

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

CLINICAL SIGNS, DAILY (SUMMARY)

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE)	TREATMENT
LOCATION	WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
<hr/>	
VARIOUS	

EMACIATED (3)	G: %:
EYE RIGHT, ENLARGED (1)	G: .....111111111111111111111111 %:0000000000000000000000000000000000
EYE RIGHT, WHITE (3)	G: %:
EXOPHTHALMOS (1)	G: .....1111 %:0000
OPACITY (1) (EYE RIGHT)	G: %:
KINKED (3) (TAIL APEX)	G: .....111111 %:000000

G: Median value of the highest individual daily grades
 %: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%, ..., A = more than 95%)

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

CLINICAL SIGNS, DAILY (SUMMARY)

MALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE)	TREATMENT
LOCATION	WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
BEHAVIOR	

SEDATED (3)	G: %:
POSTURE	

HUNCHED POSTURE (1)	G: %:
KINKED (3) (TAIL APEX)	G: .....11111111 %:00000000
SKIN / FUR	

ROUGH COAT (1)	G: %:
HAIR LOSS (3) (SHOULDER RIGHT)	G: %:
CRUSTS (3) (SHOULDER RIGHT)	G: %:
WOUND (3) (SHOULDER RIGHT)	G: %:
SECRETION / EXCRETION	

LACRIMATION (3)	G: %:
REDUCED SIZE FECALBOLI (1)	G: %:
VARIOUS	

EMACIATED (3)	G: %:
ENOPHTHALMOS (1)	G: %:
EXOPHTHALMOS (1)	G: .....1111111111...111..... %:1111111111...111.....
KINKED (3) (TAIL APEX)	G: .....111111 %:000000

G: Median value of the highest individual daily grades

#: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%, ..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

MALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
SKIN / FUR -----	
HAIR LOSS (3) (SHOULDER RIGHT)	G: .....1 %:0
SCABS (3) (SHOULDER LEFT)	G: %:
SCABS (3) (SHOULDER RIGHT)	G: .....1 %:0
SCABBED WOUND (1) (SHOULDER RIGHT)	G: .....11111. %:00000.
VARIOUS -----	
EYE RIGHT, ENLARGED (1)	G: 1..... %: 0.....
EXOPHTHALMOS (1)	G: .....11111111111..111..... %:00000000000..111.....
MYDRIASIS (1)	G: %:

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
SKIN / FUR -----	
HAIR LOSS (3) (SHOULDER RIGHT)	G: .....11111111111111111111..... %:00000000000000000000.....
FISSURES (3) (EAR LEFT)	G: %:
SCABS (3) (SHOULDER RIGHT)	G: .....221111111111..... %:000000000000.....
VARIOUS -----	
EXOPHTHALMOS (1)	G: .....11111111111111111111..... %:00000000000000000111.....

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE)	RECOVERY
LOCATION	WEEKS: 1.....2.....3.....4.....
VARIOUS	

EMACIATED (3)	G: %:
EYE RIGHT, ENLARGED (1)	G: %:
EYE RIGHT, WHITE (3)	G: .....22222222 %:11111111
EXOPHTHALMOS (1)	G: %:
OPACITY (1) (EYE RIGHT)	G: .....1111111111111111 %:1111111111111111
KINKED (3) (TAIL APEX)	G: %:

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

MALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	RECOVERY WEEKS: 1.....2.....3.....4.....
BEHAVIOR	

SEDATED (3)	G: %:
POSTURE	

HUNCHED POSTURE (1)	G: %:
KINKED (3) (TAIL APEX)	G: 111. %: 011.
SKIN / FUR	

ROUGH COAT (1)	G: %:
HAIR LOSS (3) (SHOULDER RIGHT)	G: %:
CRUSTS (3) (SHOULDER RIGHT)	G: %:
WOUND (3) (SHOULDER RIGHT)	G: %:
SECRETION / EXCRETION	

LACRIMATION (3)	G: %:
REDUCED SIZE FECALBOLI (1)	G: %:
VARIOUS	

EMACIATED (3)	G: %:
ENOPHTHALMOS (1)	G: %:
EXOPHTHALMOS (1)	G: %:
KINKED (3) (TAIL APEX)	G: %:

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

MALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	RECOVERY WEEKS: 1.....2.....3.....4.....
SKIN / FUR	

HAIR LOSS (3) (SHOULDER RIGHT)	G: 111. %: 011.
SCABS (3) (SHOULDER LEFT)	G: %:
SCABS (3) (SHOULDER RIGHT)	G: 111. %: 011.
SCABBED WOUND (1) (SHOULDER RIGHT)	G: %:
VARIOUS	

EYE RIGHT, ENLARGED (1)	G: %:
EXOPHTHALMOS (1)	G: %:
MYDRIASIS (1)	G: %:

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	RECOVERY WEEKS: 1.....2.....3.....4.....
SKIN / FUR -----	
HAIR LOSS (3) (SHOULDER RIGHT)	G: %:
FISSURES (3) (EAR LEFT)	G: ..11111111111111111111111111111111 %: ..11111111111111111111111111111111
SCABS (3) (SHOULDER RIGHT)	G: %:
VARIOUS -----	
EXOPHTHALMOS (1)	G: %:

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	ACCLIMATIZATION WEEKS: 1.....	TREATMENT 1.....2.....3.....4.....5.....6.....
BEHAVIOR -----		
AGGRESSIVE (3)	G: ..... %: .....	.....
BREATHING -----		
RALES (3)	G: ..... %: .....	.....11111..... .....00000.....
SKIN / FUR -----		
HAIR LOSS (3) (THIGH HIND LEFT)	G: ..... %: .....	.....
VARIOUS -----		
EMACIATED (3)	G: ..... %: .....	.....
EXOPHTHALMOS (1)	G: ..... %: .....	.....

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	ACCLIMATIZATION WEEKS: 1.....	TREATMENT 1.....2.....3.....4.....5.....6.....
<hr/>		
VARIOUS ----- EXOPHTHALMOS (1)	G: ..... %: .....	..... .....

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 3 (1000 MG/KG/DAY)

[illegible]

G: Median value of the highest individual daily grades

#: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%, ..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	ACCLIMATIZATION		TREATMENT					
	WEEKS:	1.....		1.....	2.....	3.....	4.....	5.....6.....
SKIN / FUR								

HAIR LOSS (3)		G:						
(FORELEG LEFT)		%:						
HAIR LOSS (3)		G:						
(FORELEG RIGHT)		%:						
VARIOUS								

EMACIATED (3)		G:						
		%:						
EXOPHTHALMOS (1)		G:						
		%:						
KINKED (3)		G:						
(TAIL APEX)		%:						

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
BEHAVIOR -----	
AGGRESSIVE (3)	G: .....111... %:000...
BREATHING -----	
RALES (3)	G: %:
SKIN / FUR -----	
HAIR LOSS (3) (THIGH HIND LEFT)	G: .....221111 %:000000
VARIOUS -----	
EMACIATED (3)	G: .....11111... %:00000...
EXOPHTHALMOS (1)	G: .....1111...111..... %:1111...444.....

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE)	TREATMENT
LOCATION	WEEKS: 7.....8.....9.....10.....11.....12.....13.....14

VARIOUS

EXOPHTHALMOS (1)

G:11111111111111111111.....
%:222222223333222444.....

G: Median value of the highest individual daily grades

%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 3 (1000 MG/KG/DAY)

[illegible]

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%, ..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
SKIN / FUR -----	
HAIR LOSS (3) (FORELEG LEFT)	G: .....111111 %:000000
HAIR LOSS (3) (FORELEG RIGHT)	G: .....111111 %:000000
VARIOUS -----	
EMACIATED (3)	G: .....11111..1 %:11111..0
EXOPHTHALMOS (1)	G: .....1111111111111111..... %:333333334444111444.....
KINKED (3) (TAIL APEX)	G: .....11111 %:00000

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	RECOVERY WEEKS: 1.....2.....3.....4.....
<hr/>	
BEHAVIOR	

AGGRESSIVE (3)	G: %:
BREATHING	

RALES (3)	G: %:
SKIN / FUR	

HAIR LOSS (3) (THIGH HIND LEFT)	G: 11..... %: 00.....
VARIOUS	

EMACIATED (3)	G: %:
EXOPHTHALMOS (1)	G: %:

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE)	RECOVERY
LOCATION	WEEKS: 1.....2.....3.....4.....

VARIOUS

EXOPHTHALMOS (1)

G: ...

 %: ...

G: Median value of the highest individual daily grades

%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	RECOVERY WEEKS: 1.....2.....3.....4.....
<hr/>	
POSTURE	

KINKED (3) (TAIL APEX)	G: 1.. %: 0..
VARIOUS	

EMACIATED (3)	G: 1.. %: 0..
EXOPHTHALMOS (1)	G: ... %: ...

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

CLINICAL SIGNS, DAILY (SUMMARY)

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) LOCATION	RECOVERY			
	WEEKS: 1	2	3	4
<hr/>				
SKIN / FUR				

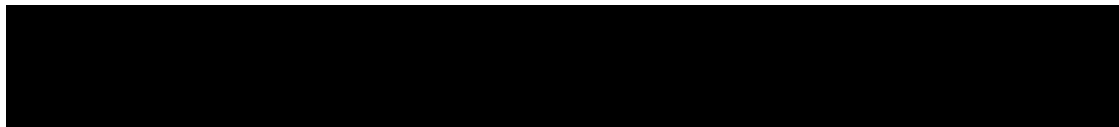
HAIR LOSS (3)	G: 11			
(FORELEG LEFT)	%: 00			
HAIR LOSS (3)	G: 11			
(FORELEG RIGHT)	%: 00			
VARIOUS				

EMACIATED (3)	G: 1			
	%: 0			
EXOPHTHALMOS (1)	G: .			
	%: .			
KINKED (3)	G: 11			
(TAIL APEX)	%: 00			

G: Median value of the highest individual daily grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, WEEKLY (SUMMARY)

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13
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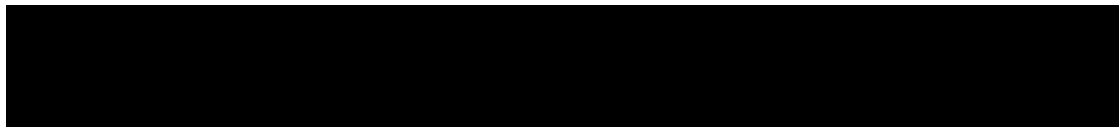
VARIOUS

KINKED (3)	G: 1
(TAIL APEX)	%: 0

G: Median value of the highest individual weekly grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, WEEKLY (SUMMARY)

MALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13
KINKED (3)	G: 1
(TAIL APEX)	%: 1

G: Median value of the highest individual weekly grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, WEEKLY (SUMMARY)

MALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13
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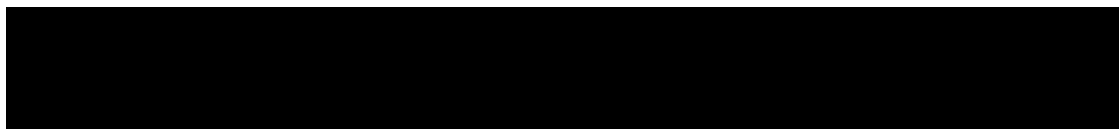
SKIN / FUR

CRUSTS (3)	G: 1
(SHOULDER RIGHT)	%: 0

G: Median value of the highest individual weekly grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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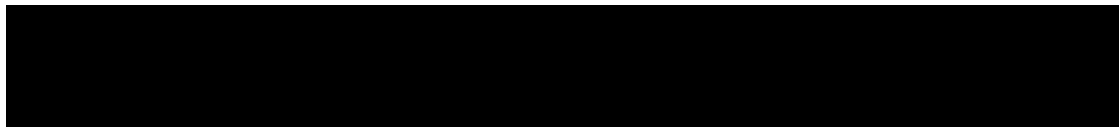
CLINICAL SIGNS, WEEKLY (SUMMARY)

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13
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NO CLINICAL SIGNS NOTED



CLINICAL SIGNS, WEEKLY (SUMMARY)

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13
<hr/>	
BEHAVIOR	

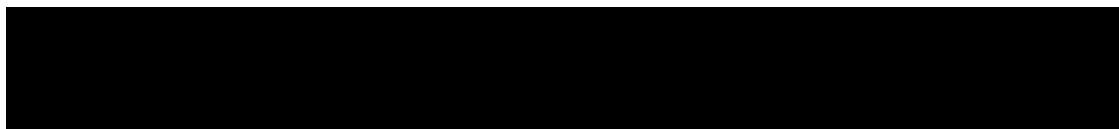
AGGRESSIVE (3)	G: 1 %: 0
SKIN / FUR	

HAIR LOSS (3) (THIGH HIND LEFT)	G: 2 %: 0

G: Median value of the highest individual weekly grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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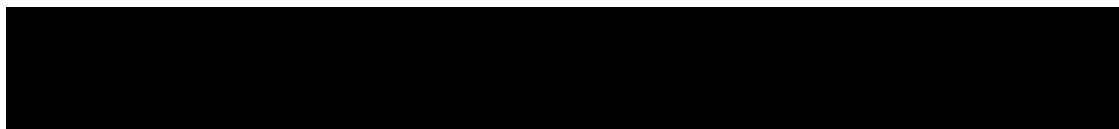
CLINICAL SIGNS, WEEKLY (SUMMARY)

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13
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NO CLINICAL SIGNS NOTED



CLINICAL SIGNS, WEEKLY (SUMMARY)

FEMALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13
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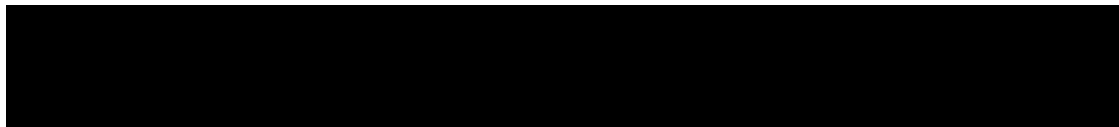
VARIOUS

KINKED (3)	G: 1
(TAIL APEX)	%: 0

G: Median value of the highest individual weekly grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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CLINICAL SIGNS, WEEKLY (SUMMARY)

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13
KINKED (3)	G: 1
(TAIL APEX)	%: 1

G: Median value of the highest individual weekly grades
%: Percent of affected animals (0 = less than 5%, 1 = between 5% and 15%,..., A = more than 95%)

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

GRIP STRENGTH AT WEEK 13, SUMMARY

	MALES	Mean (g)	FEMALES	Mean (g)
GROUP 1				
0 mg/kg	Forelimb	Hindlimb	Forelimb	Hindlimb
Mean	986	766	714	657
St.dev.	246	161	239	100
N	30	30	30	30
GROUP 2				
500 mg/kg	Forelimb	Hindlimb	Forelimb	Hindlimb
Mean	961	696	776	641
St.dev.	256	164	270	107
N	19	19	20	20
GROUP 3				
1000 mg/kg	Forelimb	Hindlimb	Forelimb	Hindlimb
Mean	1077	767	619	594 *
St.dev.	242	96	235	115
N	20	20	20	20
GROUP 4				
2000 mg/kg	Forelimb	Hindlimb	Forelimb	Hindlimb
Mean	837 *	692	694	606
St.dev.	250	162	157	111
N	30	30	30	30

*/** T-Test sig. at 5% or 1% level

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

GRIP STRENGTH , SUMMARY

WEEK 17

	MALES		FEMALES	
	Mean (g)		Mean (g)	
GROUP 1				
0 mg/kg	Forelimb	Hindlimb	Forelimb	Hindlimb
Mean	717	563	511	340
St.dev.	212	147	147	82
N	10	10	10	10
GROUP 4				
2000 mg/kg	Forelimb	Hindlimb	Forelimb	Hindlimb
Mean	741	518	572	402
St.dev.	182	111	130	88
N	10	10	10	10

*** T-Test sig. at 5% or 1% level

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

LOCOMOTOR ACTIVITY, SUMMARY DATA, WEEK 13

MALES

BEAM COUNTS

GROUP 1 0 mg/kg/day

	10 min	20 min	30 min	40 min	50 min	60 min	Total
Mean	423	278	227	231	217	199	1565
St.dev.	120	103	114	104	113	117	471
N	30	30	30	30	30	30	30

GROUP 2 500 mg/kg/day

	10 min	20 min	30 min	40 min	50 min.	60 min.	Total
Mean	306 * *	197 *	153	211	153	127 *	1185 * *
St.dev.	125	111	127	112	127	117	485
N	19	19	19	19	19	19	19

GROUP 3 1000 mg/kg/day

	10 min	20 min	30 min	40 min	50 min.	60 min.	Total
Mean	374	289	249	215	150 *	139	1415
St.dev.	146	116	95	138	124	120	520
N	20	20	20	20	20	20	20

GROUP 4 2000 mg/kg/day

	10 min	20 min	30 min	40 min	50 min.	60 min.	Total
Mean	396	259	404	185	175	107 * *	1338
St.dev.	149	105	127	149	135	121	564
N	30	30	30	30	30	30	30

*/** T-Test significant at 5% or 1% level

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

LOCOMOTOR ACTIVITY, SUMMARY DATA, WEEK 13

FEMALES

BEAM COUNTS

GROUP 1 0 mg/kg/day

	10 min	20 min	30 min	40 min	50 min	60 min	Total
Mean	457	296	250	234	164	198	1598
St.dev.	170	133	129	110	102	102	565
N	30	30	30	30	30	30	30

GROUP 2 500 mg/kg/day

	10 min	20 min	30 min	40 min	50 min.	60 min.	Total
Mean	306 **	175 **	123 *	124 **	123	87 * *	970 **
St.dev.	152	144	98	119	98	107	525
N	20	20	20	20	20	20	20

GROUP 3 1000 mg/kg/day

	10 min	20 min	30 min	40 min	50 min.	60 min.	Total
Mean	474	306	223	234	219	193	1648
St.dev.	161	97	143	103	103	100	497
N	20	20	20	20	20	20	20

GROUP 4 2000 mg/kg/day

	10 min	20 min	30 min	40 min	50 min.	60 min.	Total
Mean	549 *	327	529	228	210	191	1760
St.dev.	136	121	113	106	98	93	493
N	30	30	30	30	30	30	30

*/** T-Test significant at 5% or 1% level

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

LOCOMOTOR ACTIVITY, SUMMARY DATA, WEEK 17

MALES

BEAM COUNTS

GROUP 1 0 mg/kg/day

	10 min	20 min	30 min	40 min	50 min	60 min	Total
Mean	360	239	190	181	74	71	1115
St.dev.	150	146	155	135	75	99	620
N	10	10	10	10	10	10	10

GROUP 4 2000 mg/kg/day

	10 min	20 min	30 min	40 min	50 min.	60 min.	Total
Mean	437	312 * *	404	161	148	120	1386
St.dev.	161	124	105	99	140	129	502
N	10	10	10	10	10	10	10

*/** T-Test significant at 5% or 1% level

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

LOCOMOTOR ACTIVITY, SUMMARY DATA, WEEK 17

FEMALES

BEAM COUNTS

GROUP 1 0 mg/kg/day							
	10 min	20 min	30 min	40 min	50 min	60 min	Total
Mean	453	205	195	127	92	135	1207
St.dev.	103	110	97	83	97	103	420
N	10	10	10	10	10	10	10

GROUP 4 2000 mg/kg/day							
	10 min	20 min	30 min	40 min	50 min.	60 min.	Total
Mean	562	254 * *	395	144	121	118	1396
St.dev.	195	109	164	146	118	158	587
N	10	10	10	10	10	10	10

*/** T-Test significant at 5% or 1% level

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

OPHTHALMOSCOPIC EXAMINATIONS SUMMARY

MALES

AT ACCLIMATIZATION

	GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/D	GROUP 3 1000 MG/KG/	GROUP 4 2000 MG/KG/D
NUMBER OF ANIMALS EXAMINED	30	20	20	30
NO ABNORMALITIES DETECTED %	17 56.7	14 70.0	12 60.0	23 76.7
CORNEAL OPACITY ANIMALS AFFECTED %	4 13.3	0	1 5.0	1 3.3
ANTERIOR SYNECHIA ANIMALS AFFECTED %	0	1 5.0	0	0
PERSISTENT PUPILLARY MEMBRANE ANIMALS AFFECTED %	3 10.0	0	2 10.0	2 6.7
PERSISTENT HYALOID VESSEL IN VITREOUS ANIMALS AFFECTED %	8 26.7	5 25.0	5 25.0	4 13.3

#/# : Fisher's Exact Test significant at level 5% (#) or 1% (##).

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

OPHTHALMOSCOPIC EXAMINATIONS SUMMARY

MALES

AT WEEK 13

	GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/D
NUMBER OF ANIMALS EXAMINED	30	30
NO ABNORMALITIES DETECTED %	16 53.3	19 63.3
CORNEAL OPACITY ANIMALS AFFECTED %	8 26.7	8 26.7
PERSISTENT PUPILLARY MEMBRANE ANIMALS AFFECTED %	2 6.7	0
PERSISTENT HYALOID VESSEL IN VITREOUS ANIMALS AFFECTED %	3 10.0	2 6.7
IRIS COLOBOMA ANIMALS AFFECTED %	1 3.3	0
LENTICULAR OPACITY ANIMALS AFFECTED %	1 3.3	1 3.3

#/# : Fisher's Exact Test significant at level 5% (#) or 1% (##).

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

OPHTHALMOSCOPIC EXAMINATIONS SUMMARY

MALES

AT WEEK 17

	GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/D
NUMBER OF ANIMALS EXAMINED	10	10
NO ABNORMALITIES DETECTED %	6 60.0	8 80.0
CORNEAL OPACITY ANIMALS AFFECTED %	2 20.0	1 10.0
PERSISTENT HYALOID VESSEL IN VITREOUS ANIMALS AFFECTED %	1 10.0	1 10.0
EYE DISCOLORATION WHITE ANIMALS AFFECTED %	1 10.0	0
EYE REDUCED IN SIZE ANIMALS AFFECTED %	1 10.0	0

#/# : Fisher's Exact Test significant at level 5% (#) or 1% (##).

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

OPHTHALMOSCOPIC EXAMINATIONS SUMMARY

FEMALES

AT ACCLIMATIZATION

	GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/D	GROUP 3 1000 MG/KG/	GROUP 4 2000 MG/KG/D
NUMBER OF ANIMALS EXAMINED	30	20	20	30
NO ABNORMALITIES DETECTED %	20 66.7	16 80.0	15 75.0	19 63.3
CORNEAL OPACITY ANIMALS AFFECTED %	1 3.3	0	0	5 16.7
PERSISTENT PUPILLARY MEMBRANE ANIMALS AFFECTED %	1 3.3	1 5.0	0	2 6.7
PERSISTENT HYALOID VESSEL IN VITREOUS ANIMALS AFFECTED %	7 23.3	3 15.0	5 25.0	9 30.0
PUPIL DOES NOT REACT TO MYDRIATIC ANIMALS AFFECTED %	1 3.3	0	0	0

#/# : Fisher's Exact Test significant at level 5% (#) or 1% (##).

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

OPHTHALMOSCOPIC EXAMINATIONS SUMMARY

FEMALES

AT WEEK 13

	GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/D
NUMBER OF ANIMALS EXAMINED	30	30
NO ABNORMALITIES DETECTED %	24 80.0	24 80.0
CORNEAL OPACITY ANIMALS AFFECTED %	4 13.3	2 6.7
LENTICULAR OPACITY, POSTERIOR ANIMALS AFFECTED %	0	1 3.3
PERSISTENT PUPILLARY MEMBRANE ANIMALS AFFECTED %	1 3.3	2 6.7
PERSISTENT HYALOID VESSEL IN VITREOUS ANIMALS AFFECTED %	1 3.3	1 3.3

#/# : Fisher's Exact Test significant at level 5% (#) or 1% (##).

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

OPHTHALMOSCOPIC EXAMINATIONS SUMMARY

FEMALES

AT WEEK 17

	GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/D
NUMBER OF ANIMALS EXAMINED	10	10
NO ABNORMALITIES DETECTED %	9 90.0	5 50.0
CORNEAL OPACITY ANIMALS AFFECTED %	1 10.0	3 30.0
PERSISTENT HYALOID VESSEL IN VITREOUS ANIMALS AFFECTED %	0	2 20.0
LENTICULAR OPACITY ANIMALS AFFECTED %	0	1 10.0

#/# : Fisher's Exact Test significant at level 5% (#) or 1% (##).

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

**FOOD CONSUMPTION (G/ANIMAL/DAY) SUMMARY
MALES**

ACCLIMATIZATION			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS	1-7	MEAN	16.2	16.9	16.8	16.8
WEEK	1	ST.DEV.	1.9	1.5	1.5	1.0
		N	36	26	26	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)FOOD CONSUMPTION (G/ANIMAL/DAY) SUMMARY
MALES

TREATMENT			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS 1-8	MEAN		19.7	21.1 **	20.7	21.7 **
WEEKS 1/2	ST.DEV.		1.4	2.3	2.1	1.4
	N		36	26	26	36
DAYS 8-15	MEAN		21.9	22.5	22.5	23.2 **
WEEKS 2/3	ST.DEV.		1.5	1.6	2.0	1.6
	N		36	26	26	36
DAYS 17-22	MEAN		23.0	23.0	23.0	23.1
WEEKS 3/4	ST.DEV.		1.8	2.3	1.9	1.8
	N		36	26	26	36
DAYS 22-29	MEAN		23.0	23.4	24.7 **	24.7 **
WEEKS 4/5	ST.DEV.		1.0	2.8	1.9	2.0
	N		36	26	26	36
DAYS 29-36	MEAN		24.7	25.6	23.7	24.6
WEEKS 5/6	ST.DEV.		2.5	2.7	2.3	2.1
	N		36	25	26	36
DAYS 36-42	MEAN		22.4	24.2 **	23.5	23.9 **
WEEK 6	ST.DEV.		2.2	1.8	2.1	2.1
	N		36	25	26	36
DAYS 44-50	MEAN		23.5	24.4	23.8	24.5
WEEKS 7/8	ST.DEV.		2.2	1.6	2.2	2.2
	N		36	25	25	36
DAYS 50-57	MEAN		22.8	24.0	23.6	23.9
WEEKS 8/9	ST.DEV.		2.2	2.0	2.2	2.1
	N		36	25	25	36
DAYS 57-64	MEAN		22.1	23.0	23.4 *	23.6 **
WEEKS 9/10	ST.DEV.		2.2	1.8	2.2	2.2
	N		36	25	25	36
DAYS 64-71	MEAN		21.9	22.9	23.3 *	22.7
WEEKS 10/11	ST.DEV.		2.0	2.2	1.9	1.7
	N		36	25	25	36
DAYS 71-78	MEAN		21.9	22.4	22.9	22.6
WEEKS 11/12	ST.DEV.		1.9	1.9	1.9	2.3
	N		36	25	25	36
DAYS 78-85	MEAN		21.5	22.4	22.6	21.8
WEEKS 12/13	ST.DEV.		1.9	1.8	2.0	1.9
	N		36	25	25	36
DAYS 85-92	MEAN		21.9	22.7	22.8	22.7
WEEKS 13/14	ST.DEV.		2.1	1.9	1.9	1.8
	N		36	25	25	36
MEAN OF MEANS OVER TREATMENT			22.3	23.2	23.1	23.3

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

**FOOD CONSUMPTION (G/ANIMAL/DAY) SUMMARY
MALES**

RECOVERY			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS	4-7	MEAN	21.7	---	---	23.9
WEEK	1	ST.DEV.	1.6	---	---	2.6
		N	10	0	0	10
DAYS	7-14	MEAN	23.0	---	---	22.8
WEEKS	1/2	ST.DEV.	2.2	---	---	1.9
		N	10	0	0	10
DAYS	14-21	MEAN	23.4	---	---	22.9
WEEKS	2/3	ST.DEV.	2.2	---	---	1.9
		N	10	0	0	10
DAYS	21-28	MEAN	22.6	---	---	22.7
WEEKS	3/4	ST.DEV.	2.1	---	---	1.8
		N	10	0	0	10
MEAN OF MEANS OVER RECOVERY			22.7	---	---	23.1

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

**FOOD CONSUMPTION (G/ANIMAL/DAY) SUMMARY
FEMALES**

ACCLIMATIZATION			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS	1-7	MEAN	13.5	13.7	13.3	13.8
WEEK	1	ST.DEV.	1.2	0.8	1.0	1.2
		N	36	26	26	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**FOOD CONSUMPTION (G/ANIMAL/DAY) SUMMARY
FEMALES**

TREATMENT			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS 1-8	MEAN		15.3	16.0	15.7	16.6 **
WEEKS 1/2	ST.DEV.		1.6	1.2	1.0	1.2
	N		36	26	26	36
DAYS 8-15	MEAN		16.6	16.5	16.4	17.3
WEEKS 2/3	ST.DEV.		1.5	1.3	1.1	1.4
	N		36	26	26	36
DAYS 17-22	MEAN		16.6	16.1	15.8	17.0
WEEKS 3/4	ST.DEV.		1.6	1.4	1.2	1.5
	N		36	26	26	36
DAYS 22-29	MEAN		17.7	17.2	17.7	19.0 **
WEEKS 4/5	ST.DEV.		1.8	1.7	1.5	1.6
	N		36	26	26	36
DAYS 29-36	MEAN		17.2	17.4	16.9	17.9
WEEKS 5/6	ST.DEV.		1.8	1.5	1.7	1.5
	N		36	26	26	36
DAYS 36-42	MEAN		16.3	16.8	16.7	17.8 **
WEEK 6	ST.DEV.		1.9	1.3	1.7	1.7
	N		36	26	26	36
DAYS 44-50	MEAN		18.0	17.8	17.8	18.7
WEEKS 7/8	ST.DEV.		2.1	1.5	1.8	2.2
	N		36	26	26	36
DAYS 50-57	MEAN		17.8	17.9	17.6	18.4
WEEKS 8/9	ST.DEV.		2.3	1.4	2.0	2.0
	N		36	26	26	36
DAYS 57-64	MEAN		16.7	17.2	17.5	18.2 **
WEEKS 9/10	ST.DEV.		2.2	1.5	1.9	2.2
	N		36	26	26	36
DAYS 64-71	MEAN		17.1	17.2	17.1	18.0
WEEKS 10/11	ST.DEV.		2.3	1.4	2.0	2.3
	N		36	26	26	36
DAYS 71-78	MEAN		16.5	16.6	16.5	17.2
WEEKS 11/12	ST.DEV.		2.5	1.7	1.8	2.9
	N		36	26	26	36
DAYS 78-85	MEAN		16.5	16.5	16.7	16.6
WEEKS 12/13	ST.DEV.		2.7	1.5	1.9	2.0
	N		36	26	26	36
DAYS 85-92	MEAN		16.6	16.3	16.5	17.4
WEEKS 13/14	ST.DEV.		2.4	1.5	1.9	2.1
	N		36	26	26	36
MEAN OF MEANS OVER TREATMENT			16.8	16.9	16.8	17.7

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

**FOOD CONSUMPTION (G/ANIMAL/DAY) SUMMARY
FEMALES**

RECOVERY			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS	4-7	MEAN	17.5	---	---	18.8
WEEK	1	ST.DEV.	2.5	---	---	2.2
		N	10	0	0	10
DAYS	7-14	MEAN	17.4	---	---	18.1
WEEKS	1/2	ST.DEV.	2.3	---	---	1.9
		N	10	0	0	10
DAYS	14-21	MEAN	17.2	---	---	18.7
WEEKS	2/3	ST.DEV.	2.5	---	---	1.7
		N	10	0	0	10
DAYS	21-28	MEAN	16.9	---	---	17.4
WEEKS	3/4	ST.DEV.	2.2	---	---	1.4
		N	10	0	0	10
MEAN OF MEANS OVER RECOVERY			17.3	---	---	18.2

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

RELATIVE FOOD CONSUMPTION SUMMARY
(G/KG BODY WEIGHT/DAY)
MALES

ACCLIMATIZATION			GROUP 1	GROUP 2	GROUP 3	GROUP 4
			0 MG/KG/DAY	500 MG/KG/DAY	1000 MG/KG/DAY	2000 MG/KG/DAY
DAYS	1-7	MEAN	146	154 *	155 *	151
WEEK	1	ST.DEV.	15.0	10.7	11.7	11.3
		N	36	26	26	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

