, 05, 06 and 07, 2006) and B (May 02, 2006) animals, respectively) as compared to the corresponding controls (mean value =17.42±3.19% and 17.7±2.97% for allocation B (April 04, 05, 06 and 07, 2006) and B (May 02, 2006), respectively).

K.) CONCERNING: Conclusion
- page 14 -

PRESENT:

The data obtained show that under the described conditions the test item did not induce any biologically relevant immunomodulatory effects.

NEW:

The data obtained show that under the described conditions the test item did not induce any biologically relevant **immunomodulatory** effects.

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L.) CONCERNING: **Distribution**
 - page 15 -

PRESENT:

Contracting Institute: 1x copy

NEW:

Study Director: 1x copy

M.) CONCERNING: **Contents and Annex**
 - page 3 and 16 -

PRESENT:

Annexe

NEW:

Annex

REASON FOR THE ALTERATIONS:

E, F, G, I and J) Wording changes requested by the sponsor

A, B, C, D, H, J, K, L and M) typing errors

DISTRIBUTION

Study Director: 1x copy

Principal Investigator: 1x original

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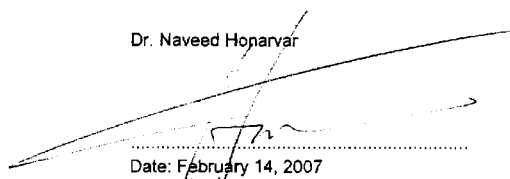
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UltraZine FG-R (Food Grade Lignosulphonate) Page 7 of 8

SIGNATURES

Study Director:

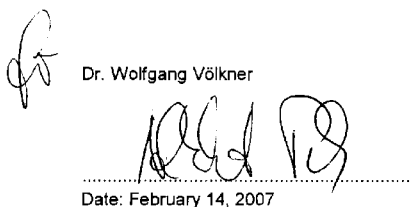
Dr. Naveed Hoparvar



Date: February 14, 2007

Management:

Dr. Wolfgang Völkner



Date: February 14, 2007

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RCC-CCR Study Number 917300 1st Amendment to Immunotoxicology Phase Report
Ultrasine FG-R (Food Grade Lignosulphonate) Page 8 of 8

STATEMENT OF QUALITY ASSURANCE UNIT

RCC-CCR Phase Number: 917300
Test Item: Ultrasine FG-R (Food Grade Lignosulphonate)
Principal Investigator: Dr. Naveed Honarvar
Study Title: Ultrasine FG-R (Food Grade Lignosulphonate):
13-Week Oral Toxicity (Feeding) Study in the
Wistar Rat
Subtitle: Analysis of the immunotoxic potential

The general facilities and activities of RCC Cytotest Cell Research GmbH are inspected periodically and the results are reported to the responsible person and the management.

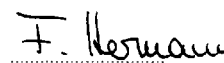
This amendment to the phase report was audited by the Quality Assurance Unit. The dates are given below.

Phases and Dates of QAU Inspections / Audits	Dates of Reports to		
	Principal Investigator and Test Site Management	Study Director, Lead QA and Test Facility Management	
1 st Amendment to Phase Report (Draft): February 09, 2007	February 09, 2007	February 09, 2007	February 09, 2007

This statement is to confirm that the present immunotoxicology phase report reflects the raw data.

Head of Quality Assurance Unit

Frauke Hermann


Date: February 14, 2007

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**2nd Amendment to Immunotoxicology Phase
Report**
(9 pages)

Study Title:

**Ultrazine FG-R (Food Grade Lignosulphonate):
13-Week Oral Toxicity (Feeding) Study in the Wistar
Rat**

Subtitle:

Analysis of the Immunotoxic Potential

Principal Investigator: Dr. Naveed Honarvar

Test Site: **RCC Cytotest Cell Research GmbH
In den Leppsteinswiesen 19
D-64380 Rossdorf / Germany**

Sponsor: **DSM Nutritional Products AG
Wurmisweg 576
CH-4303 Kaiseraugst / Switzerland**

Study Identification: **RCC Study Number: A29553
RCC-CCR Phase Number: 917300**

Date: **March 29, 2007**

Page 1 of 9



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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RCC-CCR Study Number 917300 2nd Amendment to Immunotoxicology Phase Report
Ultrasine FG-R (Food Grade Lignosulphonate) Page 2 of 9

REASON FOR THE AMENDMENT

The 2nd Amendment to the Immunotoxicology Phase Report will completely replace the 1st Amendment to the Immunotoxicology Phase Report issued on February 14, 2007, since some formal requested changes by the sponsor were not considered in the 1st Amendment to the Immunotoxicology Phase Report (pages 1, 3, 4, 5, 6 affected).