RELATIVE FOOD CONSUMPTION SUMMARY
(G/KG BODY WEIGHT/DAY)
MALES

TREATMENT			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS 1-8	MEAN		100	107 **	106 **	110 **
WEEKS 1/2	ST.DEV.		6.1	10.1	6.6	5.8
	N		36	26	26	36
DAYS 8-15	MEAN		91	93	93	95 **
WEEKS 2/3	ST.DEV.		4.5	5.0	4.6	4.4
	N		36	26	26	36
DAYS 17-22	MEAN		85	84	84	85
WEEKS 3/4	ST.DEV.		3.7	5.8	2.9	4.1
	N		36	26	26	36
DAYS 22-29	MEAN		78	78	81 **	82 **
WEEKS 4/5	ST.DEV.		4.1	5.8	3.2	4.0
	N		36	26	26	36
DAYS 29-36	MEAN		76	77	72 **	76
WEEKS 5/6	ST.DEV.		4.2	5.7	3.1	3.3
	N		36	25	26	36
DAYS 36-42	MEAN		66	69 **	68 *	70 **
WEEK 6	ST.DEV.		3.0	3.6	2.6	3.0
	N		36	25	26	36
DAYS 44-50	MEAN		66	67	66	69 **
WEEKS 7/8	ST.DEV.		3.3	3.9	3.5	3.6
	N		36	25	25	36
DAYS 50-57	MEAN		61	63	63	64 **
WEEKS 8/9	ST.DEV.		3.1	4.0	2.8	3.4
	N		36	25	25	36
DAYS 57-64	MEAN		58	59	60 **	62 **
WEEKS 9/10	ST.DEV.		3.5	3.5	3.1	3.2
	N		36	25	25	36
DAYS 64-71	MEAN		55	56	58 **	57 **
WEEKS 10/11	ST.DEV.		3.1	4.2	2.5	2.4
	N		36	25	25	36
DAYS 71-78	MEAN		53	53	55	55 **
WEEKS 11/12	ST.DEV.		2.9	3.2	2.0	3.3
	N		36	25	25	36
DAYS 78-85	MEAN		51	52	53 *	53 *
WEEKS 12/13	ST.DEV.		2.6	3.3	2.6	2.7
	N		36	25	25	36
DAYS 85-92	MEAN		51	52	52	53 **
WEEKS 13/14	ST.DEV.		3.0	3.4	2.6	2.4
	N		36	25	25	36
MEAN OF MEANS OVER TREATMENT			68	70	70	72

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

RELATIVE FOOD CONSUMPTION SUMMARY
(G/KG BODY WEIGHT/DAY)
MALES

RECOVERY			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS	4-7	MEAN	51	---	---	55
WEEK	1	ST.DEV.	4.2	---	---	4.9
		N	10	0	0	10
DAYS	7-14	MEAN	52	---	---	52
WEEKS	1/2	ST.DEV.	2.8	---	---	2.8
		N	10	0	0	10
DAYS	14-21	MEAN	52	---	---	51
WEEKS	2/3	ST.DEV.	1.9	---	---	3.0
		N	10	0	0	10
DAYS	21-28	MEAN	49	---	---	49
WEEKS	3/4	ST.DEV.	1.9	---	---	2.6
		N	10	0	0	10
MEAN OF MEANS OVER RECOVERY			51	---	---	52

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

RELATIVE FOOD CONSUMPTION SUMMARY
(G/KG BODY WEIGHT/DAY)
FEMALES

ACCLIMATIZATION			GROUP 1	GROUP 2	GROUP 3	GROUP 4
			0 MG/KG/DAY	500 MG/KG/DAY	1000 MG/KG/DAY	2000 MG/KG/DAY
DAYS	1-7	MEAN	140	142	137	143
WEEK	1	ST.DEV.	10.1	11.6	8.4	10.3
		N	36	26	26	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

RELATIVE FOOD CONSUMPTION SUMMARY
(G/KG BODY WEIGHT/DAY)
FEMALES

TREATMENT			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS 1-8	MEAN		103	108 **	110 **	113 **
WEEKS 1/2	ST.DEV.		5.8	6.6	3.9	5.0
	N		36	26	26	36
DAYS 8-15	MEAN		98	97	99	102 **
WEEKS 2/3	ST.DEV.		6.0	5.4	3.6	4.4
	N		36	26	26	36
DAYS 17-22	MEAN		91	88 *	89	92
WEEKS 3/4	ST.DEV.		5.4	5.7	5.4	5.6
	N		36	26	26	36
DAYS 22-29	MEAN		90	87	94	96 **
WEEKS 4/5	ST.DEV.		5.7	7.9	5.8	6.1
	N		36	26	26	36
DAYS 29-36	MEAN		82	84	84	86 *
WEEKS 5/6	ST.DEV.		5.4	5.8	5.5	5.7
	N		36	26	26	36
DAYS 36-42	MEAN		75	78	80 **	82 **
WEEK 6	ST.DEV.		6.2	5.1	5.3	5.8
	N		36	26	26	36
DAYS 44-50	MEAN		80	79	82	83
WEEKS 7/8	ST.DEV.		7.6	5.6	5.5	8.5
	N		36	26	26	36
DAYS 50-57	MEAN		77	77	78	79
WEEKS 8/9	ST.DEV.		8.2	5.9	6.3	6.8
	N		36	26	26	36
DAYS 57-64	MEAN		70	73	76 **	77 **
WEEKS 9/10	ST.DEV.		8.2	5.9	6.2	7.2
	N		36	26	26	36
DAYS 64-71	MEAN		70	70	72	74
WEEKS 10/11	ST.DEV.		8.4	5.9	6.0	7.3
	N		36	26	26	36
DAYS 71-78	MEAN		67	67	69	69
WEEKS 11/12	ST.DEV.		9.6	6.2	6.4	8.1
	N		36	26	26	36
DAYS 78-85	MEAN		66	66	69	66
WEEKS 12/13	ST.DEV.		10.5	6.6	5.9	5.9
	N		36	26	26	36
DAYS 85-92	MEAN		66	65	67	69
WEEKS 13/14	ST.DEV.		9.1	6.8	6.2	6.3
	N		36	26	26	36
MEAN OF MEANS OVER TREATMENT			80	80	82	84

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

RELATIVE FOOD CONSUMPTION SUMMARY
(G/KG BODY WEIGHT/DAY)
FEMALES

RECOVERY			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS	4-7	MEAN	69	---	---	75
WEEK	1	ST.DEV.	6.4	---	---	6.1
		N	10	0	0	10
DAYS	7-14	MEAN	68	---	---	72
WEEKS	1/2	ST.DEV.	4.7	---	---	4.9
		N	10	0	0	10
DAYS	14-21	MEAN	65	---	---	72 *
WEEKS	2/3	ST.DEV.	4.9	---	---	6.1
		N	10	0	0	10
DAYS	21-28	MEAN	63	---	---	66
WEEKS	3/4	ST.DEV.	4.7	---	---	5.4
		N	10	0	0	10
MEAN OF MEANS OVER RECOVERY			66	---	---	71

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

BODY WEIGHTS (GRAM) SUMMARY
MALES

ACCLIMATIZATION			GROUP 1	GROUP 2	GROUP 3	GROUP 4
			0 MG/KG/DAY	500 MG/KG/DAY	1000 MG/KG/DAY	2000 MG/KG/DAY
DAY	1	MEAN	111	110	108	111
WEEK	1	ST.DEV.	7.0	6.9	6.1	6.6
		N	36	26	26	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

BODY WEIGHTS (GRAM) SUMMARY
MALES

TREATMENT			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAY	1	MEAN	150	151	148	153
WEEK	1	ST.DEV.	13.8	9.3	8.8	6.3
		N	36	26	26	36
DAY	8	MEAN	197	197	194	198
WEEK	2	ST.DEV.	11.7	11.8	12.7	7.8
		N	36	26	26	36
DAY	15	MEAN	241	243	241	243
WEEK	3	ST.DEV.	14.6	14.2	15.5	11.0
		N	36	26	26	36
DAY	22	MEAN	272	274	273	273
WEEK	4	ST.DEV.	17.4	19.4	18.9	14.6
		N	36	26	26	36
DAY	29	MEAN	296	301	303	301
WEEK	5	ST.DEV.	15.7	25.5	20.8	16.9
		N	36	26	26	36
DAY	36	MEAN	327	333	330	326
WEEK	6	ST.DEV.	24.9	22.0	24.3	19.7
		N	36	25	26	36
DAY	42	MEAN	342	349	346	342
WEEK	6	ST.DEV.	27.6	24.4	26.4	22.1
		N	36	25	26	36
DAY	50	MEAN	358	365	359	356
WEEK	8	ST.DEV.	30.1	27.0	26.0	24.1
		N	36	25	25	36
DAY	57	MEAN	374	382	376	372
WEEK	9	ST.DEV.	32.8	27.7	27.5	25.4
		N	36	25	25	36
DAY	64	MEAN	383	390	388	381
WEEK	10	ST.DEV.	34.1	29.3	30.5	26.6
		N	36	25	25	36
DAY	71	MEAN	402	409	406	396
WEEK	11	ST.DEV.	36.7	31.4	32.0	27.4
		N	36	25	25	36
DAY	78	MEAN	412	420	418	406
WEEK	12	ST.DEV.	38.2	33.9	32.8	28.7
		N	36	25	25	36
DAY	85	MEAN	422	430	428	416
WEEK	13	ST.DEV.	38.6	34.1	33.4	29.4
		N	36	25	25	36
DAY	92	MEAN	434	441	438	427
WEEK	14	ST.DEV.	39.8	36.0	34.3	29.8
		N	36	25	25	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

BODY WEIGHTS (GRAM) SUMMARY
MALES

RECOVERY			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAY	7	MEAN	430	---	---	432
WEEK	1	ST.DEV.	44.3	---	---	30.4
		N	10	0	0	10
DAY	14	MEAN	440	---	---	439
WEEK	2	ST.DEV.	44.5	---	---	31.1
		N	10	0	0	10
DAY	21	MEAN	454	---	---	453
WEEK	3	ST.DEV.	45.8	---	---	31.1
		N	10	0	0	10
DAY	28	MEAN	459	---	---	460
WEEK	4	ST.DEV.	48.6	---	---	32.1
		N	10	0	0	10

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

BODY WEIGHTS (GRAM) SUMMARY
FEMALES

ACCLIMATIZATION			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAY	1	MEAN	96	97	97	97
WEEK	1	ST.DEV.	6.4	4.4	5.6	5.5
		N	36	26	26	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

**BODY WEIGHTS (GRAM) SUMMARY
FEMALES**

TREATMENT			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAY	1	MEAN	125	126	123	125
WEEK	1	ST.DEV.	8.7	3.6	6.4	7.1
		N	36	26	26	36
DAY	8	MEAN	149	149	143	147
WEEK	2	ST.DEV.	11.1	4.6	8.4	9.2
		N	36	26	26	36
DAY	15	MEAN	169	171	165	170
WEEK	3	ST.DEV.	12.5	7.6	10.4	11.7
		N	36	26	26	36
DAY	22	MEAN	182	183	177	183
WEEK	4	ST.DEV.	13.3	8.0	10.9	13.1
		N	36	26	26	36
DAY	29	MEAN	196	197	189	199
WEEK	5	ST.DEV.	15.3	8.4	12.1	15.1
		N	36	26	26	36
DAY	36	MEAN	209	207	201	209
WEEK	6	ST.DEV.	16.6	8.7	13.8	16.8
		N	36	26	26	36
DAY	42	MEAN	217	216	210	218
WEEK	6	ST.DEV.	17.4	10.5	14.9	16.9
		N	36	26	26	36
DAY	50	MEAN	226	225	217	225
WEEK	8	ST.DEV.	19.0	11.4	16.1	18.3
		N	36	26	26	36
DAY	57	MEAN	232	232	224	234
WEEK	9	ST.DEV.	20.0	10.0	17.2	19.3
		N	36	26	26	36
DAY	64	MEAN	237	237	229	236
WEEK	10	ST.DEV.	20.2	10.7	17.1	19.2
		N	36	26	26	36
DAY	71	MEAN	244	245	238	245
WEEK	11	ST.DEV.	21.3	12.3	18.4	20.2
		N	36	26	26	36
DAY	78	MEAN	248	247	240	250
WEEK	12	ST.DEV.	22.2	13.7	17.9	20.0
		N	36	26	26	36
DAY	85	MEAN	250	252	244	251
WEEK	13	ST.DEV.	21.4	12.2	19.3	20.4
		N	36	26	26	36
DAY	92	MEAN	253	252	245	252
WEEK	14	ST.DEV.	23.6	12.4	18.8	21.0
		N	36	26	26	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

BODY WEIGHTS (GRAM) SUMMARY
FEMALES

RECOVERY			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAY	7	MEAN	254	---	---	250
WEEK	1	ST.DEV.	27.2	---	---	20.0
		N	10	0	0	10
DAY	14	MEAN	258	---	---	252
WEEK	2	ST.DEV.	27.2	---	---	19.8
		N	10	0	0	10
DAY	21	MEAN	264	---	---	260
WEEK	3	ST.DEV.	27.4	---	---	20.3
		N	10	0	0	10
DAY	28	MEAN	266	---	---	262
WEEK	4	ST.DEV.	27.7	---	---	20.2
		N	10	0	0	10

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

BODY WEIGHT GAIN (%) SUMMARY
MALES

ACCLIMATIZATION			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAY	1	MEAN	-25.2	-26.9	-26.9	-27.2
WEEK	1	ST.DEV.	7.2	2.5	2.6	3.0
		N	36	26	26	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

BODY WEIGHT GAIN (%) SUMMARY
MALES

TREATMENT			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAY	1	MEAN	0.0	0.0	0.0	0.0
WEEK	1	ST.DEV.	0.0	0.0	0.0	0.0
		N	36	26	26	36
DAY	8	MEAN	32.3	30.5	30.8	29.7
WEEK	2	ST.DEV.	10.4	2.2	2.7	3.0
		N	36	26	26	36
DAY	15	MEAN	62.4	61.5	62.1	59.1
WEEK	3	ST.DEV.	15.0	3.7	4.5	5.7
		N	36	26	26	36
DAY	22	MEAN	83.4	82.2	83.9	78.8
WEEK	4	ST.DEV.	21.1	6.7	6.4	8.4
		N	36	26	26	36
DAY	29	MEAN	99.6	100.1	104.5	97.6
WEEK	5	ST.DEV.	23.9	12.8	8.1	10.3
		N	36	26	26	36
DAY	36	MEAN	120.2	120.9	122.1	113.7
WEEK	6	ST.DEV.	26.9	10.1	8.9	12.1
		N	36	25	26	36
DAY	42	MEAN	130.6	131.4	133.2	124.4
WEEK	6	ST.DEV.	29.1	11.8	10.4	13.6
		N	36	25	26	36
DAY	50	MEAN	141.3	142.3	142.6	133.4
WEEK	8	ST.DEV.	32.1	13.1	10.9	14.9
		N	36	25	25	36
DAY	57	MEAN	152.6	153.1	154.3	144.3
WEEK	9	ST.DEV.	33.2	14.1	11.6	15.8
		N	36	25	25	36
DAY	64	MEAN	158.1	158.7	161.9	150.2
WEEK	10	ST.DEV.	33.9	14.7	13.2	16.4
		N	36	25	25	36
DAY	71	MEAN	170.8	171.3	174.2	160.1
WEEK	11	ST.DEV.	35.9	16.2	14.5	17.8
		N	36	25	25	36
DAY	78	MEAN	177.7	178.6	182.2	166.6
WEEK	12	ST.DEV.	36.6	17.6	14.9	18.1
		N	36	25	25	36
DAY	85	MEAN	184.8	185.5	189.3	172.8
WEEK	13	ST.DEV.	36.7	18.1	16.1	19.2
		N	36	25	25	36
DAY	92	MEAN	192.4	192.3	196.1	179.8
WEEK	14	ST.DEV.	37.6	19.0	15.8	19.3
		N	36	25	25	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

BODY WEIGHT GAIN (%) SUMMARY
MALES

RECOVERY			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAY	7	MEAN	179.7	---	---	180.7
WEEK	1	ST.DEV.	20.6	---	---	21.9
		N	10	0	0	10
DAY	14	MEAN	186.1	---	---	185.5
WEEK	2	ST.DEV.	21.3	---	---	21.7
		N	10	0	0	10
DAY	21	MEAN	195.7	---	---	194.4
WEEK	3	ST.DEV.	22.5	---	---	21.7
		N	10	0	0	10
DAY	28	MEAN	198.4	---	---	198.7
WEEK	4	ST.DEV.	23.9	---	---	22.1
		N	10	0	0	10

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

BODY WEIGHT GAIN (%) SUMMARY
FEMALES

ACCLIMATIZATION			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAY	1	MEAN	-23.1	-23.2	-21.1 *	-22.2
WEEK	1	ST.DEV.	3.7	3.2	2.4	2.9
		N	36	26	26	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

BODY WEIGHT GAIN (%) SUMMARY
FEMALES

TREATMENT			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAY	1	MEAN	0.0	0.0	0.0	0.0
WEEK	1	ST.DEV.	0.0	0.0	0.0	0.0
		N	36	26	26	36
DAY	8	MEAN	18.6	17.7	16.7 *	17.5
WEEK	2	ST.DEV.	2.8	2.2	2.4	2.5
		N	36	26	26	36
DAY	15	MEAN	35.4	35.2	34.3	35.8
WEEK	3	ST.DEV.	4.4	4.8	3.9	4.4
		N	36	26	26	36
DAY	22	MEAN	45.1	45.2	44.0	46.7
WEEK	4	ST.DEV.	6.0	5.4	4.1	5.3
		N	36	26	26	36
DAY	29	MEAN	56.8	56.4	54.2	58.7
WEEK	5	ST.DEV.	7.3	6.4	5.2	6.5
		N	36	26	26	36
DAY	36	MEAN	66.9	64.2	63.7	67.2
WEEK	6	ST.DEV.	8.3	6.4	5.5	7.5
		N	36	26	26	36
DAY	42	MEAN	73.3	71.2	70.7	73.9
WEEK	6	ST.DEV.	9.3	7.7	7.0	7.9
		N	36	26	26	36
DAY	50	MEAN	80.3	78.1	76.6	79.9
WEEK	8	ST.DEV.	10.7	8.1	7.6	9.1
		N	36	26	26	36
DAY	57	MEAN	85.5	83.7	82.7	87.1
WEEK	9	ST.DEV.	10.8	7.7	8.5	9.5
		N	36	26	26	36
DAY	64	MEAN	89.4	87.6	86.3	88.8
WEEK	10	ST.DEV.	11.3	8.1	8.4	9.5
		N	36	26	26	36
DAY	71	MEAN	94.7	93.9	93.8	96.0
WEEK	11	ST.DEV.	11.4	8.8	9.5	10.8
		N	36	26	26	36
DAY	78	MEAN	97.9	96.0	95.8	99.7
WEEK	12	ST.DEV.	12.7	9.6	9.1	11.4
		N	36	26	26	36
DAY	85	MEAN	99.9	99.4	98.6	100.9
WEEK	13	ST.DEV.	11.9	8.7	10.4	11.0
		N	36	26	26	36
DAY	92	MEAN	102.0	99.8	99.2	101.9
WEEK	14	ST.DEV.	13.1	9.1	10.4	10.9
		N	36	26	26	36

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

BODY WEIGHT GAIN (%) SUMMARY
FEMALES

RECOVERY			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAY	7	MEAN	105.2	---	---	98.9
WEEK	1	ST.DEV.	15.1	---	---	6.3
		N	10	0	0	10
DAY	14	MEAN	108.5	---	---	100.4
WEEK	2	ST.DEV.	16.6	---	---	5.9
		N	10	0	0	10
DAY	21	MEAN	113.2	---	---	106.4
WEEK	3	ST.DEV.	15.6	---	---	6.5
		N	10	0	0	10
DAY	28	MEAN	115.1	---	---	108.0
WEEK	4	ST.DEV.	15.5	---	---	7.2
		N	10	0	0	10

* / ** : Dunnett-Test based on pooled variance significant at 5% (*) or 1% (**) level

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

TEST ITEM INTAKE SUMMARY
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
MALES

TREATMENT			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS 1-8	MEAN		0.0	477.0	945.9	1954.0
WEEKS 1/2	ST.DEV.		0.0	44.9	59.1	104.0
	N		36	26	26	36
DAYS 8-15	MEAN		0.0	530.8	1069.0	2186.1
WEEKS 2/3	ST.DEV.		0.0	28.7	52.7	100.5
	N		36	26	26	36
DAYS 17-22	MEAN		0.0	482.7	977.1	1898.8
WEEKS 3/4	ST.DEV.		0.0	33.2	33.6	91.7
	N		36	26	26	36
DAYS 22-29	MEAN		0.0	514.6	1083.9	2105.9
WEEKS 4/5	ST.DEV.		0.0	38.7	42.2	101.8
	N		36	26	26	36
DAYS 29-36	MEAN		0.0	545.7	1024.2	2083.5
WEEKS 5/6	ST.DEV.		0.0	40.6	44.8	91.1
	N		36	25	26	36
DAYS 36-42	MEAN		0.0	521.9	1020.4	2037.2
WEEK 6	ST.DEV.		0.0	26.8	38.6	86.9
	N		36	25	26	36
DAYS 44-50	MEAN		0.0	535.2	1017.6	2119.1
WEEKS 7/8	ST.DEV.		0.0	31.4	53.4	110.1
	N		36	25	25	36
DAYS 50-57	MEAN		0.0	502.7	1004.9	1992.3
WEEKS 8/9	ST.DEV.		0.0	32.2	44.6	105.1
	N		36	25	25	36
DAYS 57-64	MEAN		0.0	476.8	977.3	1938.4
WEEKS 9/10	ST.DEV.		0.0	27.9	49.3	100.0
	N		36	25	25	36
DAYS 64-71	MEAN		0.0	465.7	955.5	1850.7
WEEKS 10/11	ST.DEV.		0.0	35.3	40.9	78.5
	N		36	25	25	36
DAYS 71-78	MEAN		0.0	449.4	939.7	1827.0
WEEKS 11/12	ST.DEV.		0.0	27.3	34.2	109.5
	N		36	25	25	36
DAYS 78-85	MEAN		0.0	466.3	944.8	1817.7
WEEKS 12/13	ST.DEV.		0.0	29.6	45.7	92.7
	N		36	25	25	36
DAYS 85-92	MEAN		0.0	480.2	961.1	1895.5
WEEKS 13/14	ST.DEV.		0.0	32.0	48.1	85.4
	N		36	25	25	36
MEAN OF MEANS OVER TREATMENT			0.0	496.1	994.0	1977.4

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

TEST ITEM INTAKE SUMMARY
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
FEMALES

TREATMENT			GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
DAYS 1-8	MEAN		0.0	539.1	1098.9	2255.8
WEEKS 1/2	ST.DEV.		0.0	33.2	38.7	99.8
	N		36	26	26	36
DAYS 8-15	MEAN		0.0	556.0	1143.9	2348.5
WEEKS 2/3	ST.DEV.		0.0	31.3	41.4	101.8
	N		36	26	26	36
DAYS 17-22	MEAN		0.0	470.7	927.5	1883.0
WEEKS 3/4	ST.DEV.		0.0	30.5	55.8	114.1
	N		36	26	26	36
DAYS 22-29	MEAN		0.0	520.3	1069.3	2170.8
WEEKS 4/5	ST.DEV.		0.0	46.8	66.4	137.6
	N		36	26	26	36
DAYS 29-36	MEAN		0.0	523.5	1026.3	2038.2
WEEKS 5/6	ST.DEV.		0.0	36.0	67.4	135.0
	N		36	26	26	36
DAYS 36-42	MEAN		0.0	506.0	1001.7	2036.1
WEEK 6	ST.DEV.		0.0	33.2	66.5	145.0
	N		36	26	26	36
DAYS 44-50	MEAN		0.0	531.4	1060.9	2147.6
WEEKS 7/8	ST.DEV.		0.0	37.6	71.3	220.8
	N		36	26	26	36
DAYS 50-57	MEAN		0.0	525.9	1047.6	2054.4
WEEKS 8/9	ST.DEV.		0.0	40.5	84.5	176.0
	N		36	26	26	36
DAYS 57-64	MEAN		0.0	501.2	1021.1	2016.0
WEEKS 9/10	ST.DEV.		0.0	40.4	82.2	187.8
	N		36	26	26	36
DAYS 64-71	MEAN		0.0	488.7	968.0	1951.2
WEEKS 10/11	ST.DEV.		0.0	40.8	81.0	193.1
	N		36	26	26	36
DAYS 71-78	MEAN		0.0	472.6	943.0	1833.5
WEEKS 11/12	ST.DEV.		0.0	43.3	87.8	216.8
	N		36	26	26	36
DAYS 78-85	MEAN		0.0	479.0	973.7	1823.5
WEEKS 12/13	ST.DEV.		0.0	48.3	83.7	163.4
	N		36	26	26	36
DAYS 85-92	MEAN		0.0	472.4	958.0	1954.0
WEEKS 13/14	ST.DEV.		0.0	49.4	88.1	178.1
	N		36	26	26	36
MEAN OF MEANS OVER TREATMENT			0.0	506.7	1018.4	2039.4

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

Fecal pH		Males	Summary	
Males				
Group 1	0 mg/kg bw/day			
week	2	6	13	17 (rec)
mean	6.91	7.01	6.97	7.13
SD	0.41	0.25	0.30	0.14
n	27	24	23	10
Group 2	500 mg/kg bw/day			
week	2	6	13	
mean	6.71	7.25	7.03	
SD	0.19	0.39	0.25	
n	18	15	19	
Group 3	1000 mg/kg bw/day			
week	2	6	13	
mean	6.80	7.07	7.06	
SD	0.15	0.29	0.26	
n	20	11	19	
Group 4	2000 mg/kg bw/day			
week	2	6	13	17 (rec)
mean	6.82	7.11	7.14	7.42
SD	0.27	0.35	0.34	0.49
n	30	22	27	10

Note: differences in n due to elimination of value for technical reasons

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

Fecal pH Females Summary

Females

Group 1	0 mg/kg bw/day			
week	2	6	13	17 (rec)
mean	6.80	6.90	7.06	7.22
SD	0.37	0.22	0.40	0.22
n	26	29	23	9

Group 2	500 mg/kg bw/day			
week	2	6	13	
mean	6.98	7.15	7.20	
SD	0.43	0.39	0.48	
n	19	15	16	

Group 3	1000 mg/kg bw/day			
week	2	6	13	
mean	6.83	6.94	7.07	
SD	0.20	0.17	0.32	
n	19	16	16	

Group 4	2000 mg/kg bw/day			
week	2	6	13	17 (rec)
mean	6.91	6.87	7.01	7.36
SD	0.25	0.26	0.30	0.32
n	30	27	27	9

Note: differences in n due to elimination of value for technical reasons

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

SPERM ANALYSIS SUMMARY
MOTILITY
MALES

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
Prog.mot. %	MEAN	47.8	51.6	57.9 *	54.6
	ST.DEV.	14.3	10.0	10.3	9.4
	N	19	18	19	20
Stat.mot. %	MEAN	32.9	32.6	27.7	31.5
	ST.DEV.	10.4	8.0	9.8	7.4
	N	19	18	19	20
Not motile %	MEAN	19.2	15.8	14.4	13.9
	ST.DEV.	20.4	8.2	4.3	4.2
	N	19	18	19	20

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

SPERM ANALYSIS SUMMARY
MORPHOLOGY
MALES

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
A	MEAN	91.5	86.3	88.5	88.1
%	ST.DEV.	5.0	17.6	11.6	6.0
	N	20	18	19	20
B	MEAN	2.6	3.2	2.8	3.4
%	ST.DEV.	1.9	2.0	1.8	4.1
	N	20	18	19	20
C	MEAN	1.7	2.7	2.1	1.3
%	ST.DEV.	2.3	6.0	4.7	0.7
	N	20	18	19	20
D	MEAN	3.8	7.0	6.2	6.7
%	ST.DEV.	2.4	10.1	6.4	2.7
	N	20	18	19	20
E	MEAN	0.1	0.1	0.0 *	0.0
%	ST.DEV.	0.3	0.1	0.0	0.1
	N	20	18	19	20
F	MEAN	0.3	0.6	0.4	0.5
%	ST.DEV.	0.4	0.8	0.5	0.8
	N	20	18	19	20

A = Sperm with normal hook and tail D = Sperm with abnormally curved hook with tail
B = Normal hook without tail E = Sperm with reversed hook with tail
C = Misshapen sperm hook with tail F = Abnormal hook without tail

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

SPERM ANALYSIS SUMMARY
SPERM HEAD COUNT
MALES

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
Testis	MEAN	135.15	134.55	128.70	135.68
Millions/ g organ	ST.DEV.	34.33	16.72	31.60	16.25
	N	20	18	20	20
Cauda epid.	MEAN	703.46	704.51	668.12	701.66
Millions/ g organ	ST.DEV.	180.56	185.11	187.70	135.28
	N	20	19	20	20

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

SPERM ANALYSIS (RECOVERY) SUMMARY

MOTILITY

MALES

		GROUP 1	GROUP 4
		0 MG/KG/DAY	2000 MG/KG/DAY
		<hr/>	
Prog.mot.	MEAN	57.0	54.8
%	ST.DEV.	8.8	8.0
	N	10	10
Stat.mot.	MEAN	27.2	29.6
%	ST.DEV.	7.1	5.4
	N	10	10
Not motile	MEAN	15.8	15.7
%	ST.DEV.	3.7	9.0
	N	10	10

*/**: T-test based on pooled variance sig. at 5% or 1% level.

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

SPERM ANALYSIS (RECOVERY) SUMMARY

MORPHOLOGY

MALES

		GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
A	MEAN	83.8	89.9
%	ST.DEV.	23.6	2.2
	N	10	10
B	MEAN	3.7	2.9
%	ST.DEV.	1.5	1.3
	N	10	10
C	MEAN	4.5	1.8
%	ST.DEV.	9.6	1.2
	N	10	10
D	MEAN	6.9	4.8
%	ST.DEV.	12.6	1.5
	N	10	10
E	MEAN	0.0	0.0
%	ST.DEV.	0.1	0.1
	N	10	10
F	MEAN	1.1	0.5
%	ST.DEV.	1.9	0.5
	N	10	10

A = Sperm with normal hook and tail D = Sperm with abnormally curved hook with tail
B = Normal hook without tail E = Sperm with reversed hook with tail
C = Misshapen sperm hook with tail F = Abnormal hook without tail

*/**: T-test based on pooled variance sig. at 5% or 1% level.

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

SPERM ANALYSIS (RECOVERY) SUMMARY
SPERM HEAD COUNT
MALES

		GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
		<hr/>	
Testis	MEAN	115.31	113.31
millions/ g organ	ST.DEV.	14.59	9.65
	N	10	10
Cauda epid.	MEAN	632.27	600.62
Millions/ g organ	ST.DEV.	73.10	75.73
	N	10	10

*/**: T-test based on pooled variance sig. at 5% or 1% level.

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

ESTROUS CYCLES - SUMMARY MAIN STUDY FEMALES

SUMMARY OF ESTROUS CYCLES STAGES					
		0 MG/KG	500 MG/KG	1000 MG/KG	2000 MG/KG
MEAN# OF DAYS FROM ESTRUS TO ESTRUS		4.1 k	4.2	4.0	4.0
	S.D.	0.3	0.5	0.1	0.0
	N	20	20	20	19

Statistical key: k=Kruskal-Wallis

SUMMARY OF ESTROUS CYCLES STAGES					
		0 MG/KG	500 MG/KG	1000 MG/KG	2000 MG/KG
Regular Cycles					
- 4 days	N	17 c	15	18	18
	%	85.0	75.0	90.0	90.0
- 4 to 5 days	N	1 c	4	2	1
	%	5.0	20.0	10.0	5.0
- 5 days	N	2 c	0	0	0
	%	10.0	0.0	0.0	0.0
Irregular Cycles					
- shortened	N	0 c	0	0	0
	%	0.0	0.0	0.0	0.0
- prolonged	N	0 c	1	0	0
	%	0.0	5.0	0.0	0.0
Extended estrus	N	0 c	0	0	0
	%	0.0	0.0	0.0	0.0
Acyclic Cycle	N	0 c	0	0	1
	%	0.0	0.0	0.0	5.0

Statistical key: c=Chi-Square

shortened cycle - at least one cycle of two or three days
prolonged cycle - at least one cycle of six to ten days
extended estrus - at least three consecutive days of estrus
acyclic cycle - at least ten days without estrus or no estrus during the last nine days of observation

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

ESTROUS CYCLES - SUMMARY RECOVERY FEMALES TREATMENT PERIOD

SUMMARY OF ESTROUS CYCLES STAGES

	0 MG/KG	2000 MG/KG
MEAN# OF DAYS FROM ESTRUS TO ESTRUS	4.0 k	4.0
S.D.	0.1	0.2
N	10	10

Statistical key: k=Kruskal-Wallis

SUMMARY OF ESTROUS CYCLES STAGES

		0 MG/KG	2000 MG/KG
Regular Cycles			
- 4 days	N	9 c	8
	%	90.0	80.0
- 4 to 5 days	N	1 c	1
	%	10.0	10.0
- 5 days	N	0 c	0
	%	0.0	0.0
Irregular Cycles			
- shortened	N	0 c	1
	%	0.0	10.0
- prolonged	N	0 c	0
	%	0.0	0.0
Extended estrus	N	0 c	0
	%	0.0	0.0
Acyclic Cycle	N	0 c	0
	%	0.0	0.0

Statistical key: c=Chi-Square

shortened cycle - at least one cycle of two or three days
prolonged cycle - at least one cycle of six to ten days
extended estrus - at least three consecutive days of estrus
acyclic cycle - at least ten days without estrus or no estrus during the last nine days of observation

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

ESTROUS CYCLES - SUMMARY RECOVERY FEMALES RECOVERY PERIOD

SUMMARY OF ESTROUS CYCLES STAGES

	0 MG/KG	2000 MG/KG
MEAN# OF DAYS FROM ESTRUS TO ESTRUS	4.1 a	4.0
S.D.	0.3	0.0
N	10	9

Statistical key: a=ANOVA

SUMMARY OF ESTROUS CYCLES STAGES

		0 MG/KG	2000 MG/KG
Regular Cycles			
- 4 days	N	8 c	8
	%	80.0	80.0
- 4 to 5 days	N	1 c	0
	%	10.0	0.0
- 5 days	N	1 c	0
	%	10.0	0.0
Irregular Cycles			
- shortened	N	0 c	0
	%	0.0	0.0
- prolonged	N	0 c	0
	%	0.0	0.0
Extended estrus	N	0 c	1
	%	0.0	10.0
Acyclic Cycle	N	0 c	1
	%	0.0	10.0

Statistical key: c=Chi-Square

shortened cycle - at least one cycle of two or three days
prolonged cycle - at least one cycle of six to ten days
extended estrus - at least three consecutive days of estrus
acyclic cycle - at least ten days without estrus or no estrus during the last nine days of observation

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

REPORT

HEMATOLOGY SUMMARY

MALES

	RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	7.54	9.5	0.42	55.8	0.126	1.26	22.50
2 (500 MG/KG/DAY)	7.49	9.2 *	0.41	55.2	0.127	1.24	22.39
3 (1000 MG/KG/DAY)	7.43	9.2 *	0.42	55.7	0.128	1.25	22.35
4 (2000 MG/KG/DAY)	7.47	9.3	0.41	55.4	0.122	1.25	22.46
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	8.51	10.3	0.45	52.6	0.137	1.21	23.04
2 (500 MG/KG/DAY)	8.57	10.4	0.45	52.3	0.137	1.21	23.19
3 (1000 MG/KG/DAY)	8.35	10.3	0.44	52.7	0.138	1.23	23.31
4 (2000 MG/KG/DAY)	8.59	10.5	0.45	52.5	0.126	1.22	23.25
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	9.22	10.3	0.46	50.3	0.152	1.12	22.22
2 (500 MG/KG/DAY)	9.28	10.3	0.46	49.9	0.144	1.10	22.09
3 (1000 MG/KG/DAY)	9.07	10.2	0.46	50.7	0.149	1.12	22.15
4 (2000 MG/KG/DAY)	9.12	10.2	0.46	50.5	0.134	1.12	22.08
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	9.29	10.3	0.49	52.8	0.181	1.12	21.13
4 (2000 MG/KG/DAY)	9.28	10.1	0.48	51.6	0.151	1.09	21.04

RETICULOCYTE COUNT							
	HDW mmol/l	RETI rel. l	RETI G/l	L RETI rel. l	M RETI rel. l	H RETI rel. l	WBC G/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	1.40	0.042	315	0.481	0.370	0.149	6.70
2 (500 MG/KG/DAY)	1.39	0.041	307	0.492	0.373	0.135	6.39
3 (1000 MG/KG/DAY)	1.39	0.044	326	0.452	0.378	0.170	6.33
4 (2000 MG/KG/DAY)	1.39	0.042	311	0.469	0.376	0.155	6.50
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	1.72	0.017	148	0.707	0.262	0.031	6.92
2 (500 MG/KG/DAY)	1.68	0.017	143	0.733 +	0.239 +	0.029	7.22
3 (1000 MG/KG/DAY)	1.70	0.017	143	0.722	0.245	0.034	6.42
4 (2000 MG/KG/DAY)	1.67	0.019	162 *	0.682 +	0.282 +	0.036	6.88
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	1.73	0.016	147	0.741	0.238	0.022	7.02
2 (500 MG/KG/DAY)	1.72	0.016	147	0.757	0.223	0.021	6.49
3 (1000 MG/KG/DAY)	1.76	0.017	155	0.745	0.233	0.022	5.97 *
4 (2000 MG/KG/DAY)	1.75	0.017	159	0.715	0.259	0.026	6.81
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	1.81	0.017	156	0.716	0.255	0.029	6.96
4 (2000 MG/KG/DAY)	1.80	0.016	147	0.713	0.257	0.030	5.58 **

DIFF.WBC COUNT (REL)						
	NEUT rel. l	EOS rel. l	BASO rel. l	LYMPH rel. l	MONO rel. l	LUC rel. l
AFTER 2 WEEKS						
1 (0 MG/KG/DAY)	0.109	0.009	0.003	0.850	0.016	0.012
2 (500 MG/KG/DAY)	0.114	0.012	0.003	0.843	0.016	0.013
3 (1000 MG/KG/DAY)	0.096	0.008	0.003	0.864	0.016	0.012
4 (2000 MG/KG/DAY)	0.113	0.010	0.004	0.844	0.018	0.011

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

REPORT

HEMATOLOGY SUMMARY

MALES

		DIFF.WBC COUNT (REL)					
		NEUT	EOS	BASO	LYMPH	MONO	LUC
		rel. 1	rel. 1	rel. 1	rel. 1	rel. 1	rel. 1
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)		0.155	0.014	0.003	0.798	0.018	0.012
2 (500 MG/KG/DAY)		0.145	0.012	0.003	0.803	0.021	0.015
3 (1000 MG/KG/DAY)		0.151	0.012	0.003	0.801	0.020	0.013
4 (2000 MG/KG/DAY)		0.150	0.012	0.003	0.802	0.020	0.013
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)		0.174	0.018	0.005	0.773	0.023	0.007
2 (500 MG/KG/DAY)		0.172	0.017	0.005	0.773	0.025	0.008
3 (1000 MG/KG/DAY)		0.165	0.016	0.005	0.784	0.022	0.008
4 (2000 MG/KG/DAY)		0.164	0.015 +	0.005	0.785	0.023	0.007
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)		0.190	0.021	0.007	0.755	0.020	0.008
4 (2000 MG/KG/DAY)		0.188	0.018	0.008	0.761	0.018	0.008

		DIFF.WBC COUNT (ABS)					
		NEUT	EOS	BASO	LYMPH	MONO	LUC
		G/l	G/l	G/l	G/l	G/l	G/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)		0.71	0.06	0.02	5.72	0.11	0.08
2 (500 MG/KG/DAY)		0.73	0.07	0.02	5.39	0.10	0.08
3 (1000 MG/KG/DAY)		0.60	0.05	0.02	5.48	0.10	0.08
4 (2000 MG/KG/DAY)		0.73	0.06	0.02	5.48	0.12	0.07
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)		1.05	0.09	0.02	5.55	0.12	0.09
2 (500 MG/KG/DAY)		1.03	0.09	0.02	5.82	0.15 *	0.11
3 (1000 MG/KG/DAY)		0.96	0.07 *	0.02	5.16	0.13	0.08
4 (2000 MG/KG/DAY)		1.03	0.08	0.02	5.52	0.14	0.09
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)		1.21	0.13	0.03	5.44	0.16	0.05
2 (500 MG/KG/DAY)		1.11	0.11	0.03	5.03	0.16	0.05
3 (1000 MG/KG/DAY)		0.97 *	0.09 **	0.03	4.69	0.13	0.05
4 (2000 MG/KG/DAY)		1.11	0.10 *	0.03	5.36	0.15	0.05
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)		1.31	0.14	0.05	5.27	0.14	0.06
4 (2000 MG/KG/DAY)		1.05 *	0.10 *	0.04	4.25 *	0.10 **	0.04 *

		COAGULATION			
		MET-HB	HEINZ BOD	PT	PTT
		rel. 1	rel. 1	rel. 1	sec
AFTER 2 WEEKS					
1 (0 MG/KG/DAY)		0.0095	0.000	0.88	25.0
2 (500 MG/KG/DAY)		0.0099	0.000	0.90	29.5
3 (1000 MG/KG/DAY)		0.0105 +	0.000	0.93	23.5
4 (2000 MG/KG/DAY)		0.0103 +	0.000	0.91	23.5
AFTER 6 WEEKS					
1 (0 MG/KG/DAY)		0.0111	0.000	0.75	25.9
2 (500 MG/KG/DAY)		0.0109	0.000	0.80	24.8
3 (1000 MG/KG/DAY)		0.0098 +	0.000	0.78	26.7
4 (2000 MG/KG/DAY)		0.0104 +	0.000	0.80 +	25.4

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

HEMATOLOGY SUMMARY
MALES

	COAGULATION			
	MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
AFTER 13 WEEKS				
1 (0 MG/KG/DAY)	0.0087	0.000	0.83	25.0
2 (500 MG/KG/DAY)	0.0088	0.000	0.87	24.5
3 (1000 MG/KG/DAY)	0.0085	0.000	0.85	25.0
4 (2000 MG/KG/DAY)	0.0089	0.000	0.86	27.0
AFTER 17 WEEKS				
1 (0 MG/KG/DAY)	0.0110	0.000	0.79	24.4
4 (2000 MG/KG/DAY)	0.0114	0.000	0.78	26.1

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

REPORT

HEMATOLOGY SUMMARY

FEMALES

	RBC T/l	HB mmol/l	HCT rel. l	MCV fl	RDW rel. l	MCH fmol	MCHC mmol/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	7.65	9.5	0.42	54.5	0.118	1.24	22.71
2 (500 MG/KG/DAY)	7.66	9.6	0.42	54.7	0.122	1.26	22.97
3 (1000 MG/KG/DAY)	7.73	9.6	0.42	54.3	0.118	1.24	22.95
4 (2000 MG/KG/DAY)	7.85	9.7 *	0.42	53.4 **	0.114	1.23	23.09 **
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	8.15	10.1	0.43	53.1	0.123	1.24	23.28
2 (500 MG/KG/DAY)	7.98	10.1	0.43	53.5	0.128	1.26	23.56
3 (1000 MG/KG/DAY)	7.96	9.9	0.42	53.0	0.130	1.24	23.45
4 (2000 MG/KG/DAY)	8.20	10.0	0.44	53.1	0.120	1.22	22.99 *
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	8.52	10.0	0.45	52.7	0.126	1.17	22.24
2 (500 MG/KG/DAY)	8.31	10.0	0.44	53.2	0.127	1.21	22.66
3 (1000 MG/KG/DAY)	8.49	10.1	0.45	52.9	0.134	1.19	22.43
4 (2000 MG/KG/DAY)	8.48	9.9	0.44	52.3	0.119	1.16	22.25
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	8.28	10.1	0.47	56.5	0.150	1.23	21.66
4 (2000 MG/KG/DAY)	8.56	10.3	0.48	56.3	0.144	1.20	21.31 *

RETICULOCYTE COUNT							
	HDW mmol/l	RETI rel. l	RETI G/l	L RETI rel. l	M RETI rel. l	H RETI rel. l	WBC G/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	1.29	0.027	203	0.544	0.366	0.090	5.08
2 (500 MG/KG/DAY)	1.35 *	0.026	202	0.572	0.355	0.073 +	4.66
3 (1000 MG/KG/DAY)	1.34	0.027	211	0.567	0.355	0.078	5.18
4 (2000 MG/KG/DAY)	1.34	0.027	214	0.578	0.347	0.075	5.16
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	1.46	0.017	135	0.652	0.304	0.044	4.37
2 (500 MG/KG/DAY)	1.50	0.017	137	0.642	0.311	0.047	4.71
3 (1000 MG/KG/DAY)	1.49	0.017	137	0.643	0.306	0.051	4.23
4 (2000 MG/KG/DAY)	1.44	0.018	145	0.595 +	0.331	0.074 +	5.05 *
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	1.48	0.020	172	0.696	0.277	0.026	4.20
2 (500 MG/KG/DAY)	1.50	0.020	165	0.677	0.292	0.031	3.89
3 (1000 MG/KG/DAY)	1.50	0.019	158	0.708	0.267	0.025	3.61
4 (2000 MG/KG/DAY)	1.49	0.021	174	0.708	0.261	0.031	3.89
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	1.40	0.016	129	0.707	0.262	0.031	3.77
4 (2000 MG/KG/DAY)	1.42	0.015	128	0.697	0.265	0.038	3.60

DIFF.WBC COUNT (REL)						
	NEUT rel. l	EOS rel. l	BASO rel. l	LYMPH rel. l	MONO rel. l	LUC rel. l
AFTER 2 WEEKS						
1 (0 MG/KG/DAY)	0.133	0.014	0.004	0.821	0.017	0.012
2 (500 MG/KG/DAY)	0.151	0.015	0.004	0.801	0.019	0.011
3 (1000 MG/KG/DAY)	0.141	0.016	0.003	0.815	0.016	0.010
4 (2000 MG/KG/DAY)	0.133	0.013	0.004	0.822	0.018	0.011

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

REPORT

HEMATOLOGY SUMMARY

FEMALES

		DIFF.WBC COUNT (REL)					
		NEUT	EOS	BASO	LYMPH	MONO	LUC
		rel. 1	rel. 1	rel. 1	rel. 1	rel. 1	rel. 1
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	0.158	0.018	0.003	0.790	0.020	0.012	
2 (500 MG/KG/DAY)	0.156	0.015	0.003	0.794	0.020	0.012	
3 (1000 MG/KG/DAY)	0.154	0.013 +	0.003	0.803	0.017	0.010	
4 (2000 MG/KG/DAY)	0.155	0.013 +	0.003	0.795	0.021	0.013	
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	0.157	0.018	0.005	0.793	0.020	0.008	
2 (500 MG/KG/DAY)	0.186	0.019	0.005	0.763	0.020	0.007	
3 (1000 MG/KG/DAY)	0.158	0.018	0.005	0.792	0.020	0.007	
4 (2000 MG/KG/DAY)	0.179	0.018	0.006 +	0.770	0.021	0.007	
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	0.169	0.022	0.009	0.773	0.019	0.008	
4 (2000 MG/KG/DAY)	0.186	0.020	0.008	0.759	0.020	0.007	

		DIFF.WBC COUNT (ABS)					
		NEUT	EOS	BASO	LYMPH	MONO	LUC
		G/l	G/l	G/l	G/l	G/l	G/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	0.63	0.06	0.02	4.22	0.09	0.06	1108
2 (500 MG/KG/DAY)	0.66	0.07	0.02	3.78	0.09	0.05	1137
3 (1000 MG/KG/DAY)	0.70	0.08	0.02	4.26	0.08	0.05	1115
4 (2000 MG/KG/DAY)	0.65	0.06	0.02	4.28	0.09	0.06	1231 *
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	0.67	0.08	0.01	3.48	0.08	0.05	918
2 (500 MG/KG/DAY)	0.69	0.07	0.01	3.79	0.09	0.06	899
3 (1000 MG/KG/DAY)	0.64	0.06 **	0.01	3.42	0.07	0.04	917
4 (2000 MG/KG/DAY)	0.72	0.06	0.02	4.09	0.10	0.06 *	1038 **
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	0.63	0.07	0.02	3.37	0.08	0.03	989
2 (500 MG/KG/DAY)	0.67	0.07	0.02	3.03	0.08	0.03	1011
3 (1000 MG/KG/DAY)	0.57	0.06	0.02	2.86	0.07	0.02	997
4 (2000 MG/KG/DAY)	0.66	0.06	0.02	3.04	0.08	0.03	1090 **
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	0.63	0.08	0.03	2.92	0.07	0.03	987
4 (2000 MG/KG/DAY)	0.56	0.07	0.03	2.85	0.07	0.03	1097 *

		COAGULATION			
		MET-HB	HEINZ BOD	PT	PTT
		rel. 1	rel. 1	rel. 1	sec
AFTER 2 WEEKS					
1 (0 MG/KG/DAY)	0.0107	0.000	0.89	25.5	
2 (500 MG/KG/DAY)	0.0101	0.000	0.90	26.4	
3 (1000 MG/KG/DAY)	0.0103	0.000	0.93	25.9	
4 (2000 MG/KG/DAY)	0.0101	0.000	0.92	25.5	
AFTER 6 WEEKS					
1 (0 MG/KG/DAY)	0.0101	0.000	0.87	23.4	
2 (500 MG/KG/DAY)	0.0097	0.000	0.88	24.3	
3 (1000 MG/KG/DAY)	0.0103	0.000	0.87	26.6 +	
4 (2000 MG/KG/DAY)	0.0106	0.000	0.87	22.8	

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

HEMATOLOGY SUMMARY
FEMALES

	COAGULATION			
	MET-HB rel. 1	HEINZ BOD rel. 1	PT rel. 1	PTT sec
AFTER 13 WEEKS				
1 (0 MG/KG/DAY)	0.0102	0.000	0.87	29.4
2 (500 MG/KG/DAY)	0.0106	0.000	0.87	28.3
3 (1000 MG/KG/DAY)	0.0104	0.000	0.88	31.7
4 (2000 MG/KG/DAY)	0.0103	0.000	0.86	34.1
AFTER 17 WEEKS				
1 (0 MG/KG/DAY)	0.0107	0.000	0.84	32.0
4 (2000 MG/KG/DAY)	0.0115	0.000	0.83	31.5

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

REPORT

CLINICAL BIOCHEMISTRY SUMMARY

MALES

	GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT μmol/l	BILI-T μmol/l	CHOLEST mmol/l	TRIGLY mmol/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	3.69	4.66	9.33	21.9	1.04	1.77	0.39
2 (500 MG/KG/DAY)	4.12 **	5.27	10.54	22.0	1.00	2.01	0.36
3 (1000 MG/KG/DAY)	3.92	4.75	9.51	20.0	0.95	2.13 *	0.39
4 (2000 MG/KG/DAY)	4.20 **	4.60	9.21	18.6 **	1.08	1.87	0.39
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	5.31	5.13	10.26	26.5	1.13	1.61	0.47
2 (500 MG/KG/DAY)	5.41	5.45	10.90	25.1	1.11	1.77	0.41
3 (1000 MG/KG/DAY)	5.54	5.52	11.03	26.0	1.19	1.90 *	0.41
4 (2000 MG/KG/DAY)	4.83 *	5.21	10.42	25.8	1.36 +	1.85 *	0.44
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	5.05	5.28	10.55	28.6	1.40	1.73	0.36
2 (500 MG/KG/DAY)	5.52	5.08	10.16	27.0	1.32	1.82	0.32
3 (1000 MG/KG/DAY)	5.19	5.19	10.39	27.8	1.35	1.97	0.34
4 (2000 MG/KG/DAY)	5.12	5.16	10.32	26.8 *	1.58	1.76	0.38
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	5.30	4.93	9.85	30.3	1.43	1.71	0.46
4 (2000 MG/KG/DAY)	5.34	5.09	10.18	28.5	1.57	1.79	0.45

	PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	1.50	82.1	25.4	246.7	6.7	190.8	0.0
2 (500 MG/KG/DAY)	1.62	81.8	24.9	215.1	6.9	177.9	0.0
3 (1000 MG/KG/DAY)	1.64	80.4	24.5	203.0 *	6.8	173.6	0.0
4 (2000 MG/KG/DAY)	1.50	74.9 **	22.4 **	202.3 **	7.2 *	165.7	0.0
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	1.51	77.1	29.2	179.7	6.3	109.7	0.0
2 (500 MG/KG/DAY)	1.62	74.9	28.9	196.6	6.7	102.5	0.0
3 (1000 MG/KG/DAY)	1.69 *	80.5	29.5	199.4	6.9	102.0	0.0
4 (2000 MG/KG/DAY)	1.62	78.3	29.3	231.1 **	7.2 **	97.9	0.0
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	1.55	77.2	31.3	233.8	7.2	66.3	0.0
2 (500 MG/KG/DAY)	1.62	76.6	30.2	257.0	7.1	59.2	0.0
3 (1000 MG/KG/DAY)	1.71	77.9	30.5	233.6	6.9	57.0 *	0.0
4 (2000 MG/KG/DAY)	1.53	72.5	28.7	297.4 **	6.9	55.4 **	0.0
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	1.46	74.2	30.9	293.6	7.6	68.5	0.0
4 (2000 MG/KG/DAY)	1.51	66.7 *	26.3 **	259.5	7.1	47.2 **	0.0

	CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	314.3	144.6	3.36	102.9	2.69	2.76	61.59
2 (500 MG/KG/DAY)	288.7	146.2 **	3.46	104.4 **	2.72	2.75	61.72
3 (1000 MG/KG/DAY)	305.3	142.6 **	3.54 *	103.0	2.64 *	2.73	59.28 **
4 (2000 MG/KG/DAY)	263.2 *	144.2	3.69 **	104.0 *	2.69	2.92 **	60.47 *

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

CLINICAL BIOCHEMISTRY SUMMARY
MALES

	CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	199.5	143.9	3.28	103.6	2.63	2.12	64.78
2 (500 MG/KG/DAY)	211.7	145.2 **	3.43 *	104.4	2.70 **	2.26 *	66.02
3 (1000 MG/KG/DAY)	204.1	147.8 **	3.72 **	106.8 **	2.72 **	2.31 **	66.20 *
4 (2000 MG/KG/DAY)	206.2	149.6 **	3.47 **	107.0 **	2.77 **	2.33 **	68.05 **
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	187.4	144.1	3.60	105.0	2.62	1.86	65.96
2 (500 MG/KG/DAY)	192.9	144.9	3.77	105.6	2.62	1.89	65.53
3 (1000 MG/KG/DAY)	201.8	146.4 **	3.79 *	107.0 **	2.66	1.92	65.37
4 (2000 MG/KG/DAY)	202.9	146.1 **	3.74	106.2 **	2.65	1.96 *	65.96
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	170.0	146.4	3.86	107.7	2.66	1.86	68.50
4 (2000 MG/KG/DAY)	166.9	146.4	3.68	107.0	2.62	1.68 *	65.95 **
	ALBUMIN g/l	GLOBULIN g/l	A/G RATIO				
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	41.13	20.46	2.02				
2 (500 MG/KG/DAY)	41.75	19.97	2.10				
3 (1000 MG/KG/DAY)	40.36	18.92 **	2.14 +				
4 (2000 MG/KG/DAY)	41.52	18.95 **	2.20 +				
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	41.18	23.60	1.75				
2 (500 MG/KG/DAY)	41.77	24.25	1.73				
3 (1000 MG/KG/DAY)	41.72	24.48	1.71				
4 (2000 MG/KG/DAY)	43.57 **	24.48 *	1.78				
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	40.77	25.20	1.62				
2 (500 MG/KG/DAY)	40.68	24.85	1.64				
3 (1000 MG/KG/DAY)	40.82	24.54	1.67				
4 (2000 MG/KG/DAY)	41.68 *	24.28	1.73 +				
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	41.76	26.75	1.57				
4 (2000 MG/KG/DAY)	41.61	24.34 **	1.71 +				

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

REPORT

CLINICAL BIOCHEMISTRY SUMMARY
FEMALES

	GLUCOSE mmol/l	UREA mmol/l	BUN mmol/l	CREAT µmol/l	BILI-T µmol/l	CHOLEST mmol/l	TRIGLY mmol/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	4.13	5.36	10.72	22.5	1.22	1.57	0.24
2 (500 MG/KG/DAY)	4.18	5.72	11.44	22.5	1.18	1.65	0.23
3 (1000 MG/KG/DAY)	4.39	5.63	11.27	21.3	1.21	1.42	0.22
4 (2000 MG/KG/DAY)	4.42	5.67	11.33	21.7	1.13	1.46	0.21
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	4.48	5.95	11.91	27.8	1.42	1.50	0.26
2 (500 MG/KG/DAY)	4.49	6.06	12.12	27.6	1.53	1.46	0.24
3 (1000 MG/KG/DAY)	5.00 *	5.78	11.57	26.5	1.45	1.40	0.27
4 (2000 MG/KG/DAY)	3.98 *	6.21	12.42	29.4	1.60	1.41	0.26
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	5.10	6.11	12.22	30.0	2.14	1.56	0.27
2 (500 MG/KG/DAY)	5.07	6.30	12.60	30.5	1.88	1.46	0.25
3 (1000 MG/KG/DAY)	5.09	6.16	12.31	28.3	1.82	1.33	0.23
4 (2000 MG/KG/DAY)	4.93	6.05	12.10	30.3	1.89	1.34	0.26
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	5.08	5.98	11.97	34.8	1.68	1.48	0.33
4 (2000 MG/KG/DAY)	4.80	5.96	11.91	32.2	1.66	1.43	0.29

	PHOS-LIP mmol/l	ASAT U/l	ALAT U/l	LDH U/l	GLDH U/l	ALP U/l	GGT U/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	1.39	80.3	20.3	323.3	6.3	90.8	0.1
2 (500 MG/KG/DAY)	1.49	83.0	19.8	300.4	6.8	88.2	0.0
3 (1000 MG/KG/DAY)	1.37	80.2	18.1	283.8	6.8	89.5	0.0
4 (2000 MG/KG/DAY)	1.37	75.7	19.8	237.5 **	7.3 **	97.5	0.0
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	1.56	81.2	26.7	301.5	6.7	51.1	0.0
2 (500 MG/KG/DAY)	1.52	84.0	24.9	310.4	6.4	47.0	0.0
3 (1000 MG/KG/DAY)	1.49	85.8	24.4	362.5	6.4	49.5	0.0
4 (2000 MG/KG/DAY)	1.48	80.8	23.5 *	358.8	7.4	53.9	0.0
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	1.65	91.4	36.7	241.9	18.6	26.1	0.0
2 (500 MG/KG/DAY)	1.57	88.5	32.2	271.4	15.1	25.5	0.0
3 (1000 MG/KG/DAY)	1.46	77.6	26.8 *	249.8	9.0	25.1	0.0
4 (2000 MG/KG/DAY)	1.44	81.3	31.4	271.8	25.8	25.5	0.0
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	1.59	76.1	32.9	294.2	12.0	21.3	0.0
4 (2000 MG/KG/DAY)	1.56	74.4	30.4	303.4	18.4	21.8	0.0

	CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	333.6	142.2	3.28	103.9	2.52	2.14	60.37
2 (500 MG/KG/DAY)	322.3	147.1 **	3.34	107.9 **	2.61 **	2.22	63.28 **
3 (1000 MG/KG/DAY)	294.7	145.2 *	3.36	107.1 **	2.57 *	2.23	61.83 *
4 (2000 MG/KG/DAY)	242.6 **	145.4 *	3.55 **	107.6 **	2.60 **	2.34 **	61.99 **

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

CLINICAL BIOCHEMISTRY SUMMARY
FEMALES

	CK U/l	SODIUM mmol/l	POTASSIUM mmol/l	CHLORIDE mmol/l	CALCIUM mmol/l	PHOSPHORUS mmol/l	PROTEIN g/l
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	236.3	143.4	3.32	104.5	2.63	1.70	65.69
2 (500 MG/KG/DAY)	293.6	145.8 **	3.43	106.8 **	2.68	1.88 *	66.29
3 (1000 MG/KG/DAY)	345.6 *	148.2 **	3.52 *	109.0 **	2.67	1.93 **	66.62
4 (2000 MG/KG/DAY)	250.2	150.3 **	3.40	109.6 **	2.71 **	1.89 **	67.60 **
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	174.4	143.1	3.41	106.2	2.59	1.49	68.06
2 (500 MG/KG/DAY)	208.6	144.4	3.44	107.9 **	2.62	1.57	69.36
3 (1000 MG/KG/DAY)	176.7	144.6 *	3.43	107.8 *	2.63	1.57	68.39
4 (2000 MG/KG/DAY)	184.4	145.3 **	3.37	108.3 **	2.63	1.54	68.36
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	179.5	142.6	3.33	105.7	2.63	1.39	70.10
4 (2000 MG/KG/DAY)	171.3	143.3	3.33	106.5	2.67	1.45	70.83

	ALBUMIN g/l	GLOBULIN g/l	A/G RATIO
AFTER 2 WEEKS			
1 (0 MG/KG/DAY)	41.95	18.52	2.27
2 (500 MG/KG/DAY)	42.60	20.68	2.21
3 (1000 MG/KG/DAY)	43.26	18.57	2.34
4 (2000 MG/KG/DAY)	43.16	18.83	2.31
AFTER 6 WEEKS			
1 (0 MG/KG/DAY)	44.80	20.89	2.16
2 (500 MG/KG/DAY)	44.81	21.48	2.13
3 (1000 MG/KG/DAY)	45.62	21.00	2.18
4 (2000 MG/KG/DAY)	45.71	21.89	2.10
AFTER 13 WEEKS			
1 (0 MG/KG/DAY)	46.71	21.35	2.20
2 (500 MG/KG/DAY)	47.95	21.41	2.25
3 (1000 MG/KG/DAY)	47.57	20.82	2.30
4 (2000 MG/KG/DAY)	47.35	21.01	2.27
AFTER 17 WEEKS			
1 (0 MG/KG/DAY)	47.08	23.02	2.05
4 (2000 MG/KG/DAY)	48.40	22.43	2.17

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

REPORT

URINALYSIS SUMMARY

MALES

	VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	pH	NITRITE SCORE 0/1	PROTEIN g/l	GLUCOSE mmol/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	16.6	1.018	505	6.5	1	0.18	0
2 (500 MG/KG/DAY)	21.3	1.014	383	6.7	1	0.20	0
3 (1000 MG/KG/DAY)	17.6	1.024	582	6.6	1	0.20	0
4 (2000 MG/KG/DAY)	20.8	1.013	349	6.7	1	0.19	0
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	18.4	1.019	557	6.6	1	0.18	0
2 (500 MG/KG/DAY)	22.4	1.019	585	6.4	1	0.11	0
3 (1000 MG/KG/DAY)	16.9	1.019	576	6.5	1	0.19	0
4 (2000 MG/KG/DAY)	18.4	1.018	547	6.7	1	0.20	0
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	8.6	1.046	1379	6.4	0	0.45	0
2 (500 MG/KG/DAY)	12.7	1.030 +	907	6.5	0	0.29	0
3 (1000 MG/KG/DAY)	8.9	1.046	1313	6.3	1	0.40	0
4 (2000 MG/KG/DAY)	9.9	1.042	1270	6.4	0	0.42	0
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	12.6	1.032	902	6.2	0	0.15	0
4 (2000 MG/KG/DAY)	13.6	1.030	918	6.2	0	0.28	0