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RCC-CCR Study Number 917300 2nd Amendment to Immunotoxicology Phase Report
Ultrazine FG-R (Food Grade Lignosulphonate) Page 3 of 9

A.) CONCERNING: Test Item Name

PRESENT:

Identity Ultrazine FG-R (Food Grade Lignosulfonate)

NEW:

Identity Ultrazine FG-R (Food Grade Lignosulphonate)

B.) CONCERNING: General
- page 4 -

PRESENT:

Study Monitor: W. H. Braun

NEW:

Study Monitor: SCC Scientific Consulting Company
Chemisch-Wissenschaftliche Beratung GmbH
Mikroforum Ring 1
D-55234 Wendelsheim / Germany
Attn: Dr. W. Köhl
Phone: 0049 67 34 919 0
Fax: 0049 67 34 919 191

eMail: scc@scc-gmbh.de

Study Director: W. H. Braun

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RCC-CCR Study Number 917300 2nd Amendment to Immunotoxicology Phase Report
UltraZine FG-R (Food Grade Lignosulphonate) Page 4 of 9

C.) CONCERNING: Functional analysis (SRBC-ELISA)
- page 8 -

PRESENT:

This involves the recognition of the immunogen by an Antigen Presenting CELL (APC) and its presentation to specific T_{helper} cells.

NEW:

This involves the recognition of the immunogen by an Antigen Presenting Cell (APC) and its presentation to specific T_{helper} cells.

D.) CONCERNING: Morphological analysis (flow cytometry)
- page 8 -

PRESENT:

...the blood, the lymph nodes, the spleen etc..

[...] Cells of interest are labeled using fluorescent conjugated antibodies against specific surface markers of the individual cell type.

NEW:

...the blood, the lymph nodes, the spleen etc..

[...] Cells of interest are labeled using fluorescent conjugated antibodies against **specific** surface markers of the individual cell type.

E.) CONCERNING: Methods
- page 10 -

PRESENT:

The blood and serum samples analysed in this project were supplied from the animals treated in the subacute study.

NEW:

The blood and serum samples analysed in this project were supplied from the animals treated in the **subchronic** study.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RCC-CCR Study Number 917300 2nd Amendment to Immunotoxicology Phase Report
Ultrazine FG-R (Food Grade Lignosulphonate) Page 5 of 9

F.) CONCERNING: **Preparation of stained blood samples**
- page 11 -

PRESENT:

After each delivery the blood samples were immediately used for the population analysis.

NEW:

After each delivery the blood **sample aliquots** were immediately used for the population analysis.

G.) CONCERNING: **Data Recording**
- page 11 -

PRESENT:

The results are presented in tabular form, including experimental groups and vehicle control.

NEW:

The results are presented in tabular form, including experimental groups and control.

H.) CONCERNING: **Evaluation of Results**
- page 11 -

PRESENT:

Statistical analysis of the data was carried out using using ANOVA followed by Dunnett test for multiple comparison.

NEW:

Statistical analysis of the data was carried out using ANOVA followed by Dunnett test for multiple comparison. **Statistical significance was set at $p \leq 0.05$.**

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RCC-CCR Study Number 917300 2nd Amendment to Immunotoxicology Phase Report
UltraZine FG-R (Food Grade Lignosulphonate) Page 6 of 9

I.) CONCERNING: **Discussion**
- page 14 -

PRESENT:

Blood samples of animals treated with UltraZine FG-R (Food Grade Lignosulphonate) in a 13 week repeated dose toxicity assay were analysed for their leukocyte population distribution.

NEW:

Blood samples of animals treated with UltraZine FG-R (Food Grade **Lignosulphonate**) in a 13 week repeated dose toxicity **study** were analysed for their leukocyte population distribution.

J.) CONCERNING: **Analysis of the leukocyte population**
- page 14 -

PRESENT:

The analysis of the leukocyte populations showed that neither the treatment of the animals with the vehicle nor the treatment of the animals with the indicated doses of the test item affected the distribution of the CD3⁺/CD4⁺, CD45 RA⁺ and the CD11b⁺ cell populations in the blood.

[...]

The analysis of the CD3⁺/CD8⁺ population showed in both allocations A and B a slight but statistically significant decrease of the test item treated group (mean value =14.82±3.09% and 15.63±3.17% for allocation A and B animals, respectively) as compared to the corresponding controls (mean value =17.42±3.19% and 17.7±2.97% for allocation A and B animals, respectively).