	KETONES mmol/l	UROBILI µmol/l	BILIRUBIN µmol/l	ERY per µl	LEU per µl	BLOOD CELLS	
						RBC score 0/3	WBC score 0/3
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	0.2	0	0	14	10	0	0
2 (500 MG/KG/DAY)	0.2	0	1	7	8	0	0
3 (1000 MG/KG/DAY)	0.5	0	0	7	15	0	0
4 (2000 MG/KG/DAY)	0.1	0	0	7	8	0	0
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	0.1	0	0	6	3	0	0
2 (500 MG/KG/DAY)	0.1	0	0	3	1	0	0
3 (1000 MG/KG/DAY)	0.1	0	0	7	5	0	0
4 (2000 MG/KG/DAY)	0.1	0	0	9	6	0	0
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	0.7	0	3	10	18	1	1
2 (500 MG/KG/DAY)	0.4	0	1	11	17	1	1
3 (1000 MG/KG/DAY)	0.7	0	3	11	16	1	1
4 (2000 MG/KG/DAY)	0.7	0	3	11	18	1	1
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	0.4	0	0	10	5	0	0
4 (2000 MG/KG/DAY)	0.2	0	0	32	8	0	0

	EPITHELIAL CELLS			CRYSTALS			
	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3	URIC ACID score 0/3	UNIDENTIFI score 0/3
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	0	0	0	0	0	0	0
2 (500 MG/KG/DAY)	0	0	0	0	0	0	0
3 (1000 MG/KG/DAY)	0	0	0	0	0	0	0
4 (2000 MG/KG/DAY)	0	0	0	0	0	0	0

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

URINALYSIS SUMMARY
MALES

	EPITHELIAL CELLS			CRYSTALS			
	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3	URIC ACID score 0/3	UNIDENTIFI score 0/3
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	0	0	0	0	0	0	0
2 (500 MG/KG/DAY)	0	0	0	0	0	0	0
3 (1000 MG/KG/DAY)	0	0	0	0	0	0	0
4 (2000 MG/KG/DAY)	0	0	0	0	0	0	0
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	1	0	0	0	0	0	0
2 (500 MG/KG/DAY)	1	0	0	0	0	0	0
3 (1000 MG/KG/DAY)	1	0	0	0	0	0	0
4 (2000 MG/KG/DAY)	1	0	0	0	0	0	0
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	0	0	0	0	0	0	0
4 (2000 MG/KG/DAY)	0	0	0	0	0	0	0
CASTS							

CASTS							
score 0/3							
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	0						
2 (500 MG/KG/DAY)	0						
3 (1000 MG/KG/DAY)	0						
4 (2000 MG/KG/DAY)	0						
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	0						
2 (500 MG/KG/DAY)	0						
3 (1000 MG/KG/DAY)	0						
4 (2000 MG/KG/DAY)	0						
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	0						
2 (500 MG/KG/DAY)	0						
3 (1000 MG/KG/DAY)	0						
4 (2000 MG/KG/DAY)	0						
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	0						
4 (2000 MG/KG/DAY)	0						

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

REPORT

URINALYSIS SUMMARY

FEMALES

	VOLUME/18h ml	REL DENS rel. 1	OSMOLALITY mosmol/kg	pH	NITRITE SCORE 0/1	PROTEIN g/l	GLUCOSE mmol/l
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	11.8	1.020	578	6.4	1	0.16	0
2 (500 MG/KG/DAY)	11.4	1.023	671	6.1	1	0.15	0
3 (1000 MG/KG/DAY)	12.1	1.024	711	6.1	0	0.13	0
4 (2000 MG/KG/DAY)	12.9	1.025	709	6.0	0	0.13	0
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	13.5	1.024	738	6.2	1	0.16	0
2 (500 MG/KG/DAY)	15.6	1.019	602	6.1	1	0.10	0
3 (1000 MG/KG/DAY)	15.0	1.018	567	6.2	1	0.10	0
4 (2000 MG/KG/DAY)	13.8	1.025	775	6.1	1	0.10	0
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	8.2	1.033	1092	5.9	0	0.18	0
2 (500 MG/KG/DAY)	10.9	1.035	1078	6.0	1	0.20	0
3 (1000 MG/KG/DAY)	9.9	1.032	1006	6.1	1	0.23	0
4 (2000 MG/KG/DAY)	10.5	1.032	988	5.9	0	0.17	0
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	11.3	1.031	933	5.7	0	0.05	0
4 (2000 MG/KG/DAY)	14.6	1.027	780	5.9	0	0.08	0

	KETONES mmol/l	UROBILI µmol/l	BILIRUBIN µmol/l	ERY per µl	LEU per µl	BLOOD CELLS	
						RBC score 0/3	WBC score 0/3
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	0.2	0	1	10	1	0	0
2 (500 MG/KG/DAY)	0.1	0	0	6	4	0	0
3 (1000 MG/KG/DAY)	0.2	0	3	7	5	0	0
4 (2000 MG/KG/DAY)	0.2	0	1	7	6	0	0
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	0.2	1	1	4	0	0	0
2 (500 MG/KG/DAY)	0.1	0	1	4	0	0	0
3 (1000 MG/KG/DAY)	0.1	0	1	6	0	0	0
4 (2000 MG/KG/DAY)	0.1	0	1	4	0	0	0
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	0.2	0	1	1	0	0	0
2 (500 MG/KG/DAY)	0.1	0	2	3	4	0	0
3 (1000 MG/KG/DAY)	0.2	0	1	5	5	0	1
4 (2000 MG/KG/DAY)	0.2	0	2	6 +	1	0	1
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	0.2	0	0	2	0	0	0
4 (2000 MG/KG/DAY)	0.1	0	0	4	0	0	0

	EPITHELIAL CELLS			CRYSTALS			
	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3	URIC ACID score 0/3	UNIDENTIFI score 0/3
AFTER 2 WEEKS							
1 (0 MG/KG/DAY)	0	0	0	0	0	0	0
2 (500 MG/KG/DAY)	0	0	0	0	0	0	0
3 (1000 MG/KG/DAY)	0	0	0	0	0	0	0
4 (2000 MG/KG/DAY)	0	0	0	0	0	0	0

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

	EPITHELIAL CELLS			CRYSTALS			
	SQUAM score 0/3	TRANS score 0/3	RENAL score 0/3	TRIP PHOS score 0/3	CA OXALATE score 0/3	URIC ACID score 0/3	UNIDENTIFI score 0/3
AFTER 6 WEEKS							
1 (0 MG/KG/DAY)	0	0	0	0	0	0	0
2 (500 MG/KG/DAY)	1 +	1	0	0	0	0	0
3 (1000 MG/KG/DAY)	1 +	0	0	0	0	0	0
4 (2000 MG/KG/DAY)	1 +	0	0	0	0	0	0
AFTER 13 WEEKS							
1 (0 MG/KG/DAY)	1	0	0	0	0	0	0
2 (500 MG/KG/DAY)	1	0	0	0	0	0	0
3 (1000 MG/KG/DAY)	1	0	0	0	0	0	0
4 (2000 MG/KG/DAY)	1	0	0	0	0	0	0
AFTER 17 WEEKS							
1 (0 MG/KG/DAY)	0	0	0	0	0	0	0
4 (2000 MG/KG/DAY)	0	0	0	0	0	0	0

CASTS

CASTS
score 0/3

AFTER 2 WEEKS	
1 (0 MG/KG/DAY)	0
2 (500 MG/KG/DAY)	0
3 (1000 MG/KG/DAY)	0
4 (2000 MG/KG/DAY)	0
AFTER 6 WEEKS	
1 (0 MG/KG/DAY)	0
2 (500 MG/KG/DAY)	0
3 (1000 MG/KG/DAY)	0
4 (2000 MG/KG/DAY)	0
AFTER 13 WEEKS	
1 (0 MG/KG/DAY)	0
2 (500 MG/KG/DAY)	0
3 (1000 MG/KG/DAY)	0
4 (2000 MG/KG/DAY)	0
AFTER 17 WEEKS	
1 (0 MG/KG/DAY)	0
4 (2000 MG/KG/DAY)	0

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level. +: Steel-test sig. at 5% level.

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

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

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W.	MEAN	410.1	409.0	411.6	388.3
	ST.DEV.	29.3	36.2	25.9	31.1
	N	20	19	20	20
BRAIN	MEAN	2.15	2.11	2.17	2.08
	ST.DEV.	0.14	0.13	0.13	0.09
	N	20	19	20	20
HEART	MEAN	1.18	1.19	1.22	1.12
	ST.DEV.	0.14	0.12	0.15	0.12
	N	20	19	20	20
THYROIDES	MEAN	0.022	0.025	0.024	0.024
	ST.DEV.	0.004	0.004	0.004	0.004
	N	20	19	20	20
LIVER	MEAN	9.75	10.18	10.25	9.52
	ST.DEV.	1.46	1.44	0.86	0.82
	N	20	19	20	20
THYMUS	MEAN	0.373	0.357	0.324	0.342
	ST.DEV.	0.064	0.087	0.059	0.059
	N	20	19	20	20
KIDNEYS	MEAN	2.25	2.29	2.37	2.23
	ST.DEV.	0.25	0.26	0.22	0.20
	N	20	19	20	20
ADRENALS	MEAN	0.068	0.067	0.063	0.065
	ST.DEV.	0.010	0.010	0.008	0.009
	N	20	19	20	20
SPLEEN	MEAN	0.75	0.78	0.79	0.73
	ST.DEV.	0.11	0.11	0.13	0.06
	N	20	19	20	20
TESTES	MEAN	3.67	3.88	3.72	3.71
	ST.DEV.	0.59	0.52	0.89	0.17
	N	20	19	20	20
EPIDIDYMIDES	MEAN	1.285	1.258	1.325	1.265
	ST.DEV.	0.173	0.197	0.156	0.095
	N	20	19	20	20

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

**ORGAN/BODY WEIGHT RATIOS SUMMARY
AFTER 13 WEEKS
MALES**

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W. (GRAM)	MEAN ST.DEV. N	410.1 29.3 20	409.0 36.2 19	411.6 25.9 20	388.3 31.1 20
BRAIN (%)	MEAN ST.DEV. N	0.53 0.04 20	0.52 0.05 19	0.53 0.05 20	0.54 0.05 20
HEART (%)	MEAN ST.DEV. N	0.29 0.03 20	0.29 0.03 19	0.30 0.04 20	0.29 0.03 20
THYROIDS (%)	MEAN ST.DEV. N	0.005 0.001 20	0.006 0.001 19	0.006 0.001 20	0.006 * 0.001 20
LIVER (%)	MEAN ST.DEV. N	2.37 0.22 20	2.48 0.23 19	2.49 0.17 20	2.46 0.16 20
THYMUS (%)	MEAN ST.DEV. N	0.091 0.015 20	0.087 0.020 19	0.079 0.015 20	0.089 0.018 20
KIDNEYS (%)	MEAN ST.DEV. N	0.55 0.04 20	0.56 0.05 19	0.58 0.06 20	0.58 0.04 20
ADRENALS (%)	MEAN ST.DEV. N	0.016 0.002 20	0.016 0.002 19	0.015 0.002 20	0.017 0.002 20
SPLEEN (%)	MEAN ST.DEV. N	0.18 0.02 20	0.19 0.02 19	0.19 0.03 20	0.19 0.02 20
TESTES (%)	MEAN ST.DEV. N	0.90 0.14 20	0.95 0.11 19	0.90 0.21 20	0.96 0.09 20
EPIDIDYMIDES (%)	MEAN ST.DEV. N	0.314 0.042 20	0.308 0.041 19	0.323 0.041 20	0.328 0.033 20

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

**ORGAN/BRAIN WEIGHT RATIOS SUMMARY
AFTER 13 WEEKS
MALES**

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BRAIN (GRAM)	MEAN	2.15	2.11	2.17	2.08
	ST.DEV.	0.14	0.13	0.13	0.09
	N	20	19	20	20
HEART (%)	MEAN	55.01	56.37	56.27	53.97
	ST.DEV.	4.98	4.88	6.38	5.39
	N	20	19	20	20
THYROIDES (%)	MEAN	1.036	1.189 *	1.109	1.175
	ST.DEV.	0.181	0.209	0.197	0.203
	N	20	19	20	20
LIVER (%)	MEAN	453.87	480.67	473.53	458.49
	ST.DEV.	56.78	55.00	45.89	45.87
	N	20	19	20	20
THYMUS (%)	MEAN	17.395	16.764	14.975 *	16.421
	ST.DEV.	2.942	3.458	2.963	2.628
	N	20	19	20	20
KIDNEYS (%)	MEAN	104.91	108.31	109.31	107.18
	ST.DEV.	8.38	9.56	9.36	9.37
	N	20	19	20	20
ADRENALS (%)	MEAN	3.155	3.179	2.884	3.144
	ST.DEV.	0.453	0.414	0.313	0.423
	N	20	19	20	20
SPLEEN (%)	MEAN	34.96	37.11	36.23	34.97
	ST.DEV.	4.82	4.38	5.43	3.60
	N	20	19	20	20
TESTES (%)	MEAN	171.56	184.27	172.58	178.60
	ST.DEV.	29.10	25.12	42.93	13.21
	N	20	19	20	20
EPIDIDYMIDES (%)	MEAN	59.937	59.679	61.228	60.864
	ST.DEV.	7.663	9.490	7.215	4.962
	N	20	19	20	20

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

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

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W.	MEAN	232.0	232.1	225.0	229.2
	ST.DEV.	24.6	15.4	19.6	19.4
	N	20	20	20	20
BRAIN	MEAN	1.91	1.93	1.91	1.90
	ST.DEV.	0.06	0.09	0.10	0.08
	N	20	20	20	20
HEART	MEAN	0.81	0.82	0.80	0.80
	ST.DEV.	0.08	0.10	0.11	0.08
	N	20	20	20	20
THYROIDS	MEAN	0.020	0.018	0.018	0.017
	ST.DEV.	0.004	0.004	0.003	0.004
	N	20	20	20	20
LIVER	MEAN	5.90	6.06	5.90	6.29
	ST.DEV.	0.55	0.38	0.62	0.71
	N	20	20	20	20
THYMUS	MEAN	0.286	0.321	0.298	0.290
	ST.DEV.	0.065	0.067	0.062	0.065
	N	20	20	20	20
KIDNEYS	MEAN	1.42	1.46	1.49	1.47
	ST.DEV.	0.12	0.12	0.16	0.14
	N	20	20	20	20
ADRENALS	MEAN	0.079	0.082	0.077	0.081
	ST.DEV.	0.013	0.011	0.013	0.010
	N	20	20	20	20
SPLEEN	MEAN	0.53	0.56	0.53	0.54
	ST.DEV.	0.09	0.09	0.11	0.10
	N	20	20	20	20
UTERUS	MEAN	0.112	0.120	0.112	0.126
	ST.DEV.	0.024	0.020	0.029	0.033
	N	20	20	20	20
UTERUS	MEAN	0.86	0.85	0.88	0.88
	ST.DEV.	0.17	0.16	0.23	0.19
	N	20	20	20	20

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

**ORGAN/BODY WEIGHT RATIOS SUMMARY
AFTER 13 WEEKS
FEMALES**

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W. (GRAM)	MEAN ST.DEV. N	232.0 24.6 20	232.1 15.4 20	225.0 19.6 20	229.2 19.4 20
BRAIN (%)	MEAN ST.DEV. N	0.83 0.08 20	0.84 0.07 20	0.86 0.08 20	0.83 0.06 20
HEART (%)	MEAN ST.DEV. N	0.35 0.04 20	0.36 0.06 20	0.36 0.06 20	0.35 0.03 20
THYROIDS (%)	MEAN ST.DEV. N	0.009 0.002 20	0.008 0.002 20	0.008 0.001 20	0.008 0.002 20
LIVER (%)	MEAN ST.DEV. N	2.56 0.28 20	2.61 0.15 20	2.62 0.19 20	2.74 * 0.22 20
THYMUS (%)	MEAN ST.DEV. N	0.123 0.027 20	0.138 0.023 20	0.133 0.025 20	0.126 0.023 20
KIDNEYS (%)	MEAN ST.DEV. N	0.62 0.07 20	0.63 0.05 20	0.66 * 0.06 20	0.64 0.04 20
ADRENALS (%)	MEAN ST.DEV. N	0.035 0.007 20	0.035 0.005 20	0.034 0.005 20	0.036 0.005 20
SPLEEN (%)	MEAN ST.DEV. N	0.23 0.03 20	0.24 0.03 20	0.24 0.05 20	0.24 0.03 20
UTERUS (%)	MEAN ST.DEV. N	0.049 0.010 20	0.052 0.009 20	0.050 0.011 20	0.055 0.011 20
UTERUS (%)	MEAN ST.DEV. N	0.38 0.09 20	0.37 0.07 20	0.39 0.11 20	0.39 0.09 20

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

**ORGAN/BRAIN WEIGHT RATIOS SUMMARY
AFTER 13 WEEKS
FEMALES**

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BRAIN (GRAM)	MEAN	1.91	1.93	1.91	1.90
	ST.DEV.	0.06	0.09	0.10	0.08
	N	20	20	20	20
HEART (%)	MEAN	42.18	42.53	41.95	41.93
	ST.DEV.	3.93	4.92	6.24	3.29
	N	20	20	20	20
THYROIDS (%)	MEAN	1.031	0.935	0.951	0.913
	ST.DEV.	0.224	0.225	0.166	0.241
	N	20	20	20	20
LIVER (%)	MEAN	308.37	314.01	308.25	330.88 *
	ST.DEV.	27.32	21.26	31.00	34.78
	N	20	20	20	20
THYMUS (%)	MEAN	14.900	16.689	15.563	15.205
	ST.DEV.	3.276	3.709	2.975	3.086
	N	20	20	20	20
KIDNEYS (%)	MEAN	74.18	75.47	77.67	77.50
	ST.DEV.	6.03	5.27	7.41	6.80
	N	20	20	20	20
ADRENALS (%)	MEAN	4.148	4.238	4.037	4.275
	ST.DEV.	0.673	0.509	0.619	0.529
	N	20	20	20	20
SPLEEN (%)	MEAN	27.73	28.76	27.74	28.67
	ST.DEV.	4.72	4.64	5.27	4.91
	N	20	20	20	20
UTERUS (%)	MEAN	5.863	6.228	5.819	6.642
	ST.DEV.	1.203	1.011	1.355	1.614
	N	20	20	20	20
UTERUS (%)	MEAN	45.14	43.88	45.97	46.60
	ST.DEV.	9.41	7.65	12.21	10.50
	N	20	20	20	20

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

**ORGAN WEIGHTS (GRAM) SUMMARY
AFTER 17 WEEKS
MALES**

		GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W.	MEAN	439.5	434.8
	ST.DEV.	47.4	29.8
	N	10	10
BRAIN	MEAN	2.06	2.11
	ST.DEV.	0.08	0.04
	N	10	10
HEART	MEAN	1.02	1.04
	ST.DEV.	0.08	0.06
	N	10	10
THYROIDS	MEAN	0.024	0.024
	ST.DEV.	0.006	0.003
	N	10	10
LIVER	MEAN	10.31	9.90
	ST.DEV.	1.17	0.78
	N	10	10
THYMUS	MEAN	0.269	0.251
	ST.DEV.	0.047	0.063
	N	10	10
KIDNEYS	MEAN	2.23	2.29
	ST.DEV.	0.27	0.17
	N	10	10
ADRENALS	MEAN	0.064	0.063
	ST.DEV.	0.006	0.009
	N	10	10
SPLEEN	MEAN	0.77	0.72
	ST.DEV.	0.14	0.12
	N	10	10
TESTES	MEAN	3.99	4.02
	ST.DEV.	0.28	0.20
	N	10	10
EPIDIDYMIDES	MEAN	1.370	1.411
	ST.DEV.	0.119	0.067
	N	10	10

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

**ORGAN/BODY WEIGHT RATIOS SUMMARY
AFTER 17 WEEKS
MALES**

		GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W. (GRAM)	MEAN ST.DEV. N	439.5 47.4 10	434.8 29.8 10
BRAIN (%)	MEAN ST.DEV. N	0.47 0.04 10	0.49 0.04 10
HEART (%)	MEAN ST.DEV. N	0.23 0.01 10	0.24 0.02 10
THYROIDS (%)	MEAN ST.DEV. N	0.005 0.001 10	0.005 0.001 10
LIVER (%)	MEAN ST.DEV. N	2.35 0.13 10	2.28 0.13 10
THYMUS (%)	MEAN ST.DEV. N	0.062 0.013 10	0.058 0.014 10
KIDNEYS (%)	MEAN ST.DEV. N	0.51 0.05 10	0.53 0.04 10
ADRENALS (%)	MEAN ST.DEV. N	0.015 0.002 10	0.015 0.002 10
SPLEEN (%)	MEAN ST.DEV. N	0.17 0.02 10	0.17 0.02 10
TESTES (%)	MEAN ST.DEV. N	0.91 0.07 10	0.93 0.07 10
EPIDIDYMIDES (%)	MEAN ST.DEV. N	0.313 0.029 10	0.326 0.027 10

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

**ORGAN/BRAIN WEIGHT RATIOS SUMMARY
AFTER 17 WEEKS
MALES**

		GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BRAIN (GRAM)	MEAN ST.DEV. N	2.06 0.08 10	2.11 0.04 10
HEART (%)	MEAN ST.DEV. N	49.71 3.47 10	49.31 2.83 10
THYROIDS (%)	MEAN ST.DEV. N	1.153 0.269 10	1.131 0.121 10
LIVER (%)	MEAN ST.DEV. N	500.48 45.14 10	470.09 36.37 10
THYMUS (%)	MEAN ST.DEV. N	13.075 2.332 10	11.938 3.098 10
KIDNEYS (%)	MEAN ST.DEV. N	108.03 10.24 10	108.84 8.24 10
ADRENALS (%)	MEAN ST.DEV. N	3.093 0.317 10	3.006 0.367 10
SPLEEN (%)	MEAN ST.DEV. N	37.34 5.98 10	34.31 5.32 10
TESTES (%)	MEAN ST.DEV. N	193.63 8.25 10	191.00 10.07 10
EPIDIDYMIDES (%)	MEAN ST.DEV. N	66.516 3.710 10	67.008 3.496 10

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN WEIGHTS (GRAM) SUMMARY
AFTER 17 WEEKS
FEMALES**

		GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W.	MEAN	256.5	253.5
	ST.DEV.	27.4	20.1
	N	10	10
BRAIN	MEAN	1.92	1.95
	ST.DEV.	0.09	0.10
	N	10	10
HEART	MEAN	0.72	0.76
	ST.DEV.	0.08	0.09
	N	10	10
THYROIDS	MEAN	0.023	0.021
	ST.DEV.	0.006	0.004
	N	10	10
LIVER	MEAN	7.02	7.24
	ST.DEV.	0.90	0.67
	N	10	10
THYMUS	MEAN	0.268	0.258
	ST.DEV.	0.040	0.066
	N	10	10
KIDNEYS	MEAN	1.46	1.55
	ST.DEV.	0.15	0.10
	N	10	10
ADRENALS	MEAN	0.080	0.084
	ST.DEV.	0.013	0.011
	N	10	10
SPLEEN	MEAN	0.52	0.50
	ST.DEV.	0.07	0.09
	N	10	10
UTERUS	MEAN	0.104	0.270
	ST.DEV.	0.014	0.346
	N	10	10
UTERUS	MEAN	1.01	0.77
	ST.DEV.	0.29	0.37
	N	10	10

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN/BODY WEIGHT RATIOS SUMMARY
AFTER 17 WEEKS
FEMALES**

		GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W. (GRAM)	MEAN ST.DEV. N	256.5 27.4 10	253.5 20.1 10
BRAIN (%)	MEAN ST.DEV. N	0.75 0.07 10	0.77 0.05 10
HEART (%)	MEAN ST.DEV. N	0.28 0.02 10	0.30 * 0.02 10
THYROIDS (%)	MEAN ST.DEV. N	0.009 0.002 10	0.008 0.002 10
LIVER (%)	MEAN ST.DEV. N	2.74 0.21 10	2.85 0.10 10
THYMUS (%)	MEAN ST.DEV. N	0.105 0.017 10	0.101 0.020 10
KIDNEYS (%)	MEAN ST.DEV. N	0.57 0.03 10	0.61 * 0.04 10
ADRENALS (%)	MEAN ST.DEV. N	0.031 0.004 10	0.033 0.004 10
SPLEEN (%)	MEAN ST.DEV. N	0.20 0.02 10	0.20 0.03 10
UTERUS (%)	MEAN ST.DEV. N	0.041 0.006 10	0.109 0.140 10
UTERUS (%)	MEAN ST.DEV. N	0.40 0.12 10	0.30 0.14 10

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN/BRAIN WEIGHT RATIOS SUMMARY
AFTER 17 WEEKS
FEMALES**

		GROUP 1 0 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BRAIN (GRAM)	MEAN ST.DEV. N	1.92 0.09 10	1.95 0.10 10
HEART (%)	MEAN ST.DEV. N	37.46 3.51 10	39.06 4.21 10
THYROIDS (%)	MEAN ST.DEV. N	1.187 0.311 10	1.071 0.212 10
LIVER (%)	MEAN ST.DEV. N	364.83 38.97 10	371.78 29.77 10
THYMUS (%)	MEAN ST.DEV. N	13.967 2.034 10	13.274 3.393 10
KIDNEYS (%)	MEAN ST.DEV. N	76.07 6.37 10	79.83 4.76 10
ADRENALS (%)	MEAN ST.DEV. N	4.159 0.746 10	4.282 0.439 10
SPLEEN (%)	MEAN ST.DEV. N	27.02 3.63 10	25.59 5.00 10
UTERUS (%)	MEAN ST.DEV. N	5.429 0.610 10	13.548 16.778 10
UTERUS (%)	MEAN ST.DEV. N	52.63 15.13 10	39.88 18.91 10

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

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

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W.	MEAN	403.4	445.0	414.0	425.0
	ST.DEV.	63.9	32.4	56.8	29.8
	N	6	6	5	6
BRAIN	MEAN	2.02	2.05	2.12	2.05
	ST.DEV.	0.06	0.06	0.05	0.11
	N	6	6	5	6
HEART	MEAN	1.07	1.19	1.14	1.18
	ST.DEV.	0.15	0.05	0.06	0.15
	N	6	6	5	6
THYROIDS	MEAN	0.021	0.025	0.022	0.024
	ST.DEV.	0.004	0.005	0.003	0.004
	N	6	6	5	6
LIVER	MEAN	11.20	13.89 *	12.80	13.15
	ST.DEV.	1.41	1.95	1.61	1.73
	N	6	6	5	6
THYMUS	MEAN	0.292	0.311	0.299	0.323
	ST.DEV.	0.061	0.092	0.081	0.093
	N	6	6	5	6
KIDNEYS	MEAN	2.18	2.37	2.33	2.41
	ST.DEV.	0.17	0.20	0.11	0.14
	N	6	6	5	6
ADRENALS	MEAN	0.061	0.059	0.057	0.074 *
	ST.DEV.	0.009	0.008	0.005	0.009
	N	6	6	5	6
SPLEEN	MEAN	0.78	0.90	0.93	0.88
	ST.DEV.	0.18	0.08	0.13	0.11
	N	6	6	5	6
TESTES	MEAN	3.92	4.01	3.83	3.86
	ST.DEV.	0.37	0.32	0.19	0.27
	N	6	6	5	6
EPIDIDYMIDES	MEAN	1.411	1.420	1.355	1.358
	ST.DEV.	0.148	0.105	0.084	0.075
	N	6	6	5	6

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN/BODY WEIGHT RATIOS SUMMARY
AFTER 13 WEEKS
MALES**

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W. (GRAM)	MEAN ST.DEV. N	403.4 63.9 6	445.0 32.4 6	414.0 56.8 5	425.0 29.8 6
BRAIN (%)	MEAN ST.DEV. N	0.51 0.08 6	0.46 0.04 6	0.52 0.06 5	0.48 0.04 6
HEART (%)	MEAN ST.DEV. N	0.27 0.02 6	0.27 0.02 6	0.28 0.02 5	0.28 0.02 6
THYROIDS (%)	MEAN ST.DEV. N	0.005 0.001 6	0.006 0.001 6	0.005 0.000 5	0.006 0.001 6
LIVER (%)	MEAN ST.DEV. N	2.79 0.21 6	3.11 0.25 6	3.10 0.24 5	3.08 0.21 6
THYMUS (%)	MEAN ST.DEV. N	0.072 0.006 6	0.070 0.020 6	0.072 0.013 5	0.076 0.020 6
KIDNEYS (%)	MEAN ST.DEV. N	0.55 0.06 6	0.53 0.03 6	0.57 0.05 5	0.57 0.03 6
ADRENALS (%)	MEAN ST.DEV. N	0.016 0.004 6	0.013 0.001 6	0.014 0.002 5	0.017 0.002 6
SPLEEN (%)	MEAN ST.DEV. N	0.19 0.02 6	0.20 0.03 6	0.22 0.02 5	0.21 0.02 6
TESTES (%)	MEAN ST.DEV. N	0.99 0.15 6	0.90 0.08 6	0.94 0.11 5	0.91 0.05 6
EPIDIDYMIDES (%)	MEAN ST.DEV. N	0.356 0.060 6	0.320 0.029 6	0.331 0.040 5	0.321 0.026 6

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN/BRAIN WEIGHT RATIOS SUMMARY
AFTER 13 WEEKS
MALES**

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BRAIN (GRAM)	MEAN	2.02	2.05	2.12	2.05
	ST.DEV.	0.06	0.06	0.05	0.11
	N	6	6	5	6
HEART (%)	MEAN	53.11	58.09	53.83	57.83
	ST.DEV.	6.59	2.98	3.17	7.04
	N	6	6	5	6
THYROIDES (%)	MEAN	1.016	1.205	1.019	1.172
	ST.DEV.	0.154	0.277	0.119	0.222
	N	6	6	5	6
LIVER (%)	MEAN	554.70	679.93 *	605.82	642.76
	ST.DEV.	63.93	106.60	81.82	78.39
	N	6	6	5	6
THYMUS (%)	MEAN	14.450	15.233	14.150	15.738
	ST.DEV.	2.822	4.841	3.868	4.269
	N	6	6	5	6
KIDNEYS (%)	MEAN	107.95	116.19	110.30	117.76
	ST.DEV.	6.53	12.47	6.47	8.44
	N	6	6	5	6
ADRENALS (%)	MEAN	3.021	2.868	2.705	3.617 *
	ST.DEV.	0.460	0.374	0.219	0.307
	N	6	6	5	6
SPLEEN (%)	MEAN	38.46	44.21	43.81	43.34
	ST.DEV.	8.18	4.40	6.19	5.65
	N	6	6	5	6
TESTES (%)	MEAN	194.69	196.25	181.04	189.30
	ST.DEV.	20.72	20.66	8.31	20.60
	N	6	6	5	6
EPIDIDYMIDES (%)	MEAN	70.076	69.465	64.046	66.518
	ST.DEV.	8.312	6.880	2.842	5.587
	N	6	6	5	6

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

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

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W.	MEAN	245.1	243.1	241.3	255.3
	ST.DEV.	16.0	10.3	15.6	26.6
	N	6	6	6	6
BRAIN	MEAN	1.91	1.94	1.89	1.91
	ST.DEV.	0.09	0.10	0.08	0.07
	N	6	6	6	6
HEART	MEAN	0.85	0.85	0.87	0.88
	ST.DEV.	0.09	0.05	0.19	0.06
	N	6	6	6	6
THYROIDS	MEAN	0.023	0.019	0.020	0.020
	ST.DEV.	0.004	0.006	0.003	0.005
	N	6	6	6	6
LIVER	MEAN	8.07	8.00	7.82	8.25
	ST.DEV.	0.52	0.52	0.94	0.95
	N	6	6	6	6
THYMUS	MEAN	0.294	0.275	0.264	0.361
	ST.DEV.	0.057	0.031	0.030	0.093
	N	6	6	6	6
KIDNEYS	MEAN	1.61	1.57	1.47	1.73
	ST.DEV.	0.12	0.08	0.10	0.20
	N	6	6	6	6
ADRENALS	MEAN	0.079	0.085	0.075	0.089
	ST.DEV.	0.011	0.009	0.007	0.015
	N	6	6	6	6
SPLEEN	MEAN	0.60	0.61	0.64	0.75
	ST.DEV.	0.11	0.05	0.07	0.14
	N	6	6	6	6
UTERUS	MEAN	0.098	0.110	0.091	0.128
	ST.DEV.	0.021	0.021	0.022	0.030
	N	6	6	6	6
UTERUS	MEAN	0.75	1.12	0.91	0.83
	ST.DEV.	0.13	0.74	0.18	0.22
	N	6	6	6	6

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN/BODY WEIGHT RATIOS SUMMARY
AFTER 13 WEEKS
FEMALES**

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BODY W. (GRAM)	MEAN ST.DEV. N	245.1 16.0 6	243.1 10.3 6	241.3 15.6 6	255.3 26.6 6
BRAIN (%)	MEAN ST.DEV. N	0.78 0.06 6	0.80 0.06 6	0.79 0.07 6	0.75 0.09 6
HEART (%)	MEAN ST.DEV. N	0.35 0.02 6	0.35 0.02 6	0.36 0.07 6	0.35 0.03 6
THYROIDS (%)	MEAN ST.DEV. N	0.009 0.001 6	0.008 0.003 6	0.008 0.001 6	0.008 0.002 6
LIVER (%)	MEAN ST.DEV. N	3.30 0.12 6	3.29 0.20 6	3.25 0.39 6	3.24 0.22 6
THYMUS (%)	MEAN ST.DEV. N	0.119 0.018 6	0.113 0.012 6	0.110 0.014 6	0.141 0.028 6
KIDNEYS (%)	MEAN ST.DEV. N	0.66 0.03 6	0.65 0.04 6	0.61 0.04 6	0.68 0.08 6
ADRENALS (%)	MEAN ST.DEV. N	0.032 0.003 6	0.035 0.004 6	0.031 0.003 6	0.035 0.005 6
SPLEEN (%)	MEAN ST.DEV. N	0.25 0.04 6	0.25 0.02 6	0.27 0.02 6	0.29 * 0.03 6
UTERUS (%)	MEAN ST.DEV. N	0.040 0.010 6	0.045 0.009 6	0.038 0.011 6	0.050 0.008 6
UTERUS (%)	MEAN ST.DEV. N	0.30 0.05 6	0.47 0.32 6	0.38 0.10 6	0.32 0.06 6

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

**ORGAN/BRAIN WEIGHT RATIOS SUMMARY
AFTER 13 WEEKS
FEMALES**

		GROUP 1 0 MG/KG/DAY	GROUP 2 500 MG/KG/DAY	GROUP 3 1000 MG/KG/DAY	GROUP 4 2000 MG/KG/DAY
BRAIN (GRAM)	MEAN	1.91	1.94	1.89	1.91
	ST.DEV.	0.09	0.10	0.08	0.07
	N	6	6	6	6
HEART (%)	MEAN	44.58	43.75	46.44	46.40
	ST.DEV.	5.30	3.54	10.83	4.39
	N	6	6	6	6
THYROIDS (%)	MEAN	1.202	0.988	1.055	1.050
	ST.DEV.	0.149	0.288	0.158	0.268
	N	6	6	6	6
LIVER (%)	MEAN	422.84	414.21	415.37	433.67
	ST.DEV.	33.75	45.72	63.44	57.28
	N	6	6	6	6
THYMUS (%)	MEAN	15.448	14.223	13.961	18.927
	ST.DEV.	3.328	2.042	1.600	4.928
	N	6	6	6	6
KIDNEYS (%)	MEAN	84.17	81.34	78.22	91.03
	ST.DEV.	6.81	7.01	7.46	12.22
	N	6	6	6	6
ADRENALS (%)	MEAN	4.142	4.397	3.993	4.661
	ST.DEV.	0.625	0.312	0.359	0.728
	N	6	6	6	6
SPLEEN (%)	MEAN	31.71	31.23	34.15	39.46
	ST.DEV.	6.54	2.89	4.69	7.56
	N	6	6	6	6
UTERUS (%)	MEAN	5.153	5.632	4.820	6.705
	ST.DEV.	1.179	0.862	1.074	1.624
	N	6	6	6	6
UTERUS (%)	MEAN	39.20	57.28	48.35	43.53
	ST.DEV.	8.08	35.48	9.76	11.11
	N	6	6	6	6

*/**: Dunnett-test based on pooled variance sig. at 5% or 1% level.

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

MACROSCOPICAL FINDINGS SUMMARY

ALL NECROPSIES

MALES

	GROUP 1 0 MG/KG/DAY		GROUP 2 500 MG/KG/DAY		GROUP 3 1000 MG/KG/DAY		GROUP 4 2000 MG/KG/DAY	
ANIMALS EXAMINED	36		26		26		36	
ANIMALS WITHOUT FINDINGS	25		12		14		21	
ANIMALS AFFECTED:								
LUNGS.....								
FOCUS/FOCI.....	0	0%	0	0%	1	4%	0	0%
STOMACH.....								
DISCOLORATION.....	0	0%	0	0%	0	0%	1	3%
FOCUS/FOCI.....	0	0%	1	4%	0	0%	0	0%
DUODENUM.....								
CONTENTS BLACK-BROWN.....	0	0%	1	4%	0	0%	0	0%
JEJUNUM.....								
CONTENTS BLACK-BROWN.....	0	0%	1	4%	0	0%	0	0%
DISCOLORATION.....	1	3%	0	0%	0	0%	0	0%
ILEUM.....								
CONTENTS BLACK-BROWN.....	0	0%	1	4%	0	0%	0	0%
DISCOLORATION.....	1	3%	0	0%	0	0%	0	0%
INTUSSUSCEPTION.....	0	0%	1	4%	0	0%	0	0%
CAECUM.....								
DISCOLORATION.....	1	3%	0	0%	0	0%	0	0%
COLON.....								
DISCOLORATION.....	1	3%	0	0%	0	0%	0	0%
LIVER.....								
THICKENED.....	0	0%	2	8%	0	0%	0	0%
PANCREAS.....								
DISCOLORATION.....	0	0%	1	4%	0	0%	0	0%
KIDNEYS.....								
ENLARGED.....	0	0%	1	4%	0	0%	0	0%
GRANULATED SURFACE.....	0	0%	1	4%	0	0%	0	0%
PELVIC DILATION.....	1	3%	2	8%	5 #	19%	4	11%
REDUCED IN SIZE.....	0	0%	1	4%	0	0%	0	0%
TESTES.....								
REDUCED IN SIZE.....	1	3%	0	0%	1	4%	0	0%
EPIDIDYMIDES.....								
REDUCED IN SIZE.....	1	3%	0	0%	0	0%	0	0%
PROSTATE.....								
FOCUS/FOCI.....	1	3%	0	0%	0	0%	0	0%
SEMINAL VESICLES.....								
FOCUS/FOCI.....	0	0%	1	4%	0	0%	0	0%
THYMUS.....								
DISCOLORATION.....	0	0%	0	0%	0	0%	1	3%
FOCUS/FOCI.....	6	17%	5	19%	5	19%	8	22%
REDUCED IN SIZE.....	0	0%	0	0%	0	0%	2	6%
LYMPH NODES.....								
CYST(S).....	0	0%	1	4%	0	0%	0	0%
DISCOLORATION.....	0	0%	0	0%	1	4%	0	0%
BRONCHIAL L.NODE.....								
DISCOLORATION.....	0	0%	0	0%	0	0%	1	3%

/ ## : Fisher's Exact Test based on counts significant at 5% (#) or 1% (##) level

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

MACROSCOPICAL FINDINGS SUMMARY
ALL NECROPSIES
MALES

		GROUP 1 0 MG/KG/DAY		GROUP 2 500 MG/KG/DAY		GROUP 3 1000 MG/KG/DAY		GROUP 4 2000 MG/KG/DAY	
ANIMALS EXAMINED		36		26		26		36	
ANIMALS WITHOUT FINDINGS		25		12		14		21	
ANIMALS AFFECTED:									
SKIN.....									
DEJECTED		1	3%	1	4%	0	0%	0	0%
RUPTURE (S)		0	0%	0	0%	0	0%	1	3%
EYES.....									
DISCOLORATION		1	3%	0	0%	1	4%	0	0%
ENLARGED		0	0%	0	0%	1	4%	0	0%

/ ## : Fisher's Exact Test based on counts significant at 5% (#) or 1% (##) level

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

MACROSCOPICAL FINDINGS SUMMARY
ALL NECROPSIES
FEMALES

	GROUP 1 0 MG/KG/DAY		GROUP 2 500 MG/KG/DAY		GROUP 3 1000 MG/KG/DAY		GROUP 4 2000 MG/KG/DAY	
ANIMALS EXAMINED	36		26		26		36	
ANIMALS WITHOUT FINDINGS	28		14		19		24	
ANIMALS AFFECTED:								
STOMACH.....	1	3%	0	0%	0	0%	0	0%
FOCUS/FOCI								
LIVER.....	0	0%	0	0%	0	0%	1	3%
ENLARGED	0	0%	0	0%	0	0%	1	3%
NODULE (S)								
PANCREAS.....	0	0%	0	0%	1	4%	1	3%
DISCOLORATION								
KIDNEYS.....	0	0%	2	8%	1	4%	0	0%
PELVIC DILATION								
OVARIES.....	5	14%	1	4%	0	0%	1	3%
DISCOLORATION								
UTERUS.....	0	0%	1	4%	0	0%	0	0%
DILATION	1	3%	1	4%	1	4%	0	0%
DISCOLORATION								
THYMUS.....	1	3%	1	4%	0	0%	2	6%
DISCOLORATION	4	11%	6	23%	3	12%	6	17%
FOCUS/FOCI	0	0%	0	0%	0	0%	1	3%
REDUCED IN SIZE								
MANDIBULAR L.NODE.....	1	3%	0	0%	0	0%	1	3%
DISCOLORATION								
MAMMARY GLANDS.....	0	0%	1	4%	0	0%	0	0%
NODULE (S)								
SKIN.....	0	0%	0	0%	0	0%	1	3%
ALOPECIA	0	0%	0	0%	1	4%	1	3%
DEJECTED								
BODY CAVITIES.....	0	0%	0	0%	0	0%	1	3%
NODULE (S)								

/ ## : Fisher's Exact Test based on counts significant at 5% (#) or 1% (##) level

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

12 INDIVIDUAL TABLES

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

MORTALITY DATA

MALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL	SCHEDULED NECROPSY	KILLED IN EXTREMIS	TREATMENT FROM	TO
1	04-APR-06		02-JAN-06	03-APR-06
2	04-APR-06		02-JAN-06	03-APR-06
3	04-APR-06		02-JAN-06	03-APR-06
4	04-APR-06		02-JAN-06	03-APR-06
5	04-APR-06		02-JAN-06	03-APR-06
6	04-APR-06		02-JAN-06	03-APR-06
7	04-APR-06		02-JAN-06	03-APR-06
8	04-APR-06		02-JAN-06	03-APR-06
9	04-APR-06		02-JAN-06	03-APR-06
10	04-APR-06		02-JAN-06	03-APR-06
11	07-APR-06		02-JAN-06	06-APR-06
12	07-APR-06		02-JAN-06	06-APR-06
13	07-APR-06		02-JAN-06	06-APR-06
14	07-APR-06		02-JAN-06	06-APR-06
15	07-APR-06		02-JAN-06	06-APR-06
16	07-APR-06		02-JAN-06	06-APR-06
17	07-APR-06		02-JAN-06	06-APR-06
18	07-APR-06		02-JAN-06	06-APR-06
19	07-APR-06		02-JAN-06	06-APR-06
20	07-APR-06		02-JAN-06	06-APR-06
21	02-MAY-06		02-JAN-06	03-APR-06
22	02-MAY-06		02-JAN-06	03-APR-06
23	02-MAY-06		02-JAN-06	03-APR-06
24	02-MAY-06		02-JAN-06	03-APR-06
25	02-MAY-06		02-JAN-06	03-APR-06
26	02-MAY-06		02-JAN-06	03-APR-06
27	02-MAY-06		02-JAN-06	03-APR-06
28	02-MAY-06		02-JAN-06	03-APR-06
29	02-MAY-06		02-JAN-06	03-APR-06
30	02-MAY-06		02-JAN-06	03-APR-06
31	04-APR-06		02-JAN-06	03-APR-06
32	04-APR-06		02-JAN-06	03-APR-06
33	04-APR-06		02-JAN-06	03-APR-06
34	04-APR-06		02-JAN-06	03-APR-06
35	04-APR-06		02-JAN-06	03-APR-06
36	04-APR-06		02-JAN-06	03-APR-06

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

MORTALITY DATA

MALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL	SCHEDULED NECROPSY	KILLED IN EXTREMIS	TREATMENT FROM	TO
37	04-APR-06		02-JAN-06	03-APR-06
38	04-APR-06		02-JAN-06	03-APR-06
39	04-APR-06		02-JAN-06	03-APR-06
40	04-APR-06		02-JAN-06	03-APR-06
41	04-APR-06		02-JAN-06	03-APR-06
42	04-APR-06		02-JAN-06	03-APR-06
43	04-APR-06		02-JAN-06	03-APR-06
44		02-FEB-06	02-JAN-06	02-FEB-06
45	04-APR-06		02-JAN-06	03-APR-06
46	04-APR-06		02-JAN-06	03-APR-06
47	07-APR-06		02-JAN-06	06-APR-06
48	07-APR-06		02-JAN-06	06-APR-06
49	07-APR-06		02-JAN-06	06-APR-06
50	07-APR-06		02-JAN-06	06-APR-06
51	07-APR-06		02-JAN-06	06-APR-06
52	07-APR-06		02-JAN-06	06-APR-06
53	07-APR-06		02-JAN-06	06-APR-06
54	07-APR-06		02-JAN-06	06-APR-06
55	07-APR-06		02-JAN-06	06-APR-06
56	07-APR-06		02-JAN-06	06-APR-06
57	07-APR-06		02-JAN-06	06-APR-06
58	07-APR-06		02-JAN-06	06-APR-06
59	07-APR-06		02-JAN-06	06-APR-06
60	07-APR-06		02-JAN-06	06-APR-06
61	07-APR-06		02-JAN-06	06-APR-06
62	07-APR-06		02-JAN-06	06-APR-06

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

MORTALITY DATA

MALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL	SCHEDULED NECROPSY	KILLED IN EXTREMIS	TREATMENT FROM	TO
63	04-APR-06		02-JAN-06	03-APR-06
64	04-APR-06		02-JAN-06	03-APR-06
65	04-APR-06		02-JAN-06	03-APR-06
66	04-APR-06		02-JAN-06	03-APR-06
67	04-APR-06		02-JAN-06	03-APR-06
68	04-APR-06		02-JAN-06	03-APR-06
69	04-APR-06		02-JAN-06	03-APR-06
70	04-APR-06		02-JAN-06	03-APR-06
71	04-APR-06		02-JAN-06	03-APR-06
72	04-APR-06		02-JAN-06	03-APR-06
73	07-APR-06		02-JAN-06	06-APR-06
74	07-APR-06		02-JAN-06	06-APR-06
75	07-APR-06		02-JAN-06	06-APR-06
76	07-APR-06		02-JAN-06	06-APR-06
77	07-APR-06		02-JAN-06	06-APR-06
78	07-APR-06		02-JAN-06	06-APR-06
79	07-APR-06		02-JAN-06	06-APR-06
80	07-APR-06		02-JAN-06	06-APR-06
81	07-APR-06		02-JAN-06	06-APR-06
82	07-APR-06		02-JAN-06	06-APR-06
83	07-APR-06		02-JAN-06	06-APR-06
84	07-APR-06		02-JAN-06	06-APR-06
85	07-APR-06		02-JAN-06	06-APR-06
86	07-APR-06		02-JAN-06	06-APR-06
87		13-FEB-06	02-JAN-06	13-FEB-06
88	07-APR-06		02-JAN-06	06-APR-06

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

MORTALITY DATA

MALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL	SCHEDULED NECROPSY	KILLED IN EXTREMIS	TREATMENT FROM	TO
89	04-APR-06		02-JAN-06	03-APR-06
90	04-APR-06		02-JAN-06	03-APR-06
91	04-APR-06		02-JAN-06	03-APR-06
92	04-APR-06		02-JAN-06	03-APR-06
93	04-APR-06		02-JAN-06	03-APR-06
94	04-APR-06		02-JAN-06	03-APR-06
95	04-APR-06		02-JAN-06	03-APR-06
96	04-APR-06		02-JAN-06	03-APR-06
97	04-APR-06		02-JAN-06	03-APR-06
98	04-APR-06		02-JAN-06	03-APR-06
99	07-APR-06		02-JAN-06	06-APR-06
100	07-APR-06		02-JAN-06	06-APR-06
101	07-APR-06		02-JAN-06	06-APR-06
102	07-APR-06		02-JAN-06	06-APR-06
103	07-APR-06		02-JAN-06	06-APR-06
104	07-APR-06		02-JAN-06	06-APR-06
105	07-APR-06		02-JAN-06	06-APR-06
106	07-APR-06		02-JAN-06	06-APR-06
107	07-APR-06		02-JAN-06	06-APR-06
108	07-APR-06		02-JAN-06	06-APR-06
109	02-MAY-06		02-JAN-06	03-APR-06
110	02-MAY-06		02-JAN-06	03-APR-06
111	02-MAY-06		02-JAN-06	03-APR-06
112	02-MAY-06		02-JAN-06	03-APR-06
113	02-MAY-06		02-JAN-06	03-APR-06
114	02-MAY-06		02-JAN-06	03-APR-06
115	02-MAY-06		02-JAN-06	03-APR-06
116	02-MAY-06		02-JAN-06	03-APR-06
117	02-MAY-06		02-JAN-06	03-APR-06
118	02-MAY-06		02-JAN-06	03-APR-06
119	04-APR-06		02-JAN-06	03-APR-06
120	04-APR-06		02-JAN-06	03-APR-06
121	04-APR-06		02-JAN-06	03-APR-06
122	04-APR-06		02-JAN-06	03-APR-06
123	04-APR-06		02-JAN-06	03-APR-06
124	04-APR-06		02-JAN-06	03-APR-06

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

MORTALITY DATA

FEMALES

GROUP 1 (0 MG/KG/DAY)

ANIMAL	SCHEDULED NECROPSY	KILLED IN EXTREMIS	TREATMENT FROM	TO
125	05-APR-06		02-JAN-06	04-APR-06
126	05-APR-06		02-JAN-06	04-APR-06
127	05-APR-06		02-JAN-06	04-APR-06
128	05-APR-06		02-JAN-06	04-APR-06
129	05-APR-06		02-JAN-06	04-APR-06
130	05-APR-06		02-JAN-06	04-APR-06
131	05-APR-06		02-JAN-06	04-APR-06
132	05-APR-06		02-JAN-06	04-APR-06
133	05-APR-06		02-JAN-06	04-APR-06
134	05-APR-06		02-JAN-06	04-APR-06
135	06-APR-06		02-JAN-06	05-APR-06
136	06-APR-06		02-JAN-06	05-APR-06
137	06-APR-06		02-JAN-06	05-APR-06
138	06-APR-06		02-JAN-06	05-APR-06
139	06-APR-06		02-JAN-06	05-APR-06
140	06-APR-06		02-JAN-06	05-APR-06
141	06-APR-06		02-JAN-06	05-APR-06
142	06-APR-06		02-JAN-06	05-APR-06
143	06-APR-06		02-JAN-06	05-APR-06
144	06-APR-06		02-JAN-06	05-APR-06
145	02-MAY-06		02-JAN-06	03-APR-06
146	02-MAY-06		02-JAN-06	03-APR-06
147	02-MAY-06		02-JAN-06	03-APR-06
148	02-MAY-06		02-JAN-06	03-APR-06
149	02-MAY-06		02-JAN-06	03-APR-06
150	02-MAY-06		02-JAN-06	03-APR-06
151	02-MAY-06		02-JAN-06	03-APR-06
152	02-MAY-06		02-JAN-06	03-APR-06
153	02-MAY-06		02-JAN-06	03-APR-06
154	02-MAY-06		02-JAN-06	03-APR-06
155	05-APR-06		02-JAN-06	04-APR-06
156	05-APR-06		02-JAN-06	04-APR-06
157	05-APR-06		02-JAN-06	04-APR-06
158	05-APR-06		02-JAN-06	04-APR-06
159	05-APR-06		02-JAN-06	04-APR-06
160	05-APR-06		02-JAN-06	04-APR-06

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

MORTALITY DATA

FEMALES

GROUP 2 (500 MG/KG/DAY)

ANIMAL	SCHEDULED NECROPSY	KILLED IN EXTREMIS	TREATMENT FROM	TO
161	05-APR-06		02-JAN-06	04-APR-06
162	05-APR-06		02-JAN-06	04-APR-06
163	05-APR-06		02-JAN-06	04-APR-06
164	05-APR-06		02-JAN-06	04-APR-06
165	05-APR-06		02-JAN-06	04-APR-06
166	05-APR-06		02-JAN-06	04-APR-06
167	05-APR-06		02-JAN-06	04-APR-06
168	05-APR-06		02-JAN-06	04-APR-06
169	05-APR-06		02-JAN-06	04-APR-06
170	05-APR-06		02-JAN-06	04-APR-06
171	06-APR-06		02-JAN-06	05-APR-06
172	06-APR-06		02-JAN-06	05-APR-06
173	06-APR-06		02-JAN-06	05-APR-06
174	06-APR-06		02-JAN-06	05-APR-06
175	06-APR-06		02-JAN-06	05-APR-06
176	06-APR-06		02-JAN-06	05-APR-06
177	06-APR-06		02-JAN-06	05-APR-06
178	06-APR-06		02-JAN-06	05-APR-06
179	06-APR-06		02-JAN-06	05-APR-06
180	06-APR-06		02-JAN-06	05-APR-06
181	06-APR-06		02-JAN-06	05-APR-06
182	06-APR-06		02-JAN-06	05-APR-06
183	06-APR-06		02-JAN-06	05-APR-06
184	06-APR-06		02-JAN-06	05-APR-06
185	06-APR-06		02-JAN-06	05-APR-06
186	06-APR-06		02-JAN-06	05-APR-06

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

MORTALITY DATA

FEMALES

GROUP 3 (1000 MG/KG/DAY)

ANIMAL	SCHEDULED NECROPSY	KILLED IN EXTREMIS	TREATMENT FROM	TO
187	05-APR-06		02-JAN-06	04-APR-06
188	05-APR-06		02-JAN-06	04-APR-06
189	05-APR-06		02-JAN-06	04-APR-06
190	05-APR-06		02-JAN-06	04-APR-06
191	05-APR-06		02-JAN-06	04-APR-06
192	05-APR-06		02-JAN-06	04-APR-06
193	05-APR-06		02-JAN-06	04-APR-06
194	05-APR-06		02-JAN-06	04-APR-06
195	05-APR-06		02-JAN-06	04-APR-06
196	05-APR-06		02-JAN-06	04-APR-06
197	06-APR-06		02-JAN-06	05-APR-06
198	06-APR-06		02-JAN-06	05-APR-06
199	06-APR-06		02-JAN-06	05-APR-06
200	06-APR-06		02-JAN-06	05-APR-06
201	06-APR-06		02-JAN-06	05-APR-06
202	06-APR-06		02-JAN-06	05-APR-06
203	06-APR-06		02-JAN-06	05-APR-06
204	06-APR-06		02-JAN-06	05-APR-06
205	06-APR-06		02-JAN-06	05-APR-06
206	06-APR-06		02-JAN-06	05-APR-06
207	06-APR-06		02-JAN-06	05-APR-06
208	06-APR-06		02-JAN-06	05-APR-06
209	06-APR-06		02-JAN-06	05-APR-06
210	06-APR-06		02-JAN-06	05-APR-06
211	06-APR-06		02-JAN-06	05-APR-06
212	06-APR-06		02-JAN-06	05-APR-06

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

MORTALITY DATA

FEMALES

GROUP 4 (2000 MG/KG/DAY)

ANIMAL	SCHEDULED NECROPSY	KILLED IN EXTREMIS	TREATMENT FROM	TO
213	05-APR-06		02-JAN-06	04-APR-06
214	05-APR-06		02-JAN-06	04-APR-06
215	05-APR-06		02-JAN-06	04-APR-06
216	05-APR-06		02-JAN-06	04-APR-06
217	05-APR-06		02-JAN-06	04-APR-06
218	05-APR-06		02-JAN-06	04-APR-06
219	05-APR-06		02-JAN-06	04-APR-06
220	05-APR-06		02-JAN-06	04-APR-06
221	05-APR-06		02-JAN-06	04-APR-06
222	05-APR-06		02-JAN-06	04-APR-06
223	06-APR-06		02-JAN-06	05-APR-06
224	06-APR-06		02-JAN-06	05-APR-06
225	06-APR-06		02-JAN-06	05-APR-06
226	06-APR-06		02-JAN-06	05-APR-06
227	06-APR-06		02-JAN-06	05-APR-06
228	06-APR-06		02-JAN-06	05-APR-06
229	06-APR-06		02-JAN-06	05-APR-06
230	06-APR-06		02-JAN-06	05-APR-06
231	06-APR-06		02-JAN-06	05-APR-06
232	06-APR-06		02-JAN-06	05-APR-06
233	02-MAY-06		02-JAN-06	03-APR-06
234	02-MAY-06		02-JAN-06	03-APR-06
235	02-MAY-06		02-JAN-06	03-APR-06
236	02-MAY-06		02-JAN-06	03-APR-06
237	02-MAY-06		02-JAN-06	03-APR-06
238	02-MAY-06		02-JAN-06	03-APR-06
239	02-MAY-06		02-JAN-06	03-APR-06
240	02-MAY-06		02-JAN-06	03-APR-06
241	02-MAY-06		02-JAN-06	03-APR-06
242	02-MAY-06		02-JAN-06	03-APR-06
243	05-APR-06		02-JAN-06	04-APR-06
244	05-APR-06		02-JAN-06	04-APR-06
245	05-APR-06		02-JAN-06	04-APR-06
246	05-APR-06		02-JAN-06	04-APR-06
247	05-APR-06		02-JAN-06	04-APR-06
248	05-APR-06		02-JAN-06	04-APR-06

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

CLINICAL SIGNS, DAILY

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....	ACCLIMATIZATION	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 1			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 2			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 3			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 4			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 5			
----- VARIOUS KINKED (3) (TAIL APEX)	G: .....		.....
ANIMAL 6			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 7			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 8			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 9			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 10			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 11			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 12			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 13			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 14			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 15			
----- VARIOUS EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 16			
----- NO CLINICAL SIGNS NOTED			
ANIMAL 17			
----- NO CLINICAL SIGNS NOTED			

G: Highest daily grades

09009e53801f3ee2

182

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

CLINICAL SIGNS, DAILY

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	ACCLIMATIZATION WEEKS: 1.....	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 18		

NO CLINICAL SIGNS NOTED		
ANIMAL 19		

NO CLINICAL SIGNS NOTED		
ANIMAL 20		

NO CLINICAL SIGNS NOTED		
ANIMAL 21		

NO CLINICAL SIGNS NOTED		
ANIMAL 22		

NO CLINICAL SIGNS NOTED		
ANIMAL 23		

NO CLINICAL SIGNS NOTED		
ANIMAL 24		

NO CLINICAL SIGNS NOTED		
ANIMAL 25		

NO CLINICAL SIGNS NOTED		
ANIMAL 26		

NO CLINICAL SIGNS NOTED		
ANIMAL 27		

NO CLINICAL SIGNS NOTED		
ANIMAL 28		

VARIOUS		
EYE RIGHT, WHITE (3)	G: .....	.....
OPACITY (1)	G: .....	.....
(EYE RIGHT)		
ANIMAL 29		

NO CLINICAL SIGNS NOTED		
ANIMAL 30		

NO CLINICAL SIGNS NOTED		
ANIMAL 31		

NO CLINICAL SIGNS NOTED		
ANIMAL 32		

NO CLINICAL SIGNS NOTED		
ANIMAL 33		

NO CLINICAL SIGNS NOTED		

G: Highest daily grades

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183

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

CLINICAL SIGNS, DAILY

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....	ACCLIMATIZATION	TREATMENT 1.....2.....3.....4.....5.....6.....
<hr/>			
ANIMAL 34			

VARIOUS			
EMACIATED (3)	G:		111.....

ANIMAL 35			

VARIOUS			
EYE RIGHT, ENLARGED (1)	G: .....		.....