[...] The biological relevance of this slight drop is insignificant...

NEW:

The analysis of the leukocyte populations showed that neither the **control animals** nor the treatment of the animals with the indicated doses of the test item affected the distribution of the CD3⁺/CD4⁺, CD45 RA⁺ and the CD11b⁺ cell populations in the blood.

[...]

The analysis of the CD3⁺/CD8⁺ population showed in both allocations **B (April 04, 05, 06 and 07, 2006) and B (May 02, 2006)** a slight but statistically significant decrease of the test item treated group (mean value =14.82±3.09% and 15.63±3.17% for allocation **B (April 04, 05, 06 and 07, 2006) and B (May 02, 2006)** animals, respectively) as compared to the corresponding controls (mean value =17.42±3.19% and 17.7±2.97% for allocation **B (April 04, 05, 06 and 07, 2006) and B (May 02, 2006)**, respectively).

[...] The biological relevance of this slight drop is insignificant...

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RCC-CCR Study Number 917300 2nd Amendment to Immunotoxicology Phase Report
Ultrasine FG-R (Food Grade Lignosulphonate) Page 7 of 9

K.) CONCERNING: **Conclusion**
- page 14 -

PRESENT:

The data obtained show that under the described conditions the test item did not induce any biologically relevant immunomodulatory effects.

NEW:

The data obtained show that under the described conditions the test item did not induce any biologically relevant **immunomodulatory** effects.

L.) CONCERNING: **Distribution**
- page 15 -

PRESENT:

Contracting Institute: 1x copy

NEW:

Study Director: 1x copy

M.) CONCERNING: **Contents and Annex**
- page 3 and 16 -

PRESENT:

Annexe

NEW:

Annex

REASON FOR THE ALTERATIONS:

B) Correction of personnel informations provided
E, F, G, H, I, J and K) wording changes requested by the sponsor
A, C, D, I, J, L and M) typing errors

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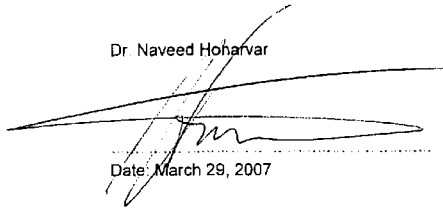
RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RCC-CCR Study Number 917300 2nd Amendment to Immunotoxicology Phase Report
UltraZine FG-R (Food Grade Lignosulphonate) Page 8 of 9

SIGNATURES

Principal Investigator:

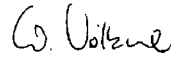
Dr. Naveed Hohanvar



Date: March 29, 2007

Management:

Dr. Wolfgang Völkner



Date: March 29, 2007

DISTRIBUTION

Study Director:

1x copy

Principal Investigator:

1x original

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RCC-CCR Study Number 917300 2nd Amendment to Immunotoxicology Phase Report
Ultrazine FG-R (Food Grade Lignosulphonate) Page 9 of 9

STATEMENT OF QUALITY ASSURANCE UNIT

RCC-CCR Phase Number:	917300
Test Item:	Ultrazine FG-R (Food Grade Lignosulphonate)
Principal Investigator:	Dr. Naveed Honarvar
Study Title:	Ultrazine FG-R (Food Grade Lignosulphonate): 13-Week Oral Toxicity (Feeding) Study in the Wistar Rat
Subtitle:	Analysis of the Immunotoxic potential

The general facilities and activities of RCC Cytotest Cell Research GmbH are inspected periodically and the results are reported to the responsible person and the management.

This amendment to the phase report was audited by the Quality Assurance Unit. The dates are given below.

Phases and Dates of QAU Inspections / Audits		Dates of Reports to	
		Principal Investigator and Test Site Management	Study Director, Lead QA and Test Facility Management
2 nd Amendment to Phase Report (Draft):	March 29, 2007	March 29, 2007	March 29, 2007

This statement is to confirm that the present immunotoxicology phase report reflects the raw data.