ANIMAL 36			

NO CLINICAL SIGNS NOTED			

G: Highest daily grades

09009e53801f3ee2

184

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

CLINICAL SIGNS, DAILY

MALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....	ACCLIMATIZATION	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 37			

NO CLINICAL SIGNS NOTED			
ANIMAL 38			

NO CLINICAL SIGNS NOTED			
ANIMAL 39			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 40			

NO CLINICAL SIGNS NOTED			
ANIMAL 41			

VARIOUS			
KINKED (3)	G: .....		.....
(TAIL APEX)			
ANIMAL 42			

NO CLINICAL SIGNS NOTED			
ANIMAL 43			

NO CLINICAL SIGNS NOTED			
ANIMAL 44			

BEHAVIOR			
SEDATED (3)	G: .....		.....3
POSTURE			
HUNCHED POSTURE (1)	G: .....		.....111
SKIN / FUR			
ROUGH COAT (1)	G: .....		.....1111
SECRETION / EXCRETION			
LACRIMATION (3)	G: .....		.....2
REDUCED SIZE FECALBOLI (1)	G: .....		.....1
VARIOUS			
EMACIATED (3)	G: .....		.....1223
ENOPHTHALMOS (1)	G: .....		.....1
ANIMAL 45			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 46			

NO CLINICAL SIGNS NOTED			
ANIMAL 47			

NO CLINICAL SIGNS NOTED			
ANIMAL 48			

NO CLINICAL SIGNS NOTED			
ANIMAL 49			

NO CLINICAL SIGNS NOTED			
ANIMAL 50			

NO CLINICAL SIGNS NOTED			

G: Highest daily grades

09009e53801f3ee2

185

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

CLINICAL SIGNS, DAILY

MALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....	ACCLIMATIZATION	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 51			
NO CLINICAL SIGNS NOTED			
ANIMAL 52			
NO CLINICAL SIGNS NOTED			
ANIMAL 53			
NO CLINICAL SIGNS NOTED			
ANIMAL 54			
POSTURE			
KINKED (3)	G:		
(TAIL APEX)			
ANIMAL 55			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 56			
NO CLINICAL SIGNS NOTED			
ANIMAL 57			
NO CLINICAL SIGNS NOTED			
ANIMAL 58			
SKIN / FUR			
HAIR LOSS (3)	G: .....		.....22222222111.....
(SHOULDER RIGHT)			
CRUSTS (3)	G: .....		.....11111111111.....
(SHOULDER RIGHT)			
WOUND (3)	G: .....		.....221.....
(SHOULDER RIGHT)			
ANIMAL 59			
NO CLINICAL SIGNS NOTED			
ANIMAL 60			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 61			
NO CLINICAL SIGNS NOTED			
ANIMAL 62			
NO CLINICAL SIGNS NOTED			

G: Highest daily grades

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186

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

CLINICAL SIGNS, DAILY

MALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS:	ACCLIMATIZATION 1.....	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 63			

NO CLINICAL SIGNS NOTED			
ANIMAL 64			

NO CLINICAL SIGNS NOTED			
ANIMAL 65			

NO CLINICAL SIGNS NOTED			
ANIMAL 66			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 67			

NO CLINICAL SIGNS NOTED			
ANIMAL 68			

NO CLINICAL SIGNS NOTED			
ANIMAL 69			

NO CLINICAL SIGNS NOTED			
ANIMAL 70			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 71			

NO CLINICAL SIGNS NOTED			
ANIMAL 72			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 73			

NO CLINICAL SIGNS NOTED			
ANIMAL 74			

NO CLINICAL SIGNS NOTED			
ANIMAL 75			

SKIN / FUR			
HAIR LOSS (3)	G: .....		.....
(SHOULDER RIGHT)			
SCABS (3)	G: .....		.....1111111111111111.....
(SHOULDER LEFT)			
SCABS (3)	G: .....		.....
(SHOULDER RIGHT)			
SCABBED WOUND (1)	G: .....		.....
(SHOULDER RIGHT)			
ANIMAL 76			

VARIOUS			
EXOPHTHALMOS (1)	G:
ANIMAL 77			

NO CLINICAL SIGNS NOTED			

G: Highest daily grades

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

CLINICAL SIGNS, DAILY

MALES

GROUP 3 (1000 MG/KG/DAY)

[illegible]

G: Highest daily grades

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

CLINICAL SIGNS, DAILY

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....	ACCLIMATIZATION	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 89			

NO CLINICAL SIGNS NOTED			
ANIMAL 90			

NO CLINICAL SIGNS NOTED			
ANIMAL 91			

NO CLINICAL SIGNS NOTED			
ANIMAL 92			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 93			

NO CLINICAL SIGNS NOTED			
ANIMAL 94			

NO CLINICAL SIGNS NOTED			
ANIMAL 95			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 96			

NO CLINICAL SIGNS NOTED			
ANIMAL 97			

NO CLINICAL SIGNS NOTED			
ANIMAL 98			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 99			

NO CLINICAL SIGNS NOTED			
ANIMAL 100			

NO CLINICAL SIGNS NOTED			
ANIMAL 101			

NO CLINICAL SIGNS NOTED			
ANIMAL 102			

NO CLINICAL SIGNS NOTED			
ANIMAL 103			

NO CLINICAL SIGNS NOTED			
ANIMAL 104			

NO CLINICAL SIGNS NOTED			
ANIMAL 105			

NO CLINICAL SIGNS NOTED			

G: Highest daily grades

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189

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

CLINICAL SIGNS, DAILY

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....	ACCLIMATIZATION	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 106			
NO CLINICAL SIGNS NOTED			
ANIMAL 107			
NO CLINICAL SIGNS NOTED			
ANIMAL 108			
NO CLINICAL SIGNS NOTED			
ANIMAL 109			
SKIN / FUR			
HAIR LOSS (3)	G:		
(SHOULDER RIGHT)			
SCABS (3)	G:		
(SHOULDER RIGHT)			
ANIMAL 110			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 111			
NO CLINICAL SIGNS NOTED			
ANIMAL 112			
NO CLINICAL SIGNS NOTED			
ANIMAL 113			
SKIN / FUR			
FISSURES (3)	G:		
(EAR LEFT)			
ANIMAL 114			
NO CLINICAL SIGNS NOTED			
ANIMAL 115			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 116			
NO CLINICAL SIGNS NOTED			
ANIMAL 117			
NO CLINICAL SIGNS NOTED			
ANIMAL 118			
NO CLINICAL SIGNS NOTED			
ANIMAL 119			
NO CLINICAL SIGNS NOTED			
ANIMAL 120			
NO CLINICAL SIGNS NOTED			
ANIMAL 121			
NO CLINICAL SIGNS NOTED			

G: Highest daily grades

09009e53801f3ee2

190

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

CLINICAL SIGNS, DAILY

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....	ACCLIMATIZATION	TREATMENT 1.....2.....3.....4.....5.....6.....
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ANIMAL 122

NO CLINICAL SIGNS NOTED

ANIMAL 123

NO CLINICAL SIGNS NOTED

ANIMAL 124

NO CLINICAL SIGNS NOTED

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191

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

CLINICAL SIGNS, DAILY

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
ANIMAL 1	

NO CLINICAL SIGNS NOTED	
ANIMAL 2	

NO CLINICAL SIGNS NOTED	
ANIMAL 3	

NO CLINICAL SIGNS NOTED	
ANIMAL 4	

NO CLINICAL SIGNS NOTED	
ANIMAL 5	

VARIOUS	
KINKED (3)	G: .....111111
(TAIL APEX)	
ANIMAL 6	

NO CLINICAL SIGNS NOTED	
ANIMAL 7	

NO CLINICAL SIGNS NOTED	
ANIMAL 8	

NO CLINICAL SIGNS NOTED	
ANIMAL 9	

NO CLINICAL SIGNS NOTED	
ANIMAL 10	

NO CLINICAL SIGNS NOTED	
ANIMAL 11	

NO CLINICAL SIGNS NOTED	
ANIMAL 12	

NO CLINICAL SIGNS NOTED	
ANIMAL 13	

NO CLINICAL SIGNS NOTED	
ANIMAL 14	

NO CLINICAL SIGNS NOTED	
ANIMAL 15	

VARIOUS	
EXOPHTHALMOS (1)	G: .....1111.....
ANIMAL 16	

NO CLINICAL SIGNS NOTED	
ANIMAL 17	

NO CLINICAL SIGNS NOTED	

G: Highest daily grades

09009e53801f3ee2

192

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

CLINICAL SIGNS, DAILY

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 7.....8.....9.....10.....11.....12.....13.....14	TREATMENT
--------------------------------	---	-----------

ANIMAL 18

NO CLINICAL SIGNS NOTED

ANIMAL 19

NO CLINICAL SIGNS NOTED

ANIMAL 20

NO CLINICAL SIGNS NOTED

ANIMAL 21

NO CLINICAL SIGNS NOTED

ANIMAL 22

NO CLINICAL SIGNS NOTED

ANIMAL 23

NO CLINICAL SIGNS NOTED

ANIMAL 24

NO CLINICAL SIGNS NOTED

ANIMAL 25

NO CLINICAL SIGNS NOTED

ANIMAL 26

NO CLINICAL SIGNS NOTED

ANIMAL 27

NO CLINICAL SIGNS NOTED

ANIMAL 28

VARIOUS

EYE RIGHT, WHITE (3)	G:
OPACITY (1)	G:
(EYE RIGHT)	

ANIMAL 29

NO CLINICAL SIGNS NOTED

ANIMAL 30

NO CLINICAL SIGNS NOTED

ANIMAL 31

NO CLINICAL SIGNS NOTED

ANIMAL 32

NO CLINICAL SIGNS NOTED

ANIMAL 33

NO CLINICAL SIGNS NOTED

G: Highest daily grades

09009e53801f3ee2

193

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

CLINICAL SIGNS, DAILY

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE)	TREATMENT
(LOCATION)	WEEKS: 7.....8.....9.....10.....11.....12.....13.....14

ANIMAL 34

VARIOUS

EMACIATED (3)

G:

ANIMAL 35

VARIOUS

EYE RIGHT, ENLARGED (1)

G:

ANIMAL 36

NO CLINICAL SIGNS NOTED

G: Highest daily grades

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

CLINICAL SIGNS, DAILY

MALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
ANIMAL 37	

NO CLINICAL SIGNS NOTED	
ANIMAL 38	

NO CLINICAL SIGNS NOTED	
ANIMAL 39	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 40	

NO CLINICAL SIGNS NOTED	
ANIMAL 41	

VARIOUS	
KINKED (3)	G: .....111111
(TAIL APEX)	
ANIMAL 42	

NO CLINICAL SIGNS NOTED	
ANIMAL 43	

NO CLINICAL SIGNS NOTED	
ANIMAL 45	

VARIOUS	
EXOPHTHALMOS (1)	G: .....1111111111.....
ANIMAL 46	

NO CLINICAL SIGNS NOTED	
ANIMAL 47	

NO CLINICAL SIGNS NOTED	
ANIMAL 48	

NO CLINICAL SIGNS NOTED	
ANIMAL 49	

NO CLINICAL SIGNS NOTED	
ANIMAL 50	

NO CLINICAL SIGNS NOTED	
ANIMAL 51	

NO CLINICAL SIGNS NOTED	
ANIMAL 52	

NO CLINICAL SIGNS NOTED	
ANIMAL 53	

NO CLINICAL SIGNS NOTED	

G: Highest daily grades

09009e53801f3ee2

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

CLINICAL SIGNS, DAILY

MALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE)	TREATMENT
(LOCATION)	WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
ANIMAL 54	

POSTURE	
KINKED (3)	G: .....11111111
(TAIL APEX)	
ANIMAL 55	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111111111111...111.....
ANIMAL 56	

NO CLINICAL SIGNS NOTED	
ANIMAL 57	

NO CLINICAL SIGNS NOTED	
ANIMAL 58	

SKIN / FUR	
HAIR LOSS (3)	G:
(SHOULDER RIGHT)	
CRUSTS (3)	G:
(SHOULDER RIGHT)	
WOUND (3)	G:
(SHOULDER RIGHT)	
ANIMAL 59	

NO CLINICAL SIGNS NOTED	
ANIMAL 60	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 61	

NO CLINICAL SIGNS NOTED	
ANIMAL 62	

NO CLINICAL SIGNS NOTED	

G: Highest daily grades

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

CLINICAL SIGNS, DAILY

MALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS:	TREATMENT
	7.....8.....9.....10.....11.....12.....13.....14	
ANIMAL 63		

NO CLINICAL SIGNS NOTED		
ANIMAL 64		

NO CLINICAL SIGNS NOTED		
ANIMAL 65		

NO CLINICAL SIGNS NOTED		
ANIMAL 66		

VARIOUS		
EXOPHTHALMOS (1)	G:	111.....
ANIMAL 67		

NO CLINICAL SIGNS NOTED		
ANIMAL 68		

NO CLINICAL SIGNS NOTED		
ANIMAL 69		

NO CLINICAL SIGNS NOTED		
ANIMAL 70		

VARIOUS		
EXOPHTHALMOS (1)	G:	111.....
ANIMAL 71		

NO CLINICAL SIGNS NOTED		
ANIMAL 72		

VARIOUS		
EXOPHTHALMOS (1)	G:	111111111111.....
ANIMAL 73		

NO CLINICAL SIGNS NOTED		
ANIMAL 74		

NO CLINICAL SIGNS NOTED		
ANIMAL 75		

SKIN / FUR		
HAIR LOSS (3)	G:	1
(SHOULDER RIGHT)		
SCABS (3)	G:	
(SHOULDER LEFT)		
SCABS (3)	G:	1
(SHOULDER RIGHT)		
SCABBED WOUND (1)	G:	11111.
(SHOULDER RIGHT)		
ANIMAL 76		

VARIOUS		
EXOPHTHALMOS (1)	G:	111.....
ANIMAL 77		

NO CLINICAL SIGNS NOTED		

G: Highest daily grades

09009e53801f3ee2

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

CLINICAL SIGNS, DAILY

MALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 7.....8.....9.....10.....11.....12.....13.....14	TREATMENT
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ANIMAL 78

NO CLINICAL SIGNS NOTED

ANIMAL 79

NO CLINICAL SIGNS NOTED

ANIMAL 80

NO CLINICAL SIGNS NOTED

ANIMAL 81

NO CLINICAL SIGNS NOTED

ANIMAL 82

NO CLINICAL SIGNS NOTED

ANIMAL 83

NO CLINICAL SIGNS NOTED

ANIMAL 84

NO CLINICAL SIGNS NOTED

ANIMAL 85

NO CLINICAL SIGNS NOTED

ANIMAL 86

NO CLINICAL SIGNS NOTED

ANIMAL 87

VARIOUS

EYE RIGHT, ENLARGED (1)	G: 1
MYDRIASIS (1)	G: .

ANIMAL 88

NO CLINICAL SIGNS NOTED

G: Highest daily grades

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198

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

CLINICAL SIGNS, DAILY

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
ANIMAL 89	

NO CLINICAL SIGNS NOTED	
ANIMAL 90	

NO CLINICAL SIGNS NOTED	
ANIMAL 91	

NO CLINICAL SIGNS NOTED	
ANIMAL 92	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 93	

NO CLINICAL SIGNS NOTED	
ANIMAL 94	

NO CLINICAL SIGNS NOTED	
ANIMAL 95	

VARIOUS	
EXOPHTHALMOS (1)	G: .....1111111111111111.....
ANIMAL 96	

NO CLINICAL SIGNS NOTED	
ANIMAL 97	

NO CLINICAL SIGNS NOTED	
ANIMAL 98	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 99	

NO CLINICAL SIGNS NOTED	
ANIMAL 100	

NO CLINICAL SIGNS NOTED	
ANIMAL 101	

NO CLINICAL SIGNS NOTED	
ANIMAL 102	

NO CLINICAL SIGNS NOTED	
ANIMAL 103	

NO CLINICAL SIGNS NOTED	
ANIMAL 104	

NO CLINICAL SIGNS NOTED	
ANIMAL 105	

NO CLINICAL SIGNS NOTED	

G: Highest daily grades

09009e53801f3ee2

199

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

CLINICAL SIGNS, DAILY

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE)	TREATMENT
(LOCATION)	WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
ANIMAL 106	

NO CLINICAL SIGNS NOTED	
ANIMAL 107	

NO CLINICAL SIGNS NOTED	
ANIMAL 108	

NO CLINICAL SIGNS NOTED	
ANIMAL 109	

SKIN / FUR	
HAIR LOSS (3)	G: .....11111111111111111111.....
(SHOULDER RIGHT)	
SCABS (3)	G: .....22111111111111.....
(SHOULDER RIGHT)	
ANIMAL 110	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 111	

NO CLINICAL SIGNS NOTED	
ANIMAL 112	

NO CLINICAL SIGNS NOTED	
ANIMAL 113	

SKIN / FUR	
FISSURES (3)	G: .....111.....
(EAR LEFT)	
ANIMAL 114	

NO CLINICAL SIGNS NOTED	
ANIMAL 115	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 116	

NO CLINICAL SIGNS NOTED	
ANIMAL 117	

NO CLINICAL SIGNS NOTED	
ANIMAL 118	

NO CLINICAL SIGNS NOTED	
ANIMAL 119	

NO CLINICAL SIGNS NOTED	
ANIMAL 120	

NO CLINICAL SIGNS NOTED	
ANIMAL 121	

NO CLINICAL SIGNS NOTED	

G: Highest daily grades

09009e53801f3ee2

200

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

CLINICAL SIGNS, DAILY

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
--------------------------------	--

ANIMAL 122

NO CLINICAL SIGNS NOTED

ANIMAL 123

NO CLINICAL SIGNS NOTED

ANIMAL 124

NO CLINICAL SIGNS NOTED

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201

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

CLINICAL SIGNS, DAILY

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) _____ RECOVERY
(LOCATION) WEEKS: 1.....2.....3.....4.....

ANIMAL 1

NO CLINICAL SIGNS NOTED

ANIMAL 2

NO CLINICAL SIGNS NOTED

ANIMAL 3

NO CLINICAL SIGNS NOTED

ANIMAL 4

NO CLINICAL SIGNS NOTED

ANIMAL 5

VARIOUS
KINKED (3) G: .
(TAIL APEX)

ANIMAL 6

NO CLINICAL SIGNS NOTED

ANIMAL 7

NO CLINICAL SIGNS NOTED

ANIMAL 8

NO CLINICAL SIGNS NOTED

ANIMAL 9

NO CLINICAL SIGNS NOTED

ANIMAL 10

NO CLINICAL SIGNS NOTED

ANIMAL 11

NO CLINICAL SIGNS NOTED

ANIMAL 12

NO CLINICAL SIGNS NOTED

ANIMAL 13

NO CLINICAL SIGNS NOTED

ANIMAL 14

NO CLINICAL SIGNS NOTED

ANIMAL 15

VARIOUS
EXOPHTHALMOS (1) G: . . .

ANIMAL 16

NO CLINICAL SIGNS NOTED

ANIMAL 17

NO CLINICAL SIGNS NOTED

G: Highest daily grades

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

CLINICAL SIGNS, DAILY

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
--------------------------------	---------------------------------	----------

ANIMAL 18

NO CLINICAL SIGNS NOTED

ANIMAL 19

NO CLINICAL SIGNS NOTED

ANIMAL 20

NO CLINICAL SIGNS NOTED

ANIMAL 21

NO CLINICAL SIGNS NOTED

ANIMAL 22

NO CLINICAL SIGNS NOTED

ANIMAL 23

NO CLINICAL SIGNS NOTED

ANIMAL 24

NO CLINICAL SIGNS NOTED

ANIMAL 25

NO CLINICAL SIGNS NOTED

ANIMAL 26

NO CLINICAL SIGNS NOTED

ANIMAL 27

NO CLINICAL SIGNS NOTED

ANIMAL 28

VARIOUS

EYE RIGHT, WHITE (3)	G: .....22222222
OPACITY (1)	G: .....1111111111111111
(EYE RIGHT)	

ANIMAL 29

NO CLINICAL SIGNS NOTED

ANIMAL 30

NO CLINICAL SIGNS NOTED

ANIMAL 31

NO CLINICAL SIGNS NOTED

ANIMAL 32

NO CLINICAL SIGNS NOTED

ANIMAL 33

NO CLINICAL SIGNS NOTED

G: Highest daily grades

09009e53801f3ee2

203

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

CLINICAL SIGNS, DAILY

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
--------------------------------	---------------------------------	----------

ANIMAL 34

VARIOUS

EMACIATED (3)

G: .

ANIMAL 35

VARIOUS

EYE RIGHT, ENLARGED (1)

G: .

ANIMAL 36

NO CLINICAL SIGNS NOTED

G: Highest daily grades

09009e53801f3ee2

204

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

CLINICAL SIGNS, DAILY

MALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
--------------------------------	---------------------------------	----------

ANIMAL 37

NO CLINICAL SIGNS NOTED

ANIMAL 38

NO CLINICAL SIGNS NOTED

ANIMAL 39

VARIOUS
EXOPHTHALMOS (1) G: .

ANIMAL 40

NO CLINICAL SIGNS NOTED

ANIMAL 41

VARIOUS
KINKED (3) G: .
(TAIL APEX)

ANIMAL 42

NO CLINICAL SIGNS NOTED

ANIMAL 43

NO CLINICAL SIGNS NOTED

ANIMAL 45

VARIOUS
EXOPHTHALMOS (1) G: .

ANIMAL 46

NO CLINICAL SIGNS NOTED

ANIMAL 47

NO CLINICAL SIGNS NOTED

ANIMAL 48

NO CLINICAL SIGNS NOTED

ANIMAL 49

NO CLINICAL SIGNS NOTED

ANIMAL 50

NO CLINICAL SIGNS NOTED

ANIMAL 51

NO CLINICAL SIGNS NOTED

ANIMAL 52

NO CLINICAL SIGNS NOTED

ANIMAL 53

NO CLINICAL SIGNS NOTED

G: Highest daily grades

09009e53801f3ee2

205

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

CLINICAL SIGNS, DAILY

MALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
ANIMAL 54		
POSTURE		
KINKED (3)		G: 111.
(TAIL APEX)		
ANIMAL 55		
VARIOUS		
EXOPHTHALMOS (1)		G:
ANIMAL 56		
NO CLINICAL SIGNS NOTED		
ANIMAL 57		
NO CLINICAL SIGNS NOTED		
ANIMAL 58		
SKIN / FUR		
HAIR LOSS (3)		G:
(SHOULDER RIGHT)		
CRUSTS (3)		G:
(SHOULDER RIGHT)		
WOUND (3)		G:
(SHOULDER RIGHT)		
ANIMAL 59		
NO CLINICAL SIGNS NOTED		
ANIMAL 60		
VARIOUS		
EXOPHTHALMOS (1)		G:
ANIMAL 61		
NO CLINICAL SIGNS NOTED		
ANIMAL 62		
NO CLINICAL SIGNS NOTED		

G: Highest daily grades

09009e53801f3ee2

206

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

CLINICAL SIGNS, DAILY

MALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	RECOVERY WEEKS: 1.....2.....3.....4.....
--------------------------------	---

ANIMAL 63	

NO CLINICAL SIGNS NOTED	
ANIMAL 64	

NO CLINICAL SIGNS NOTED	
ANIMAL 65	

NO CLINICAL SIGNS NOTED	
ANIMAL 66	

VARIOUS	
EXOPHTHALMOS (1)	G: .
ANIMAL 67	

NO CLINICAL SIGNS NOTED	
ANIMAL 68	

NO CLINICAL SIGNS NOTED	
ANIMAL 69	

NO CLINICAL SIGNS NOTED	
ANIMAL 70	

VARIOUS	
EXOPHTHALMOS (1)	G: .
ANIMAL 71	

NO CLINICAL SIGNS NOTED	
ANIMAL 72	

VARIOUS	
EXOPHTHALMOS (1)	G: .
ANIMAL 73	

NO CLINICAL SIGNS NOTED	
ANIMAL 74	

NO CLINICAL SIGNS NOTED	
ANIMAL 75	

SKIN / FUR	
HAIR LOSS (3)	G: 111.
(SHOULDER RIGHT)	
SCABS (3)	G:
(SHOULDER LEFT)	
SCABS (3)	G: 111.
(SHOULDER RIGHT)	
SCABBED WOUND (1)	G:
(SHOULDER RIGHT)	
ANIMAL 76	

VARIOUS	
EXOPHTHALMOS (1)	G:
ANIMAL 77	

NO CLINICAL SIGNS NOTED	

G: Highest daily grades

09009e53801f3ee2

207

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

CLINICAL SIGNS, DAILY

MALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
--------------------------------	---------------------------------	----------

ANIMAL 78	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 79	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 80	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 81	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 82	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 83	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 84	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 85	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 86	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 88	-----	
NO CLINICAL SIGNS NOTED		

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208

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

CLINICAL SIGNS, DAILY

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
--------------------------------	---------------------------------	----------

ANIMAL 89	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 90	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 91	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 92	-----	
VARIOUS		
EXOPHTHALMOS (1)	G: .	
ANIMAL 93	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 94	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 95	-----	
VARIOUS		
EXOPHTHALMOS (1)	G: .	
ANIMAL 96	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 97	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 98	-----	
VARIOUS		
EXOPHTHALMOS (1)	G: .	
ANIMAL 99	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 100	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 101	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 102	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 103	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 104	-----	
NO CLINICAL SIGNS NOTED		
ANIMAL 105	-----	
NO CLINICAL SIGNS NOTED		

G: Highest daily grades

09009e53801f3ee2

209

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

CLINICAL SIGNS, DAILY

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	RECOVERY WEEKS: 1.....2.....3.....4.....
--------------------------------	---

ANIMAL 122

NO CLINICAL SIGNS NOTED

ANIMAL 123

NO CLINICAL SIGNS NOTED

ANIMAL 124

NO CLINICAL SIGNS NOTED

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211

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS:	ACCLIMATIZATION 1.....	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 125			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 126			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 127			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 128			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 129			
NO CLINICAL SIGNS NOTED			
ANIMAL 130			
NO CLINICAL SIGNS NOTED			
ANIMAL 131			
NO CLINICAL SIGNS NOTED			
ANIMAL 132			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 133			
NO CLINICAL SIGNS NOTED			
ANIMAL 134			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 135			
VARIOUS			
EMACIATED (3)	G:		
EXOPHTHALMOS (1)	G:		
ANIMAL 136			
NO CLINICAL SIGNS NOTED			
ANIMAL 137			
NO CLINICAL SIGNS NOTED			
ANIMAL 138			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 139			
NO CLINICAL SIGNS NOTED			

G: Highest daily grades

09009e53801f3ee2

212

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....	ACCLIMATIZATION	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 140			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 141			
NO CLINICAL SIGNS NOTED			
ANIMAL 142			
BEHAVIOR			
AGGRESSIVE (3)	G:		
SKIN / FUR			
HAIR LOSS (3)	G:		
(THIGH HIND LEFT)			
ANIMAL 143			
NO CLINICAL SIGNS NOTED			
ANIMAL 144			
NO CLINICAL SIGNS NOTED			
ANIMAL 145			
BREATHING			
RALES (3)	G: .....		.....11111.....
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 146			
NO CLINICAL SIGNS NOTED			
ANIMAL 147			
NO CLINICAL SIGNS NOTED			
ANIMAL 148			
NO CLINICAL SIGNS NOTED			
ANIMAL 149			
NO CLINICAL SIGNS NOTED			
ANIMAL 150			
NO CLINICAL SIGNS NOTED			
ANIMAL 151			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 152			
NO CLINICAL SIGNS NOTED			
ANIMAL 153			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 154			
NO CLINICAL SIGNS NOTED			

G: Highest daily grades

09009e53801f3ee2

213

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....	ACCLIMATIZATION	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 155			

NO CLINICAL SIGNS NOTED			
ANIMAL 156			

NO CLINICAL SIGNS NOTED			
ANIMAL 157			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 158			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 159			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 160			

NO CLINICAL SIGNS NOTED			

G: Highest daily grades

09009e53801f3ee2

214

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS:	ACCLIMATIZATION 1.....	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 161			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 162			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 163			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 164			
NO CLINICAL SIGNS NOTED			
ANIMAL 165			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 166			
NO CLINICAL SIGNS NOTED			
ANIMAL 167			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 168			
NO CLINICAL SIGNS NOTED			
ANIMAL 169			
NO CLINICAL SIGNS NOTED			
ANIMAL 170			
NO CLINICAL SIGNS NOTED			
ANIMAL 171			
NO CLINICAL SIGNS NOTED			
ANIMAL 172			
NO CLINICAL SIGNS NOTED			
ANIMAL 173			
NO CLINICAL SIGNS NOTED			
ANIMAL 174			
NO CLINICAL SIGNS NOTED			
ANIMAL 175			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 176			
NO CLINICAL SIGNS NOTED			

G: Highest daily grades

09009e53801f3ee2

215

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS:	ACCLIMATIZATION 1.....	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 177			

NO CLINICAL SIGNS NOTED			
ANIMAL 178			

NO CLINICAL SIGNS NOTED			
ANIMAL 179			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 180			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 181			

NO CLINICAL SIGNS NOTED			
ANIMAL 182			

NO CLINICAL SIGNS NOTED			
ANIMAL 183			

NO CLINICAL SIGNS NOTED			
ANIMAL 184			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 185			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....
ANIMAL 186			

VARIOUS			
EXOPHTHALMOS (1)	G: .....		.....

G: Highest daily grades

09009e53801f3ee2

216

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 3 (1000 MG/KG/DAY)

[illegible]

G: Highest daily grades

09009e53801f3ee2

217

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS:	ACCLIMATIZATION 1.....	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 201			
VARIOUS EXOPHTHALMOS (1)	G:		
ANIMAL 202			
NO CLINICAL SIGNS NOTED			
ANIMAL 203			
NO CLINICAL SIGNS NOTED			
ANIMAL 204			
VARIOUS EXOPHTHALMOS (1)	G:		
ANIMAL 205			
VARIOUS EXOPHTHALMOS (1)	G:		
ANIMAL 206			
VARIOUS EXOPHTHALMOS (1)	G:		
ANIMAL 207			
VARIOUS EXOPHTHALMOS (1)	G:		
ANIMAL 208			
VARIOUS EXOPHTHALMOS (1)	G:		
ANIMAL 209			
VARIOUS EXOPHTHALMOS (1)	G:		
ANIMAL 210			
NO CLINICAL SIGNS NOTED			
ANIMAL 211			
VARIOUS EXOPHTHALMOS (1)	G:		
ANIMAL 212			
VARIOUS EXOPHTHALMOS (1)	G:		

G: Highest daily grades

09009e53801f3ee2

218

RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**CLINICAL SIGNS, DAILY****FEMALES****GROUP 4 (2000 MG/KG/DAY)**

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....	ACCLIMATIZATION	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 213			
NO CLINICAL SIGNS NOTED			
ANIMAL 214			
NO CLINICAL SIGNS NOTED			
ANIMAL 215			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 216			
VARIOUS			
EMACIATED (3)	G:		
ANIMAL 217			
NO CLINICAL SIGNS NOTED			
ANIMAL 218			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 219			
NO CLINICAL SIGNS NOTED			
ANIMAL 220			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 221			
NO CLINICAL SIGNS NOTED			
ANIMAL 222			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 223			
NO CLINICAL SIGNS NOTED			
ANIMAL 224			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 225			
NO CLINICAL SIGNS NOTED			
ANIMAL 226			
VARIOUS			
EMACIATED (3)	G:		
EXOPHTHALMOS (1)	G:		
ANIMAL 227			
VARIOUS			
EXOPHTHALMOS (1)	G:		

G: Highest daily grades

09009e53801f3ee2

219

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS:	ACCLIMATIZATION 1.....	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 228			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 229			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 230			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 231			
VARIOUS			
KINKED (3) (TAIL APEX)	G:		
ANIMAL 232			
SKIN / FUR			
HAIR LOSS (3) (FORELEG LEFT)	G:		
HAIR LOSS (3) (FORELEG RIGHT)	G:		
ANIMAL 233			
VARIOUS			
EMACIATED (3)	G:		
EXOPHTHALMOS (1)	G:		
ANIMAL 234			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 235			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 236			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 237			
NO CLINICAL SIGNS NOTED			
ANIMAL 238			
NO CLINICAL SIGNS NOTED			
ANIMAL 239			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 240			
NO CLINICAL SIGNS NOTED			
ANIMAL 241			
NO CLINICAL SIGNS NOTED			

G: Highest daily grades

09009e53801f3ee2

220

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS:	ACCLIMATIZATION 1.....	TREATMENT 1.....2.....3.....4.....5.....6.....
ANIMAL 242			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 243			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 244			
NO CLINICAL SIGNS NOTED			
ANIMAL 245			
NO CLINICAL SIGNS NOTED			
ANIMAL 246			
NO CLINICAL SIGNS NOTED			
ANIMAL 247			
VARIOUS			
EXOPHTHALMOS (1)	G:		
ANIMAL 248			
VARIOUS			
EXOPHTHALMOS (1)	G:		

G: Highest daily grades

09009e53801f3ee2

221

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
ANIMAL 125	

VARIOUS	
EXOPHTHALMOS (1)	G: .....1111...111.....
ANIMAL 126	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 127	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 128	

VARIOUS	
EXOPHTHALMOS (1)	G: .....1111...111.....
ANIMAL 129	

NO CLINICAL SIGNS NOTED	
ANIMAL 130	

NO CLINICAL SIGNS NOTED	
ANIMAL 131	

NO CLINICAL SIGNS NOTED	
ANIMAL 132	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 133	

NO CLINICAL SIGNS NOTED	
ANIMAL 134	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 135	

VARIOUS	
EMACIATED (3)	G: .....11111...
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 136	

NO CLINICAL SIGNS NOTED	
ANIMAL 137	

NO CLINICAL SIGNS NOTED	
ANIMAL 138	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 139	

NO CLINICAL SIGNS NOTED	

G: Highest daily grades

09009e53801f3ee2

222

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 7.....8.....9.....10.....11.....12.....13.....14	TREATMENT
ANIMAL 140		
VARIOUS		
EXOPHTHALMOS (1)	G:	111.....
ANIMAL 141		
NO CLINICAL SIGNS NOTED		
ANIMAL 142		
BEHAVIOR		
AGGRESSIVE (3)	G:	111...
SKIN / FUR		
HAIR LOSS (3)	G:	221111
(THIGH HIND LEFT)		
ANIMAL 143		
NO CLINICAL SIGNS NOTED		
ANIMAL 144		
NO CLINICAL SIGNS NOTED		
ANIMAL 145		
BREATHING		
RALES (3)	G:	
VARIOUS		
EXOPHTHALMOS (1)	G:	111.....
ANIMAL 146		
NO CLINICAL SIGNS NOTED		
ANIMAL 147		
NO CLINICAL SIGNS NOTED		
ANIMAL 148		
NO CLINICAL SIGNS NOTED		
ANIMAL 149		
NO CLINICAL SIGNS NOTED		
ANIMAL 150		
NO CLINICAL SIGNS NOTED		
ANIMAL 151		
VARIOUS		
EXOPHTHALMOS (1)	G:	1111...111.....
ANIMAL 152		
NO CLINICAL SIGNS NOTED		
ANIMAL 153		
VARIOUS		
EXOPHTHALMOS (1)	G:	111.....
ANIMAL 154		
NO CLINICAL SIGNS NOTED		

G: Highest daily grades

09009e53801f3ee2

223

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
<hr/>	
ANIMAL 155	

NO CLINICAL SIGNS NOTED	
ANIMAL 156	

NO CLINICAL SIGNS NOTED	
ANIMAL 157	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 158	

VARIOUS	
EXOPHTHALMOS (1)	G: .....1111.....
ANIMAL 159	

VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 160	

NO CLINICAL SIGNS NOTED	

G: Highest daily grades

09009e53801f3ee2

224

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
ANIMAL 161	
VARIOUS	
EXOPHTHALMOS (1)	G: .....1111...111.....
ANIMAL 162	
VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 163	
VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 164	
NO CLINICAL SIGNS NOTED	
ANIMAL 165	
VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 166	
NO CLINICAL SIGNS NOTED	
ANIMAL 167	
VARIOUS	
EXOPHTHALMOS (1)	G: .....1111111111.....
ANIMAL 168	
NO CLINICAL SIGNS NOTED	
ANIMAL 169	
NO CLINICAL SIGNS NOTED	
ANIMAL 170	
NO CLINICAL SIGNS NOTED	
ANIMAL 171	
NO CLINICAL SIGNS NOTED	
ANIMAL 172	
NO CLINICAL SIGNS NOTED	
ANIMAL 173	
NO CLINICAL SIGNS NOTED	
ANIMAL 174	
NO CLINICAL SIGNS NOTED	
ANIMAL 175	
VARIOUS	
EXOPHTHALMOS (1)	G: .....1111111111111111.....
ANIMAL 176	
NO CLINICAL SIGNS NOTED	

G: Highest daily grades

09009e53801f3ee2

225

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
ANIMAL 177	
NO CLINICAL SIGNS NOTED	
ANIMAL 178	
NO CLINICAL SIGNS NOTED	
ANIMAL 179	
VARIOUS EXOPHTHALMOS (1)	G: .....111111111.....
ANIMAL 180	
VARIOUS EXOPHTHALMOS (1)	G: .....1111...111.....
ANIMAL 181	
NO CLINICAL SIGNS NOTED	
ANIMAL 182	
NO CLINICAL SIGNS NOTED	
ANIMAL 183	
NO CLINICAL SIGNS NOTED	
ANIMAL 184	
VARIOUS EXOPHTHALMOS (1)	G: .....1111111111111111.....
ANIMAL 185	
VARIOUS EXOPHTHALMOS (1)	G: .....1111111111111111.....
ANIMAL 186	
VARIOUS EXOPHTHALMOS (1)	G: .....1111111111111111.....