Head of Quality Assurance Unit

Frauke Hermann

F. Hermann

Date: March 29, 2007

RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

APPENDIX VII:
PEER REVIEW CERTIFICATE FOR PATHOLOGY

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

PEER REVIEW CERTIFICATE

ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE): 90-day Oral Toxicity (Feeding) Study in the Wistar Rat

A histopathology peer review was conducted as follows:

1. Re-examination of all tissues and diagnoses from 10% of male and female rats from groups 1 and 4 (total of 8 animals)
2. Re-examination of all tissues and diagnoses from Male no. 44 (500 mg/kg/day) which was killed for ethical reasons on treatment day 32.
3. Re-examination of all neoplasms (a total of 2 lesions).
4. Re-examination of all target tissues of Allocation A and B rats (total of 200 rats). Target tissues were mesenteric lymph nodes with "foamy histiocytes" and kidneys with "tubular vacuoles".

Allocation And Target Dose Levels	Group 1* 0 mg/kg/day	Group 2 500 mg/kg/day	Group 3 1000 mg/kg/day	Group 4 2000 mg/kg/day
Males A	1 – 20	37 – 56	63 – 82	89 – 108
Males B	21 – 30			109 – 118
Females A	125 – 144	161 – 180	187 – 206	213 – 232
Females B	145 – 154			233 – 242

A – Main Study (termination after 13 weeks of treatment)

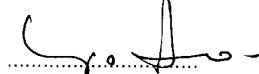
B – Recovery (termination after 13 weeks of treatment and 4 weeks of recovery)

* – Control animals will be treated with control diet only.

All diagnoses noted in the above animals/tissues by the study pathologist were correlated with the microscopic alterations in the sample tissue sections by the peer-reviewing pathologist and the results were compared. In case of ambiguity, the lesions were re-evaluated by the study pathologist, and the results of the re-evaluation were discussed; both pathologists agreed upon the final diagnoses. The documentation of the peer review process was recorded and is archived at RCC.

Study Pathologist:

Dr. L. Romeo



date: October 30, 2006

Peer Reviewing Pathologist:

Eberhard Karbe, Prof. Dr. med. vet., Ph.D.



date: October 16, 2006

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

APPENDIX VIII: PATHOLOGY REPORT

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

PATHOLOGY REPORT		RCC STUDY NUMBER A29553	
TEST ITEM	: ULTRAZINE FG-R	PATH. NO	: 11023 ROL
TEST SYSTEM	: Rat	DATE	: 14-FEB-07
STUDY TYPE	: 13-Week, Oral Toxicity	SPONSOR	: DSM Nutritional Products AG

Prepared by:

Dr. L. Romeo
Pathologist

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

PATHOLOGY REPORT

PAGE: 2

PRINCIPAL SECTION

RCC STUDY NUMBER A29553

TEST ITEM	: ULTRAZINE FG-R	PATH. NO.	: 11023 ROL
TEST SYSTEM	: Rat	DATE	: 14-FEB-07
STUDY TYPE	: 13-Week, Oral Toxicity	SPONSOR	: DSM Nutritional Products AG

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AUTHENTICATION	3
SUMMARY	4
MATERIALS AND METHODS	5
RESULTS	7
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SUMMARY INCIDENCE OF GRADINGS BY ORGAN/GROUP/SEX	24
CORRELATION TABLE: NECROPSY – MICROSCOPY	58
EXPLANATION OF CODES AND SYMBOLS	78
TABLE OF INDIVIDUAL MICROSCOPIC FINDINGS (AOFT)	79
TEXT OF GROSS AND MICROSCOPIC FINDINGS	140

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

PATHOLOGY REPORT

PAGE: 3

PRINCIPAL SECTION

RCC STUDY NUMBER A29553

TEST ITEM : ULTRAZINE FG-R
TEST SYSTEM : Rat
STUDY TYPE : 13-Week, Oral Toxicity

PATH. NO. : 11023 ROL
DATE : 14-FEB-07
SPONSOR : DSM Nutritional Products AG

AUTHENTICATION

I, the undersigned hereby declare that the histopathology data (Principal Section and Tables) in this report were compiled by me, and that they accurately reflect the primary data records.

Prepared by:

Ligia Romeo
Pathologist

Date: 14-Feb-07

Peer Review by:

Prof. Dr. Eberhard Karbe

Date: 14-Feb-07

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

PATHOLOGY REPORT

PAGE: 4

PRINCIPAL SECTION

RCC STUDY NUMBER A29553

TEST ITEM	: ULTRAZINE FG-R	PATH. NO.	: 11023 ROL
TEST SYSTEM	: Rat	DATE	: 14-FEB-07
STUDY TYPE	: 13-Week, Oral Toxicity	SPONSOR	: DSM Nutritional Products AG

SUMMARY

The purpose of this oral study was to evaluate the cumulative toxicity of ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE) when administered to rats in the diet for a period of at least 13 weeks.