G: Highest daily grades

09009e53801f3ee2

226

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 3 (1000 MG/KG/DAY)

[illegible]

G: Highest daily grades

09009e53801f3ee2

227

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 7.....8.....9.....10.....11.....12.....13.....14	TREATMENT
ANIMAL 201		
VARIOUS		
EXOPHTHALMOS (1)	G:	111.....
ANIMAL 202		
NO CLINICAL SIGNS NOTED		
ANIMAL 203		
NO CLINICAL SIGNS NOTED		
ANIMAL 204		
VARIOUS		
EXOPHTHALMOS (1)	G:	111111111111...111.....
ANIMAL 205		
VARIOUS		
EXOPHTHALMOS (1)	G:	111.....
ANIMAL 206		
VARIOUS		
EXOPHTHALMOS (1)	G:	1111...111.....
ANIMAL 207		
VARIOUS		
EXOPHTHALMOS (1)	G:	111111111111.....
ANIMAL 208		
VARIOUS		
EXOPHTHALMOS (1)	G:	111.....
ANIMAL 209		
VARIOUS		
EXOPHTHALMOS (1)	G:	111.....
ANIMAL 210		
NO CLINICAL SIGNS NOTED		
ANIMAL 211		
VARIOUS		
EXOPHTHALMOS (1)	G:	111111111111...111.....
ANIMAL 212		
VARIOUS		
EXOPHTHALMOS (1)	G:	111111111111...111.....

G: Highest daily grades

09009e53801f3ee2

228

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS:	TREATMENT
	7.....8.....9.....10.....11.....12.....13.....14	
ANIMAL 213		
NO CLINICAL SIGNS NOTED		
ANIMAL 214		
NO CLINICAL SIGNS NOTED		
ANIMAL 215		
VARIOUS		
EXOPHTHALMOS (1)	G:	111111111111.....
ANIMAL 216		
VARIOUS		
EMACIATED (3)	G:	1
ANIMAL 217		
NO CLINICAL SIGNS NOTED		
ANIMAL 218		
VARIOUS		
EXOPHTHALMOS (1)	G:	111111111111...111.....
ANIMAL 219		
NO CLINICAL SIGNS NOTED		
ANIMAL 220		
VARIOUS		
EXOPHTHALMOS (1)	G:	111.....
ANIMAL 221		
NO CLINICAL SIGNS NOTED		
ANIMAL 222		
VARIOUS		
EXOPHTHALMOS (1)	G:	1111...111.....
ANIMAL 223		
NO CLINICAL SIGNS NOTED		
ANIMAL 224		
VARIOUS		
EXOPHTHALMOS (1)	G:	111111111111...111.....
ANIMAL 225		
NO CLINICAL SIGNS NOTED		
ANIMAL 226		
VARIOUS		
EMACIATED (3)	G:	11111...
EXOPHTHALMOS (1)	G:	111111111111.....
ANIMAL 227		
VARIOUS		
EXOPHTHALMOS (1)	G:	111111111111.....

G: Highest daily grades

09009e53801f3ee2

229

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 7.....8.....9.....10.....11.....12.....13.....14
ANIMAL 228	
VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 229	
VARIOUS	
EXOPHTHALMOS (1)	G: .....1111111111.....
ANIMAL 230	
VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 231	
VARIOUS	
KINKED (3) (TAIL APEX)	G: .....11111
ANIMAL 232	
SKIN / FUR	
HAIR LOSS (3) (FORELEG LEFT)	G: .....111111
HAIR LOSS (3) (FORELEG RIGHT)	G: .....111111
ANIMAL 233	
VARIOUS	
EMACIATED (3)	G: .....11111...
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 234	
VARIOUS	
EXOPHTHALMOS (1)	G: .....1111111111...111.....
ANIMAL 235	
VARIOUS	
EXOPHTHALMOS (1)	G: .....1111111111.....
ANIMAL 236	
VARIOUS	
EXOPHTHALMOS (1)	G: .....1111111111...111.....
ANIMAL 237	
NO CLINICAL SIGNS NOTED	
ANIMAL 238	
NO CLINICAL SIGNS NOTED	
ANIMAL 239	
VARIOUS	
EXOPHTHALMOS (1)	G: .....111.....
ANIMAL 240	
NO CLINICAL SIGNS NOTED	
ANIMAL 241	
NO CLINICAL SIGNS NOTED	

G: Highest daily grades

09009e53801f3ee2

230

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS:	TREATMENT
	7.....8.....9.....10.....11.....12.....13.....14	
ANIMAL 242		
VARIOUS		
EXOPHTHALMOS (1)	G:	.....111111111111...111.....
ANIMAL 243		
VARIOUS		
EXOPHTHALMOS (1)	G:	.....1111111111111111.....
ANIMAL 244		
NO CLINICAL SIGNS NOTED		
ANIMAL 245		
NO CLINICAL SIGNS NOTED		
ANIMAL 246		
NO CLINICAL SIGNS NOTED		
ANIMAL 247		
VARIOUS		
EXOPHTHALMOS (1)	G:	.....1111.....
ANIMAL 248		
VARIOUS		
EXOPHTHALMOS (1)	G:	.....111111111111...111.....

G: Highest daily grades

09009e53801f3ee2

231

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	RECOVERY			
	WEEKS: 1.....2.....3.....4.....			
ANIMAL 125				
VARIOUS				
EXOPHTHALMOS (1)	G: ..			
ANIMAL 126				
VARIOUS				
EXOPHTHALMOS (1)	G: ..			
ANIMAL 127				
VARIOUS				
EXOPHTHALMOS (1)	G: ..			
ANIMAL 128				
VARIOUS				
EXOPHTHALMOS (1)	G: ..			
ANIMAL 129				
NO CLINICAL SIGNS NOTED				
ANIMAL 130				
NO CLINICAL SIGNS NOTED				
ANIMAL 131				
NO CLINICAL SIGNS NOTED				
ANIMAL 132				
VARIOUS				
EXOPHTHALMOS (1)	G: ..			
ANIMAL 133				
NO CLINICAL SIGNS NOTED				
ANIMAL 134				
VARIOUS				
EXOPHTHALMOS (1)	G: ..			
ANIMAL 135				
VARIOUS				
EMACIATED (3)	G: ...			
EXOPHTHALMOS (1)	G: ...			
ANIMAL 136				
NO CLINICAL SIGNS NOTED				
ANIMAL 137				
NO CLINICAL SIGNS NOTED				
ANIMAL 138				
VARIOUS				
EXOPHTHALMOS (1)	G: ...			
ANIMAL 139				
NO CLINICAL SIGNS NOTED				

G: Highest daily grades

09009e53801f3ee2

232

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
ANIMAL 140		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 141		
NO CLINICAL SIGNS NOTED		
ANIMAL 142		
BEHAVIOR		
AGGRESSIVE (3)	G: ...	
SKIN / FUR		
HAIR LOSS (3)	G: 11.	
(THIGH HIND LEFT)		
ANIMAL 143		
NO CLINICAL SIGNS NOTED		
ANIMAL 144		
NO CLINICAL SIGNS NOTED		
ANIMAL 145		
BREATHING		
RALES (3)	G:	
VARIOUS		
EXOPHTHALMOS (1)	G:	
ANIMAL 146		
NO CLINICAL SIGNS NOTED		
ANIMAL 147		
NO CLINICAL SIGNS NOTED		
ANIMAL 148		
NO CLINICAL SIGNS NOTED		
ANIMAL 149		
NO CLINICAL SIGNS NOTED		
ANIMAL 150		
NO CLINICAL SIGNS NOTED		
ANIMAL 151		
VARIOUS		
EXOPHTHALMOS (1)	G:	
ANIMAL 152		
NO CLINICAL SIGNS NOTED		
ANIMAL 153		
VARIOUS		
EXOPHTHALMOS (1)	G:	
ANIMAL 154		
NO CLINICAL SIGNS NOTED		

G: Highest daily grades

09009e53801f3ee2

233

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	RECOVERY WEEKS: 1.....2.....3.....4.....
--------------------------------	---

ANIMAL 155

NO CLINICAL SIGNS NOTED

ANIMAL 156

NO CLINICAL SIGNS NOTED

ANIMAL 157

VARIOUS
EXOPHTHALMOS (1) G: ..

ANIMAL 158

VARIOUS
EXOPHTHALMOS (1) G: ..

ANIMAL 159

VARIOUS
EXOPHTHALMOS (1) G: ..

ANIMAL 160

NO CLINICAL SIGNS NOTED

G: Highest daily grades

09009e53801f3ee2

234

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
ANIMAL 161		
VARIOUS		
EXOPHTHALMOS (1)	G: ..	
ANIMAL 162		
VARIOUS		
EXOPHTHALMOS (1)	G: ..	
ANIMAL 163		
VARIOUS		
EXOPHTHALMOS (1)	G: ..	
ANIMAL 164		
NO CLINICAL SIGNS NOTED		
ANIMAL 165		
VARIOUS		
EXOPHTHALMOS (1)	G: ..	
ANIMAL 166		
NO CLINICAL SIGNS NOTED		
ANIMAL 167		
VARIOUS		
EXOPHTHALMOS (1)	G: ..	
ANIMAL 168		
NO CLINICAL SIGNS NOTED		
ANIMAL 169		
NO CLINICAL SIGNS NOTED		
ANIMAL 170		
NO CLINICAL SIGNS NOTED		
ANIMAL 171		
NO CLINICAL SIGNS NOTED		
ANIMAL 172		
NO CLINICAL SIGNS NOTED		
ANIMAL 173		
NO CLINICAL SIGNS NOTED		
ANIMAL 174		
NO CLINICAL SIGNS NOTED		
ANIMAL 175		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 176		
NO CLINICAL SIGNS NOTED		

G: Highest daily grades

09009e53801f3ee2

235

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
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ANIMAL 177		

NO CLINICAL SIGNS NOTED		
ANIMAL 178		

NO CLINICAL SIGNS NOTED		
ANIMAL 179		

VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 180		

VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 181		

NO CLINICAL SIGNS NOTED		
ANIMAL 182		

NO CLINICAL SIGNS NOTED		
ANIMAL 183		

NO CLINICAL SIGNS NOTED		
ANIMAL 184		

VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 185		

VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 186		

VARIOUS		
EXOPHTHALMOS (1)	G: ...	

G: Highest daily grades

09009e53801f3ee2

236

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
--------------------------------	---------------------------------	----------

ANIMAL 187		

NO CLINICAL SIGNS NOTED		
ANIMAL 188		

NO CLINICAL SIGNS NOTED		
ANIMAL 189		

POSTURE		
KINKED (3)	G: 1.	
(TAIL APEX)		
VARIOUS		
EMACIATED (3)	G: 1.	
EXOPHTHALMOS (1)	G: ..	
ANIMAL 190		

VARIOUS		
EXOPHTHALMOS (1)	G: ..	
ANIMAL 191		

VARIOUS		
EXOPHTHALMOS (1)	G: ..	
ANIMAL 192		

VARIOUS		
EXOPHTHALMOS (1)	G: ..	
ANIMAL 193		

VARIOUS		
EXOPHTHALMOS (1)	G: ..	
ANIMAL 194		

VARIOUS		
EXOPHTHALMOS (1)	G: ..	
ANIMAL 195		

VARIOUS		
EXOPHTHALMOS (1)	G: ..	
ANIMAL 196		

NO CLINICAL SIGNS NOTED		
ANIMAL 197		

NO CLINICAL SIGNS NOTED		
ANIMAL 198		

NO CLINICAL SIGNS NOTED		
ANIMAL 199		

NO CLINICAL SIGNS NOTED		
ANIMAL 200		

NO CLINICAL SIGNS NOTED		

G: Highest daily grades

09009e53801f3ee2

237

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
--------------------------------	---------------------------------	----------

ANIMAL 201		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 202		
NO CLINICAL SIGNS NOTED		
ANIMAL 203		
NO CLINICAL SIGNS NOTED		
ANIMAL 204		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 205		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 206		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 207		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 208		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 209		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 210		
NO CLINICAL SIGNS NOTED		
ANIMAL 211		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 212		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	

G: Highest daily grades

09009e53801f3ee2

238

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	RECOVERY WEEKS: 1.....2.....3.....4.....
--------------------------------	---

ANIMAL 213	

NO CLINICAL SIGNS NOTED	
ANIMAL 214	

NO CLINICAL SIGNS NOTED	
ANIMAL 215	

VARIOUS	
EXOPHTHALMOS (1)	G: ..
ANIMAL 216	

VARIOUS	
EMACIATED (3)	G: 1.
ANIMAL 217	

NO CLINICAL SIGNS NOTED	
ANIMAL 218	

VARIOUS	
EXOPHTHALMOS (1)	G: ..
ANIMAL 219	

NO CLINICAL SIGNS NOTED	
ANIMAL 220	

VARIOUS	
EXOPHTHALMOS (1)	G: ..
ANIMAL 221	

NO CLINICAL SIGNS NOTED	
ANIMAL 222	

VARIOUS	
EXOPHTHALMOS (1)	G: ..
ANIMAL 223	

NO CLINICAL SIGNS NOTED	
ANIMAL 224	

VARIOUS	
EXOPHTHALMOS (1)	G: ...
ANIMAL 225	

NO CLINICAL SIGNS NOTED	
ANIMAL 226	

VARIOUS	
EMACIATED (3)	G: ...
EXOPHTHALMOS (1)	G: ...
ANIMAL 227	

VARIOUS	
EXOPHTHALMOS (1)	G: ...

G: Highest daily grades

09009e53801f3ee2

239

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

CLINICAL SIGNS, DAILY

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	WEEKS: 1.....2.....3.....4.....	RECOVERY
ANIMAL 228		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 229		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 230		
VARIOUS		
EXOPHTHALMOS (1)	G: ...	
ANIMAL 231		
VARIOUS		
KINKED (3)	G: 11.	
(TAIL APEX)		
ANIMAL 232		
SKIN / FUR		
HAIR LOSS (3)	G: 11.	
(FORELEG LEFT)		
HAIR LOSS (3)	G: 11.	
(FORELEG RIGHT)		
ANIMAL 233		
VARIOUS		
EMACIATED (3)	G:	
EXOPHTHALMOS (1)	G:	
ANIMAL 234		
VARIOUS		
EXOPHTHALMOS (1)	G:	
ANIMAL 235		
VARIOUS		
EXOPHTHALMOS (1)	G:	
ANIMAL 236		
VARIOUS		
EXOPHTHALMOS (1)	G:	
ANIMAL 237		
NO CLINICAL SIGNS NOTED		
ANIMAL 238		
NO CLINICAL SIGNS NOTED		
ANIMAL 239		
VARIOUS		
EXOPHTHALMOS (1)	G:	
ANIMAL 240		
NO CLINICAL SIGNS NOTED		
ANIMAL 241		
NO CLINICAL SIGNS NOTED		

G: Highest daily grades

09009e53801f3ee2

240

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

CLINICAL SIGNS, DAILY

FEMALES

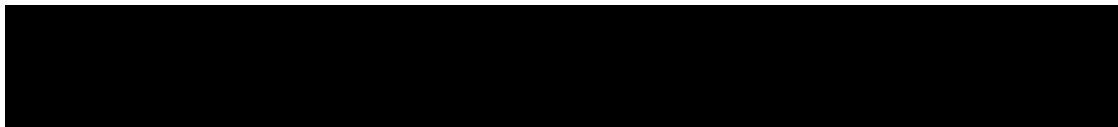
GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	RECOVERY			
	WEEKS: 1.....2.....3.....4.....			
ANIMAL 242				
VARIOUS				
EXOPHTHALMOS (1)	G:			
ANIMAL 243				
VARIOUS				
EXOPHTHALMOS (1)	G: ..			
ANIMAL 244				
NO CLINICAL SIGNS NOTED				
ANIMAL 245				
NO CLINICAL SIGNS NOTED				
ANIMAL 246				
NO CLINICAL SIGNS NOTED				
ANIMAL 247				
VARIOUS				
EXOPHTHALMOS (1)	G: ..			
ANIMAL 248				
VARIOUS				
EXOPHTHALMOS (1)	G: ..			

G: Highest daily grades

09009e53801f3ee2

241



CLINICAL SIGNS, WEEKLY

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
<hr/>		
ANIMAL 1		

NO CLINICAL SIGNS NOTED		
ANIMAL 2		

NO CLINICAL SIGNS NOTED		
ANIMAL 3		

NO CLINICAL SIGNS NOTED		
ANIMAL 4		

NO CLINICAL SIGNS NOTED		
ANIMAL 5		

VARIOUS		
KINKED (3)	G: 1.	....
(TAIL APEX)		
ANIMAL 6		

NO CLINICAL SIGNS NOTED		
ANIMAL 7		

NO CLINICAL SIGNS NOTED		
ANIMAL 8		

NO CLINICAL SIGNS NOTED		
ANIMAL 9		

NO CLINICAL SIGNS NOTED		
ANIMAL 10		

NO CLINICAL SIGNS NOTED		
ANIMAL 11		

NO CLINICAL SIGNS NOTED		
ANIMAL 12		

NO CLINICAL SIGNS NOTED		
ANIMAL 13		

NO CLINICAL SIGNS NOTED		
ANIMAL 14		

NO CLINICAL SIGNS NOTED		
ANIMAL 15		

NO CLINICAL SIGNS NOTED		
ANIMAL 16		

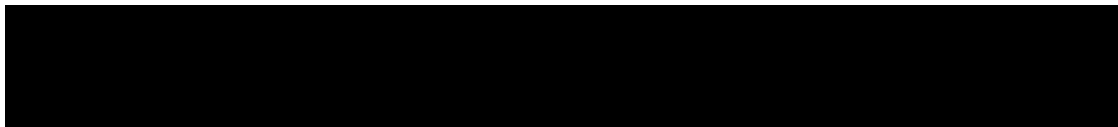
NO CLINICAL SIGNS NOTED		
ANIMAL 17		

NO CLINICAL SIGNS NOTED		

G: Highest weekly grades

09009e5380242f07

242



CLINICAL SIGNS, WEEKLY

MALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
<hr/>		
ANIMAL 18		

NO CLINICAL SIGNS NOTED		
ANIMAL 19		

NO CLINICAL SIGNS NOTED		
ANIMAL 20		

NO CLINICAL SIGNS NOTED		
ANIMAL 21		

NO CLINICAL SIGNS NOTED		
ANIMAL 22		

NO CLINICAL SIGNS NOTED		
ANIMAL 23		

NO CLINICAL SIGNS NOTED		
ANIMAL 24		

NO CLINICAL SIGNS NOTED		
ANIMAL 25		

NO CLINICAL SIGNS NOTED		
ANIMAL 26		

NO CLINICAL SIGNS NOTED		
ANIMAL 27		

NO CLINICAL SIGNS NOTED		
ANIMAL 28		

VARIOUS		
EYE RIGHT, WHITE (3)	G: ..	...1
ANIMAL 29		

NO CLINICAL SIGNS NOTED		
ANIMAL 30		

NO CLINICAL SIGNS NOTED		
ANIMAL 31		

NO CLINICAL SIGNS NOTED		
ANIMAL 32		

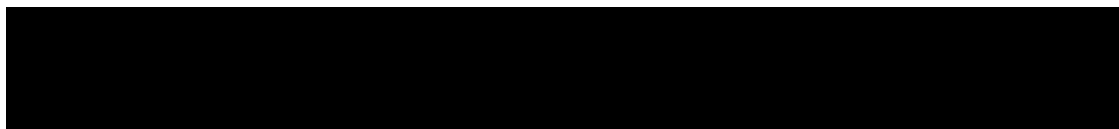
NO CLINICAL SIGNS NOTED		
ANIMAL 33		

NO CLINICAL SIGNS NOTED		
ANIMAL 34		

NO CLINICAL SIGNS NOTED		

G: Highest weekly grades

09009e5380242f07



CLINICAL SIGNS, WEEKLY

MALES

GROUP 1 (0 MG/KG/DAY)

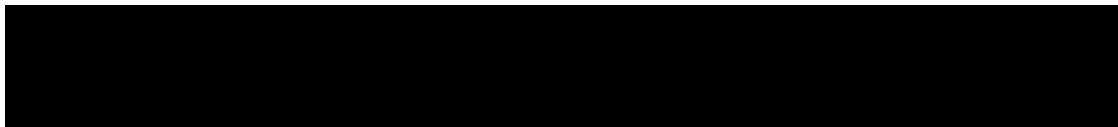
SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1 . . .
--------------------------------	------------------------	---------------------

ANIMAL 35

NO CLINICAL SIGNS NOTED

ANIMAL 36

NO CLINICAL SIGNS NOTED



CLINICAL SIGNS, WEEKLY

MALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
<hr/>		
ANIMAL 37		

NO CLINICAL SIGNS NOTED		
ANIMAL 38		

NO CLINICAL SIGNS NOTED		
ANIMAL 39		

NO CLINICAL SIGNS NOTED		
ANIMAL 40		

NO CLINICAL SIGNS NOTED		
ANIMAL 41		

VARIOUS		
KINKED (3)	G: 1.	....
(TAIL APEX)		
ANIMAL 42		

NO CLINICAL SIGNS NOTED		
ANIMAL 43		

NO CLINICAL SIGNS NOTED		
ANIMAL 44		

NO CLINICAL SIGNS NOTED		
ANIMAL 45		

NO CLINICAL SIGNS NOTED		
ANIMAL 46		

NO CLINICAL SIGNS NOTED		
ANIMAL 47		

NO CLINICAL SIGNS NOTED		
ANIMAL 48		

NO CLINICAL SIGNS NOTED		
ANIMAL 49		

NO CLINICAL SIGNS NOTED		
ANIMAL 50		

NO CLINICAL SIGNS NOTED		
ANIMAL 51		

NO CLINICAL SIGNS NOTED		
ANIMAL 52		

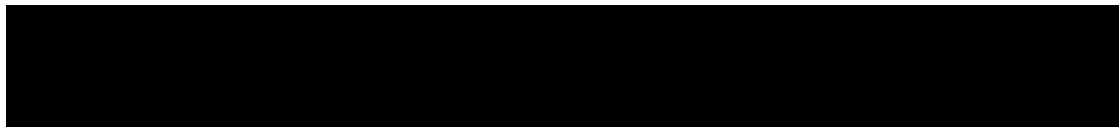
NO CLINICAL SIGNS NOTED		
ANIMAL 53		

NO CLINICAL SIGNS NOTED		

G: Highest weekly grades

09009e5380242f07

245



CLINICAL SIGNS, WEEKLY

MALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
<hr/>		
ANIMAL 54		

VARIOUS		
KINKED (3)	G: 1.	....
(TAIL APEX)		
ANIMAL 55		

NO CLINICAL SIGNS NOTED		
ANIMAL 56		

NO CLINICAL SIGNS NOTED		
ANIMAL 57		

NO CLINICAL SIGNS NOTED		
ANIMAL 58		

NO CLINICAL SIGNS NOTED		
ANIMAL 59		

NO CLINICAL SIGNS NOTED		
ANIMAL 60		

NO CLINICAL SIGNS NOTED		
ANIMAL 61		

NO CLINICAL SIGNS NOTED		
ANIMAL 62		

NO CLINICAL SIGNS NOTED		

G: Highest weekly grades

09009e5380242f07

246



CLINICAL SIGNS, WEEKLY

MALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
--------------------------------	------------------------	------------------

ANIMAL 63

NO CLINICAL SIGNS NOTED

ANIMAL 64

NO CLINICAL SIGNS NOTED

ANIMAL 65

NO CLINICAL SIGNS NOTED

ANIMAL 66

NO CLINICAL SIGNS NOTED

ANIMAL 67

NO CLINICAL SIGNS NOTED

ANIMAL 68

NO CLINICAL SIGNS NOTED

ANIMAL 69

NO CLINICAL SIGNS NOTED

ANIMAL 70

NO CLINICAL SIGNS NOTED

ANIMAL 71

NO CLINICAL SIGNS NOTED

ANIMAL 72

NO CLINICAL SIGNS NOTED

ANIMAL 73

NO CLINICAL SIGNS NOTED

ANIMAL 74

NO CLINICAL SIGNS NOTED

ANIMAL 75

SKIN / FUR
CRUSTS (3) G: 1.
(SHOULDER RIGHT)

ANIMAL 76

NO CLINICAL SIGNS NOTED

ANIMAL 77

NO CLINICAL SIGNS NOTED

ANIMAL 78

NO CLINICAL SIGNS NOTED

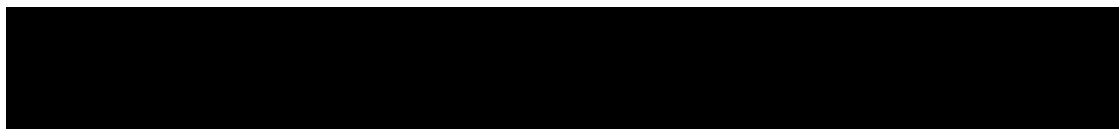
ANIMAL 79

NO CLINICAL SIGNS NOTED

G: Highest weekly grades

09009e5380242f07

247



CLINICAL SIGNS, WEEKLY

MALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
--------------------------------	------------------------	------------------

ANIMAL 80		

NO CLINICAL SIGNS NOTED		
ANIMAL 81		

NO CLINICAL SIGNS NOTED		
ANIMAL 82		

NO CLINICAL SIGNS NOTED		
ANIMAL 83		

NO CLINICAL SIGNS NOTED		
ANIMAL 84		

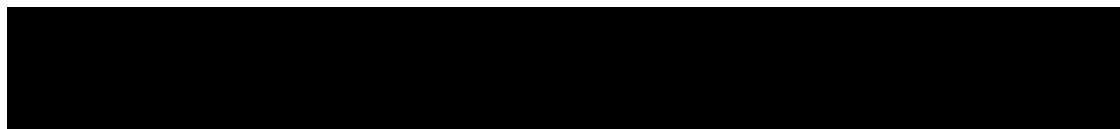
NO CLINICAL SIGNS NOTED		
ANIMAL 85		

NO CLINICAL SIGNS NOTED		
ANIMAL 86		

NO CLINICAL SIGNS NOTED		
ANIMAL 87		

NO CLINICAL SIGNS NOTED		
ANIMAL 88		

NO CLINICAL SIGNS NOTED		



CLINICAL SIGNS, WEEKLY

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
<hr/>		
ANIMAL 89		

NO CLINICAL SIGNS NOTED		
ANIMAL 90		

NO CLINICAL SIGNS NOTED		
ANIMAL 91		

NO CLINICAL SIGNS NOTED		
ANIMAL 92		

NO CLINICAL SIGNS NOTED		
ANIMAL 93		

NO CLINICAL SIGNS NOTED		
ANIMAL 94		

NO CLINICAL SIGNS NOTED		
ANIMAL 95		

NO CLINICAL SIGNS NOTED		
ANIMAL 96		

NO CLINICAL SIGNS NOTED		
ANIMAL 97		

NO CLINICAL SIGNS NOTED		
ANIMAL 98		

NO CLINICAL SIGNS NOTED		
ANIMAL 99		

NO CLINICAL SIGNS NOTED		
ANIMAL 100		

NO CLINICAL SIGNS NOTED		
ANIMAL 101		

NO CLINICAL SIGNS NOTED		
ANIMAL 102		

NO CLINICAL SIGNS NOTED		
ANIMAL 103		

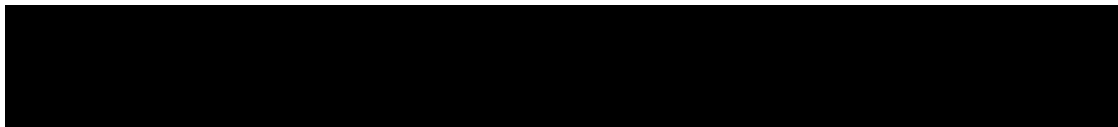
NO CLINICAL SIGNS NOTED		
ANIMAL 104		

NO CLINICAL SIGNS NOTED		
ANIMAL 105		

NO CLINICAL SIGNS NOTED		

09009e5380242f07

249



CLINICAL SIGNS, WEEKLY

MALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
--------------------------------	------------------------	------------------

ANIMAL 106		

NO CLINICAL SIGNS NOTED		
ANIMAL 107		

NO CLINICAL SIGNS NOTED		
ANIMAL 108		

NO CLINICAL SIGNS NOTED		
ANIMAL 109		

NO CLINICAL SIGNS NOTED		
ANIMAL 110		

NO CLINICAL SIGNS NOTED		
ANIMAL 111		

NO CLINICAL SIGNS NOTED		
ANIMAL 112		

NO CLINICAL SIGNS NOTED		
ANIMAL 113		

NO CLINICAL SIGNS NOTED		
ANIMAL 114		

NO CLINICAL SIGNS NOTED		
ANIMAL 115		

NO CLINICAL SIGNS NOTED		
ANIMAL 116		

NO CLINICAL SIGNS NOTED		
ANIMAL 117		

NO CLINICAL SIGNS NOTED		
ANIMAL 118		

NO CLINICAL SIGNS NOTED		
ANIMAL 119		

NO CLINICAL SIGNS NOTED		
ANIMAL 120		

NO CLINICAL SIGNS NOTED		
ANIMAL 121		

NO CLINICAL SIGNS NOTED		
ANIMAL 122		

NO CLINICAL SIGNS NOTED		

09009e5380242f07

250



CLINICAL SIGNS, WEEKLY

MALES

GROUP 4 (2000 MG/KG/DAY)

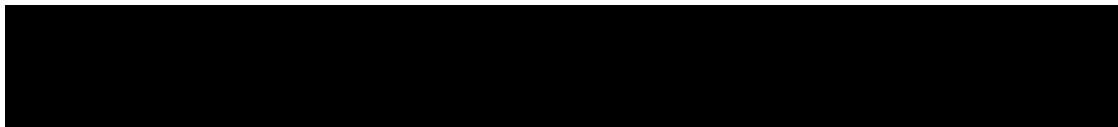
SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1 . . .
--------------------------------	------------------------	---------------------

ANIMAL 123

NO CLINICAL SIGNS NOTED

ANIMAL 124

NO CLINICAL SIGNS NOTED



CLINICAL SIGNS, WEEKLY

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
--------------------------------	------------------------	------------------