Rats (a total of 208) were assigned to four dose groups each containing 26 animals per sex, of these, 6 animals per sex and group were assigned to immunotoxic studies (Allocation C). The remaining 20 animals per sex and group corresponded to main study animals (Allocation A).

Additional 10 animals per sex were available in group 1 (control) and group 4 (high dose) for the assessment of reversibility of effects or progression of any test item-related change (Allocation B). The test item was administered daily at doses of 500, 1000 and 2000 mg/kg/day (groups 2, 3, and 4, respectively). The control group received control diet only.

At the end of the treatment and recovery periods all Allocation A and B animals were weighed, sacrificed, necropsied and examined *post mortem*. Histological examinations were performed on all study plan organs and tissues from Allocation A and B control and high dose animals. Rectum and all gross lesions from Allocation A and B animals of all groups were also examined histologically.

Because of possible test item-related findings noted in animals of group 4, the mesenteric lymph nodes and kidneys were also evaluated in the animals of groups 2 and 3.

Two male rats were killed for ethical reasons unrelated to the test item.

- Male no. 44 (500 mg/kg bw/day) was killed on 02-Feb-2006 (day 32) and found to have an intestinal intussusception;
- Male no. 87 (1000 mg/kg bw/day) had a markedly enlarged right eye, was removed from the study on 13-Feb-2006 (day 43) and sacrificed.

All the other animals survived their scheduled study period.

The cause of morbidity of the above-mentioned animal, male no. 44, was due to polycystic kidney disease and associated uremia, not related to the test substance administration. The second animal, male no. 87, was removed for ethical reasons.

At necropsy, performed at the end of treatment and recovery periods, on all Allocation A and B animals, no test item-related macroscopic findings were recorded.

Microscopically, focal/multifocal aggregates of foamy histiocytes were recorded in mesenteric lymph nodes of animals of groups 2, 3 and 4. After the recovery period this finding was still recorded in animals of group 4, with a decrease in its severity grade. Therefore a tendency to regression was stated. It is not likely that this finding is of adverse nature, because of this trend to regression and because of the absence of coexisting tissue damage or reaction.

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

PATHOLOGY REPORT

PAGE: 5

PRINCIPAL SECTION

RCC STUDY NUMBER A29553

TEST ITEM : ULTRAZINE FG-R	PATH. NO. : 11023 ROL
TEST SYSTEM : Rat	DATE : 14-FEB-07
STUDY TYPE : 13-Week, Oral Toxicity	SPONSOR : DSM Nutritional Products AG

Minimal tubular vacuolation was recorded in kidneys of males of group 4, females of groups 3 and 4, and recovery males and females of group 4. This finding, per se, with non-dose dependant severity grade, in absence of tubular damage or any other sign of renal toxicity or impairment is not likely to be of adverse nature.

MATERIALS AND METHODS

Group Allocation

Allocation	Group 1*	Group 2	Group 3	Group 4
And Target	0	500	1000	2000
Dose Levels	mg/kg/day	mg/kg/day	mg/kg/day	mg/kg/day
Males A	1 – 20	37 - 56	63 - 82	89 – 108
Males B	21 – 30			109 – 118
Males C	31 – 36	57 - 62	83 - 88	119 – 124
Females A	125 – 144	161 – 180	187 – 206	213 – 232
Females B	145 – 154			233 – 242
Females C	155 - 160	181 - 186	207 - 212	243 – 248

A – Main Study (terminated after 13 weeks of treatment)

B – Recovery (terminated after 13 weeks of treatment and 4 weeks of recovery)

C – Immunotoxicity parameters (terminated after 13 weeks of treatment)

* – Control animals were treated with control diet only.

Necropsy

Necropsies were performed at RCC Ltd, Itingen / Switzerland. At the end of the treatment period all Allocation A and B animals were weighed, anesthetized by intraperitoneal injection of pentobarbitone, sacrificed by exsanguination, and necropsied. Descriptions of all macroscopic abnormalities were recorded. Samples of the following tissues and organs were collected from all animals at necropsy and, unless otherwise indicated, fixed in neutral phosphate buffered 4% formaldehyde solution.

Adrenal glands

Aorta

Bone (sternum, femur including joint)

Bone marrow (sternum)

Brain (4 levels, incl. cerebrum, cerebellum, medulla/pons)

Cecum

Colon

Nasal turbinates

Ovaries

Pancreas

Pituitary gland

Prostate gland

Rectum

Salivary glands - mandibular, sublingual, parotid

Sciatic nerve

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