ANIMAL 125		

NO CLINICAL SIGNS NOTED		
ANIMAL 126		

NO CLINICAL SIGNS NOTED		
ANIMAL 127		

NO CLINICAL SIGNS NOTED		
ANIMAL 128		

NO CLINICAL SIGNS NOTED		
ANIMAL 129		

NO CLINICAL SIGNS NOTED		
ANIMAL 130		

NO CLINICAL SIGNS NOTED		
ANIMAL 131		

NO CLINICAL SIGNS NOTED		
ANIMAL 132		

NO CLINICAL SIGNS NOTED		
ANIMAL 133		

NO CLINICAL SIGNS NOTED		
ANIMAL 134		

NO CLINICAL SIGNS NOTED		
ANIMAL 135		

NO CLINICAL SIGNS NOTED		
ANIMAL 136		

NO CLINICAL SIGNS NOTED		
ANIMAL 137		

NO CLINICAL SIGNS NOTED		
ANIMAL 138		

NO CLINICAL SIGNS NOTED		
ANIMAL 139		

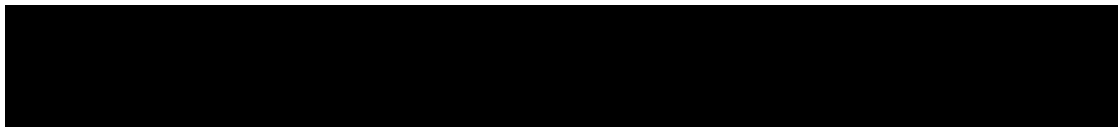
NO CLINICAL SIGNS NOTED		
ANIMAL 140		

NO CLINICAL SIGNS NOTED		
ANIMAL 141		

NO CLINICAL SIGNS NOTED		

09009e5380242f07

252



CLINICAL SIGNS, WEEKLY

FEMALES

GROUP 1 (0 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
ANIMAL 142		

BEHAVIOR		
AGGRESSIVE (3)	G: 1.	....
SKIN / FUR		
HAIR LOSS (3)	G: 2.	....
(THIGH HIND LEFT)		
ANIMAL 143		

NO CLINICAL SIGNS NOTED		
ANIMAL 144		

NO CLINICAL SIGNS NOTED		
ANIMAL 145		

NO CLINICAL SIGNS NOTED		
ANIMAL 146		

NO CLINICAL SIGNS NOTED		
ANIMAL 147		

NO CLINICAL SIGNS NOTED		
ANIMAL 148		

NO CLINICAL SIGNS NOTED		
ANIMAL 149		

NO CLINICAL SIGNS NOTED		
ANIMAL 150		

NO CLINICAL SIGNS NOTED		
ANIMAL 151		

NO CLINICAL SIGNS NOTED		
ANIMAL 152		

NO CLINICAL SIGNS NOTED		
ANIMAL 153		

NO CLINICAL SIGNS NOTED		
ANIMAL 154		

NO CLINICAL SIGNS NOTED		
ANIMAL 155		

NO CLINICAL SIGNS NOTED		
ANIMAL 156		

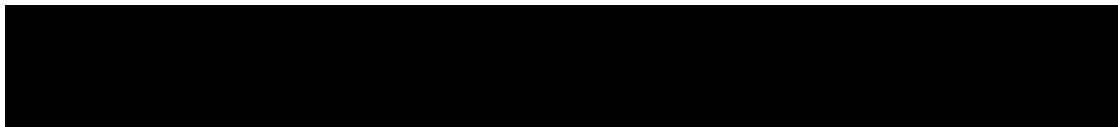
NO CLINICAL SIGNS NOTED		
ANIMAL 157		

NO CLINICAL SIGNS NOTED		

G: Highest weekly grades

09009e5380242f07

253



CLINICAL SIGNS, WEEKLY

FEMALES

GROUP 1 (0 MG/KG/DAY)

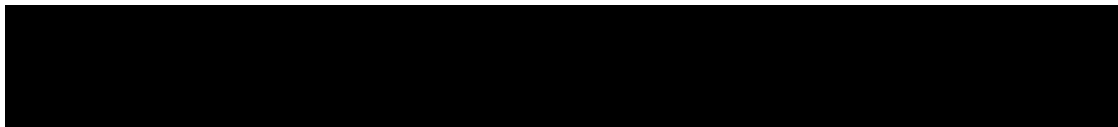
SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
--------------------------------	------------------------	------------------

ANIMAL 158		

NO CLINICAL SIGNS NOTED		
ANIMAL 159		

NO CLINICAL SIGNS NOTED		
ANIMAL 160		

NO CLINICAL SIGNS NOTED		



CLINICAL SIGNS, WEEKLY

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
<hr/>		
ANIMAL 161		

NO CLINICAL SIGNS NOTED		
ANIMAL 162		

NO CLINICAL SIGNS NOTED		
ANIMAL 163		

NO CLINICAL SIGNS NOTED		
ANIMAL 164		

NO CLINICAL SIGNS NOTED		
ANIMAL 165		

NO CLINICAL SIGNS NOTED		
ANIMAL 166		

NO CLINICAL SIGNS NOTED		
ANIMAL 167		

NO CLINICAL SIGNS NOTED		
ANIMAL 168		

NO CLINICAL SIGNS NOTED		
ANIMAL 169		

NO CLINICAL SIGNS NOTED		
ANIMAL 170		

NO CLINICAL SIGNS NOTED		
ANIMAL 171		

NO CLINICAL SIGNS NOTED		
ANIMAL 172		

NO CLINICAL SIGNS NOTED		
ANIMAL 173		

NO CLINICAL SIGNS NOTED		
ANIMAL 174		

NO CLINICAL SIGNS NOTED		
ANIMAL 175		

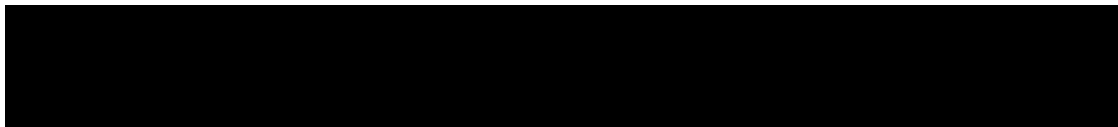
NO CLINICAL SIGNS NOTED		
ANIMAL 176		

NO CLINICAL SIGNS NOTED		
ANIMAL 177		

NO CLINICAL SIGNS NOTED		

09009e5380242f07

255



CLINICAL SIGNS, WEEKLY

FEMALES

GROUP 2 (500 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
<hr/>		
ANIMAL 178		

NO CLINICAL SIGNS NOTED		
ANIMAL 179		

NO CLINICAL SIGNS NOTED		
ANIMAL 180		

NO CLINICAL SIGNS NOTED		
ANIMAL 181		

NO CLINICAL SIGNS NOTED		
ANIMAL 182		

NO CLINICAL SIGNS NOTED		
ANIMAL 183		

NO CLINICAL SIGNS NOTED		
ANIMAL 184		

NO CLINICAL SIGNS NOTED		
ANIMAL 185		

NO CLINICAL SIGNS NOTED		
ANIMAL 186		

NO CLINICAL SIGNS NOTED		



CLINICAL SIGNS, WEEKLY

FEMALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
<hr/>		
ANIMAL 187		

NO CLINICAL SIGNS NOTED		
ANIMAL 188		

NO CLINICAL SIGNS NOTED		
ANIMAL 189		

VARIOUS		
KINKED (3)	G: 1.	....
(TAIL APEX)		
ANIMAL 190		

NO CLINICAL SIGNS NOTED		
ANIMAL 191		

NO CLINICAL SIGNS NOTED		
ANIMAL 192		

NO CLINICAL SIGNS NOTED		
ANIMAL 193		

NO CLINICAL SIGNS NOTED		
ANIMAL 194		

NO CLINICAL SIGNS NOTED		
ANIMAL 195		

NO CLINICAL SIGNS NOTED		
ANIMAL 196		

NO CLINICAL SIGNS NOTED		
ANIMAL 197		

NO CLINICAL SIGNS NOTED		
ANIMAL 198		

NO CLINICAL SIGNS NOTED		
ANIMAL 199		

NO CLINICAL SIGNS NOTED		
ANIMAL 200		

NO CLINICAL SIGNS NOTED		
ANIMAL 201		

NO CLINICAL SIGNS NOTED		
ANIMAL 202		

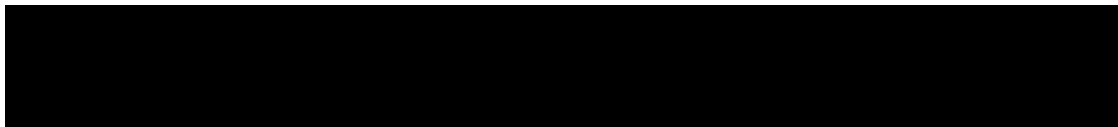
NO CLINICAL SIGNS NOTED		
ANIMAL 203		

NO CLINICAL SIGNS NOTED		

G: Highest weekly grades

09009e5380242f07

257



CLINICAL SIGNS, WEEKLY

FEMALES

GROUP 3 (1000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
--------------------------------	------------------------	------------------

ANIMAL 204		

NO CLINICAL SIGNS NOTED		
ANIMAL 205		

NO CLINICAL SIGNS NOTED		
ANIMAL 206		

NO CLINICAL SIGNS NOTED		
ANIMAL 207		

NO CLINICAL SIGNS NOTED		
ANIMAL 208		

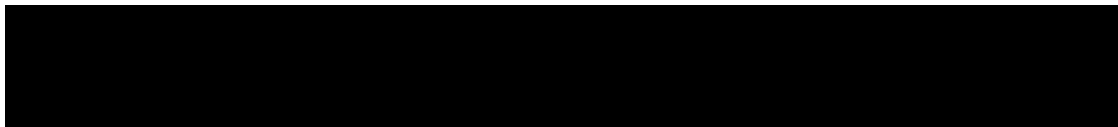
NO CLINICAL SIGNS NOTED		
ANIMAL 209		

NO CLINICAL SIGNS NOTED		
ANIMAL 210		

NO CLINICAL SIGNS NOTED		
ANIMAL 211		

NO CLINICAL SIGNS NOTED		
ANIMAL 212		

NO CLINICAL SIGNS NOTED		



CLINICAL SIGNS, WEEKLY

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
--------------------------------	------------------------	------------------

ANIMAL 213		

NO CLINICAL SIGNS NOTED		
ANIMAL 214		

NO CLINICAL SIGNS NOTED		
ANIMAL 215		

NO CLINICAL SIGNS NOTED		
ANIMAL 216		

NO CLINICAL SIGNS NOTED		
ANIMAL 217		

NO CLINICAL SIGNS NOTED		
ANIMAL 218		

NO CLINICAL SIGNS NOTED		
ANIMAL 219		

NO CLINICAL SIGNS NOTED		
ANIMAL 220		

NO CLINICAL SIGNS NOTED		
ANIMAL 221		

NO CLINICAL SIGNS NOTED		
ANIMAL 222		

NO CLINICAL SIGNS NOTED		
ANIMAL 223		

NO CLINICAL SIGNS NOTED		
ANIMAL 224		

NO CLINICAL SIGNS NOTED		
ANIMAL 225		

NO CLINICAL SIGNS NOTED		
ANIMAL 226		

NO CLINICAL SIGNS NOTED		
ANIMAL 227		

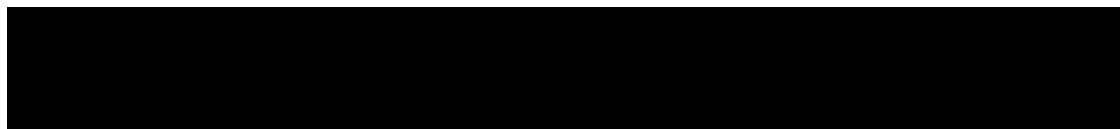
NO CLINICAL SIGNS NOTED		
ANIMAL 228		

NO CLINICAL SIGNS NOTED		
ANIMAL 229		

NO CLINICAL SIGNS NOTED		

09009e5380242f07

259



CLINICAL SIGNS, WEEKLY

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
ANIMAL 230		

NO CLINICAL SIGNS NOTED		
ANIMAL 231		

VARIOUS		
KINKED (3)	G: 1.	....
(TAIL APEX)		
ANIMAL 232		

VARIOUS		
KINKED (3)	G: 1.	....
(TAIL APEX)		
ANIMAL 233		

NO CLINICAL SIGNS NOTED		
ANIMAL 234		

NO CLINICAL SIGNS NOTED		
ANIMAL 235		

NO CLINICAL SIGNS NOTED		
ANIMAL 236		

NO CLINICAL SIGNS NOTED		
ANIMAL 237		

NO CLINICAL SIGNS NOTED		
ANIMAL 238		

NO CLINICAL SIGNS NOTED		
ANIMAL 239		

NO CLINICAL SIGNS NOTED		
ANIMAL 240		

NO CLINICAL SIGNS NOTED		
ANIMAL 241		

NO CLINICAL SIGNS NOTED		
ANIMAL 242		

NO CLINICAL SIGNS NOTED		
ANIMAL 243		

NO CLINICAL SIGNS NOTED		
ANIMAL 244		

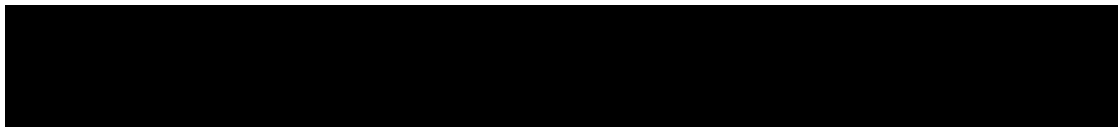
NO CLINICAL SIGNS NOTED		
ANIMAL 245		

NO CLINICAL SIGNS NOTED		

G: Highest weekly grades

09009e5380242f07

260



CLINICAL SIGNS, WEEKLY

FEMALES

GROUP 4 (2000 MG/KG/DAY)

SIGN (MAX.GRADE) (LOCATION)	TREATMENT WEEKS: 13	RECOVERY 1...
--------------------------------	------------------------	------------------

ANIMAL 246		

NO CLINICAL SIGNS NOTED		
ANIMAL 247		

NO CLINICAL SIGNS NOTED		
ANIMAL 248		

NO CLINICAL SIGNS NOTED		

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

GRIP STRENGTH AT WEEK 13, INDIVIDUAL DATA

GROUP 1	MALES		FEMALES		
	0 mg/kg		Mean (g)		
Animal No.	Forelimb	Hindlimb	Animal No.	Forelimb	Hindlimb
1	849	825	125	445	605
2	1389	791	126	681	583
3	1036	717	127	931	783
4	949	889	128	703	693
5	914	752	129	685	756
6	1181	845	130	511	589
7	901	628	131	604	595
8	996	821	132	776	699
9	1251	876	133	481	753
10	1017	642	134	1044	752
11	1257	801	135	1097	656
12	1141	691	136	560	685
13	1085	725	137	504	493
14	1232	669	138	759	679
15	1088	1112	139	467	584
16	895	963	140	563	785
17	631	536	141	393	543
18	812	787	142	589	561
19	1107	827	143	939	772
20	1064	753	144	1024	819
21	1180	1215	145	373	473
22	1225	791	146	615	648
23	713	523	147	1037	673
24	1379	784	148	713	585
25	1123	561	149	1159	763
26	547	584	150	852	679
27	876	728	151	493	616
28	669	860	152	499	501
29	616	819	153	1161	823
30	440	465	154	760	557

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

GRIP STRENGTH AT WEEK 13, INDIVIDUAL DATA

		MALES		FEMALES	
		Mean (g)		Mean (g)	
GROUP 2		500 mg/kg			
Animal No.	Forelimb	Hindlimb	Animal No.	Forelimb	Hindlimb
37	1137	765	161	1148	729
38	857	713	162	747	533
39	1053	736	163	691	571
40	1325	849	164	797	863
41	789	787	165	1141	855
42	936	503	166	807	600
43	831	1021	167	595	592
44	+	+	168	1005	719
45	809	439	169	656	684
46	856	591	170	668	479
47	1303	876	171	317	680
48	740	383	172	683	593
49	809	585	173	905	645
50	1147	551	174	575	723
51	1132	655	175	488	731
52	1437	777	176	816	573
53	864	661	177	939	476
54	1130	852	178	444	553
55	719	851	179	636	599
56	377	625	180	1467	628

+: Animal dead

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

GRIP STRENGTH AT WEEK 13, INDIVIDUAL DATA

MALES			FEMALES		
Mean (g)			Mean (g)		
GROUP 3					
1000 mg/kg					
Animal No.	Forelimb	Hindlimb	Animal No.	Forelimb	Hindlimb
63	1113	711	187	560	604
64	1199	799	188	455	465
65	491	831	189	1191	559
66	1181	835	190	908	609
67	717	527	191	928	785
68	1239	967	192	699	755
69	1281	805	193	437	549
70	1235	667	194	653	463
71	1259	761	195	371	435
72	744	767	196	444	561
73	1225	767	197	336	609
74	1241	851	198	372	672
75	1081	868	199	403	432
76	1333	812	200	928	660
77	1421	731	201	815	835
78	1097	775	202	536	620
79	1096	761	203	553	467
80	847	591	204	469	629
81	840	725	205	766	651
82	891	796	206	564	511

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

GRIP STRENGTH AT WEEK 13, INDIVIDUAL DATA

		MALES		FEMALES	
		Mean (g)		Mean (g)	
GROUP 4		2000 mg/kg			
Animal No.	Forelimb	Hindlimb	Animal No.	Forelimb	Hindlimb
89	677	680	213	975	571
90	732	637	214	529	436
91	1084	812	215	744	531
92	727	680	216	601	623
93	1043	615	217	771	541
94	736	609	218	867	651
95	787	763	219	765	639
96	1316	1003	220	857	535
97	1153	919	221	783	643
98	753	1032	222	376	491
99	656	697	223	980	928
100	1088	767	224	637	544
101	876	665	225	849	564
102	864	569	226	516	624
103	399	459	227	371	439
104	608	536	228	552	563
105	481	588	229	691	700
106	889	760	230	640	607
107	1271	660	231	769	559
108	1075	487	232	752	720
109	525	460	233	784	443
110	836	632	234	769	605
111	468	619	235	865	756
112	1169	901	236	608	532
113	1112	760	237	613	788
114	549	400	238	653	639
115	841	607	239	496	783
116	667	884	240	667	495
117	699	639	241	531	617
118	1032	935	242	819	623

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

GRIP STRENGTH , INDIVIDUAL DATA

WEEK 17

MALES			Mean (g)	FEMALES			Mean (g)
GROUP 1 0 mg/kg							
Animal No.	Forelimb	Hindlimb		Animal No.	Forelimb	Hindlimb	
21	660	630		145	393	236	
22	902	492		146	423	335	
23	662	361		147	399	277	
24	1098	639		148	538	318	
25	581	371		149	860	492	
26	994	617		150	488	311	
27	484	520		151	530	402	
28	710	855		152	386	266	
29	611	652		153	643	449	
30	472	489		154	446	317	
GROUP 4 2000 mg/kg							
Animal No.	Forelimb	Hindlimb		Animal No.	Forelimb	Hindlimb	
109	571	614		233	495	400	
110	590	406		234	430	522	
111	619	499		235	498	346	
112	925	592		236	659	448	
113	838	641		237	705	506	
114	738	321		238	505	374	
115	449	603		239	698	372	
116	769	474		240	800	261	
117	1030	416		241	476	299	
118	879	614		242	451	490	

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 13

MALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 1	0 mg/kg/day						
1	296	184	148	144	41	6	819
2	354	210	325	362	136	194	1581
3	209	234	179	228	234	338	1422
4	462	235	128	320	340	43	1528
5	479	344	244	416	199	256	1938
6	484	366	213	217	250	127	1657
7	233	105	255	135	307	135	1170
8	601	398	197	353	329	236	2114
9	271	204	139	152	39	34	839
10	592	511	501	311	492	337	2744
11	310	297	210	264	142	104	1327
12	566	238	88	336	269	127	1624
13	467	324	263	220	82	110	1466
14	592	273	481	303	247	333	2229
15	446	307	246	111	246	202	1558
16	484	377	174	268	180	433	1916
17	306	88	162	99	41	72	768
18	504	295	314	295	233	171	1812
19	330	187	23	15	184	14	753
20	335	262	68	3	12	227	907
21	258	264	263	161	259	93	1298
22	426	407	344	279	235	356	2047
23	516	402	204	208	191	123	1644
24	462	125	124	226	176	342	1455
25	402	294	271	205	202	304	1678
26	498	90	171	391	341	335	1950
27	476	377	429	273	465	326	2090
28	333	354	143	232	209	196	1428
29	339	242	168	112	170	195	1329
30	668	339	344	296	273	204	1851

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 13

MALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 2	500 mg/kg/day						
37	127	104	155	221	16	2	625
38	213	168	59	406	63	0	909
39	152	171	171	173	55	80	802
40	373	361	355	298	176	111	1674
41	258	167	59	0	0	6	490
42	224	77	204	279	231	108	1123
43	414	106	372	382	204	50	1528
44	+	+	+	+	+	+	+
45	322	280	206	261	144	228	1441
46	476	319	253	75	363	174	1660
47	466	229	247	259	188	72	1461
48	110	239	135	162	243	227	1116
49	210	213	327	111	140	116	1117
50	413	185	23	276	319	88	1304
51	475	261	70	306	233	332	1677
52	386	228	152	183	63	242	1254
53	457	460	323	255	415	419	2329
54	187	24	146	0	32	19	408
55	304	83	161	203	12	23	786
56	239	61	225	166	4	110	805

+ animal dead

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 13

MALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 3 1000 mg/kg/day							
63	377	331	209	281	231	225	1654
64	361	261	297	162	113	281	1475
65	484	299	173	22	6	366	1350
66	422	303	338	121	344	213	1741
67	252	288	251	243	107	116	1257
68	544	321	289	358	225	142	1879
69	628	578	403	308	336	242	2495
70	265	207	86	204	0	0	762
71	553	352	208	34	0	65	1212
72	543	249	248	306	254	206	1806
73	480	417	318	355	374	379	2323
74	404	458	294	342	150	125	1773
75	455	356	311	216	255	84	1677
76	271	142	323	510	68	0	1314
77	341	128	130	34	0	0	633
78	121	151	221	0	48	136	677
79	299	352	409	330	106	28	1524
80	372	165	194	130	11	4	876
81	89	263	233	250	148	0	983
82	211	150	49	91	229	166	896

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 13

MALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 4 2000 mg/kg/day							
89	335	94	25	20	0	16	490
90	194	213	16	0	0	12	435
91	443	305	322	391	108	8	1577
92	213	175	248	166	245	57	1104
93	406	430	476	248	556	125	2241
94	228	171	2	11	0	24	436
95	548	391	311	399	228	262	2139
96	569	346	353	369	274	352	2263
97	431	244	124	348	103	17	1267
98	625	379	330	230	283	117	1964
99	231	160	57	21	2	1	472
100	235	154	233	396	135	2	1155
101	400	96	6	4	4	154	664
102	357	292	301	42	215	35	1242
103	271	177	45	0	8	0	501
104	608	176	112	206	436	380	1918
105	583	297	219	227	267	40	1633
106	510	169	147	71	149	0	1046
107	600	344	133	14	270	11	1372
108	182	401	236	245	231	19	1314
109	272	103	253	286	102	19	1035
110	493	461	372	422	135	163	2046
111	653	384	357	18	174	342	1928
112	497	275	144	11	193	19	1139
113	405	263	323	298	145	2	1436
114	211	196	253	174	182	182	1198
115	375	303	309	172	63	125	1347
116	409	344	201	351	388	183	1876
117	196	162	261	102	124	250	1095
118	398	261	312	312	241	288	1812

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 13

FEMALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 1 0 mg/kg/day							
125	302	153	183	245	185	184	1252
126	381	355	289	163	258	209	1655
127	213	247	205	352	140	113	1270
128	386	234	151	257	147	194	1369
129	355	195	131	171	90	101	1043
130	462	262	238	324	178	314	1778
131	483	305	162	205	196	134	1485
132	269	200	152	93	181	242	1137
133	333	151	248	267	193	261	1453
134	450	404	336	341	179	248	1958
135	491	272	288	202	128	282	1663
136	360	189	75	180	308	128	1240
137	276	168	201	84	225	129	1083
138	303	299	139	167	157	144	1209
139	615	335	182	230	362	206	1930
140	583	318	194	156	8	383	1642
141	528	264	117	267	72	309	1557
142	609	337	395	239	158	58	1796
143	525	290	239	162	5	271	1492
144	704	449	242	467	53	215	2130
145	544	268	259	123	150	146	1490
146	621	378	350	192	203	127	1871
147	498	366	302	299	169	210	1844
148	598	508	513	296	331	343	2589
149	778	553	201	452	335	250	2569
150	710	519	600	468	284	370	2951
151	673	497	348	270	201	307	2296
152	381	319	494	167	0	0	1361
153	165	4	12	166	19	64	430
154	113	26	246	8	6	0	399

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 13

FEMALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 2	500 mg/kg/day						
161	315	263	299	282	260	313	1732
162	74	26	0	2	2	0	104
163	465	350	311	98	156	150	1530
164	259	59	6	64	153	164	705
165	333	85	0	2	154	329	903
166	136	60	292	60	8	31	587
167	259	157	258	140	8	14	836
168	213	26	77	281	132	9	738
169	175	70	29	85	2	76	437
170	23	2	84	0	4	0	113
171	188	192	0	0	0	156	536
172	315	106	83	32	157	107	800
173	644	448	184	437	244	57	2014
174	330	122	267	119	232	251	1321
175	392	302	169	167	145	18	1193
176	290	205	158	0	201	0	854
177	302	330	297	167	192	33	1321
178	458	157	194	254	277	26	1366
179	432	487	376	204	125	0	1624
180	510	53	34	91	5	2	695

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 13

FEMALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 3 1000 mg/kg/day							
187	300	132	2	175	129	0	738
188	405	292	222	185	137	253	1494
189	384	262	10	147	0	37	840
190	460	298	57	268	244	279	1606
191	426	250	219	100	251	385	1631
192	500	285	348	298	221	262	1914
193	730	499	307	395	396	166	2493
194	972	463	385	386	376	195	2777
195	662	524	312	328	311	208	2345
196	518	278	281	14	4	407	1502
197	379	313	225	282	238	262	1699
198	365	223	186	335	276	95	1480
199	462	324	45	140	292	114	1377
200	497	374	442	336	276	121	2046
201	367	285	226	222	231	185	1516
202	322	206	282	352	285	168	1615
203	420	344	477	209	171	156	1777
204	578	241	296	168	137	190	1610
205	365	235	101	170	217	219	1307
206	366	286	30	163	197	154	1196

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 13

FEMALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 4 2000 mg/kg/day							
213	387	415	361	225	242	226	1856
214	491	106	333	182	129	39	1280
215	518	280	268	342	140	193	1741
216	457	293	239	206	272	207	1674
217	402	422	219	256	270	325	1894
218	284	131	159	232	153	119	1078
219	351	133	92	162	4	15	757
220	419	164	192	118	5	197	1095
221	545	487	461	292	292	203	2280
222	511	206	270	197	305	226	1715
223	651	464	253	370	242	163	2143
224	499	282	36	137	357	63	1374
225	472	337	224	125	204	190	1552
226	532	455	464	576	323	266	2616
227	550	407	172	202	185	206	1722
228	551	470	272	354	270	297	2214
229	450	247	211	227	239	175	1549
230	780	462	420	220	226	130	2238
231	623	357	194	182	96	137	1589
232	723	540	389	355	359	369	2735
233	600	314	287	299	190	183	1873
234	734	463	257	170	175	353	2152
235	421	100	123	0	0	8	652
236	575	321	445	240	343	261	2185
237	497	317	264	221	246	111	1656
238	619	266	73	144	190	277	1569
239	666	331	117	179	136	150	1579
240	890	335	347	276	212	269	2329
241	542	377	210	94	182	261	1666
242	742	314	300	259	303	123	2041

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 17

MALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 1 0 mg/kg/day							
21	293	306	296	169	121	43	1228
22	545	480	383	465	218	39	2130
23	401	236	126	217	59	18	1057
24	559	396	465	176	16	274	1886
25	463	182	66	17	85	12	825
26	274	21	10	2	0	2	309
27	401	218	85	194	13	0	911
28	278	157	94	136	18	95	778
29	51	50	87	119	32	0	339
30	334	348	288	314	175	225	1684

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 17

MALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 4 2000 mg/kg/day							
109	114	140	118	12	56	6	446
110	472	241	285	255	137	117	1507
111	386	240	154	111	0	0	891
112	545	360	77	4	16	306	1308
113	515	335	267	210	255	340	1922
114	489	507	441	236	447	121	2241
115	586	366	152	239	72	10	1425
116	486	475	237	139	134	0	1471
117	585	313	189	281	82	75	1525
118	195	141	153	126	279	225	1119

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 17

FEMALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 1 0 mg/kg/day							
145	503	268	234	270	201	212	1688
146	393	233	221	107	143	174	1271
147	468	272	145	220	156	241	1502
148	252	31	108	79	10	0	480
149	481	162	289	140	0	87	1159
150	547	394	231	174	139	98	1583
151	633	243	305	136	14	161	1492
152	417	265	102	5	0	0	789
153	382	59	294	132	252	313	1432
154	450	126	16	11	0	66	669

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

LOCOMOTOR ACTIVITY, INDIVIDUAL DATA, WEEK 17

FEMALES

BEAM COUNTS

Animal No	10 min	20 min	30 min	40 min	50 min	60 min	Total
Group 4	2000 mg/kg/day						
233	295	65	253	100	112	14	839
234	675	232	356	331	188	264	2046
235	420	243	8	6	2	3	682
236	674	380	298	391	292	353	2388
237	302	220	201	281	314	399	1717
238	500	191	96	118	181	90	1176
239	943	324	511	16	4	26	1824
240	564	131	19	0	0	0	714
241	638	385	33	16	43	16	1131
242	608	366	197	180	75	17	1443

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

OPHTHALMOSCOPIC EXAMINATIONS

MALES

AT ACCLIMATIZATION

GROUP 1 (0 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
1	NO ABNORMALITIES DETECTED	BOTH
2	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
3	NO ABNORMALITIES DETECTED	BOTH
4	NO ABNORMALITIES DETECTED	BOTH
5	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
6	NO ABNORMALITIES DETECTED	BOTH
7	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
8	NO ABNORMALITIES DETECTED	BOTH
9	NO ABNORMALITIES DETECTED	BOTH
10	CORNEAL OPACITY	BOTH
	PERSISTENT PUPILLARY MEMBRANE	RIGHT
11	NO ABNORMALITIES DETECTED	BOTH
12	CORNEAL OPACITY	BOTH
13	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
14	CORNEAL OPACITY	RIGHT
	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
15	NO ABNORMALITIES DETECTED	BOTH
16	PERSISTENT PUPILLARY MEMBRANE	RIGHT
17	NO ABNORMALITIES DETECTED	BOTH
18	PERSISTENT PUPILLARY MEMBRANE	LEFT
19	NO ABNORMALITIES DETECTED	BOTH
20	PERSISTENT HYALOID VESSEL IN VITREOUS	BOTH
21	CORNEAL OPACITY	RIGHT
22	NO ABNORMALITIES DETECTED	BOTH
23	NO ABNORMALITIES DETECTED	BOTH
24	NO ABNORMALITIES DETECTED	BOTH
25	NO ABNORMALITIES DETECTED	BOTH
26	NO ABNORMALITIES DETECTED	BOTH
27	NO ABNORMALITIES DETECTED	BOTH
28	NO ABNORMALITIES DETECTED	BOTH
29	PERSISTENT HYALOID VESSEL IN VITREOUS	BOTH
30	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT

GROUP 2 (500 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
37	NO ABNORMALITIES DETECTED	BOTH
38	NO ABNORMALITIES DETECTED	BOTH
39	NO ABNORMALITIES DETECTED	BOTH
40	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
41	NO ABNORMALITIES DETECTED	BOTH
42	NO ABNORMALITIES DETECTED	BOTH
43	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
44	ANTERIOR SYNECHIA	LEFT
45	NO ABNORMALITIES DETECTED	BOTH
46	NO ABNORMALITIES DETECTED	BOTH
47	NO ABNORMALITIES DETECTED	BOTH
48	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
49	NO ABNORMALITIES DETECTED	BOTH
50	NO ABNORMALITIES DETECTED	BOTH
51	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
52	NO ABNORMALITIES DETECTED	BOTH
53	NO ABNORMALITIES DETECTED	BOTH
54	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
55	NO ABNORMALITIES DETECTED	BOTH
56	NO ABNORMALITIES DETECTED	BOTH

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

OPHTHALMOSCOPIC EXAMINATIONS

MALES

AT ACCLIMATIZATION

GROUP 3 (1000 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
63	PERSISTENT PUPILLARY MEMBRANE	RIGHT
64	NO ABNORMALITIES DETECTED	BOTH
65	NO ABNORMALITIES DETECTED	BOTH
66	NO ABNORMALITIES DETECTED	BOTH
67	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
68	NO ABNORMALITIES DETECTED	BOTH
69	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
70	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
71	PERSISTENT PUPILLARY MEMBRANE	RIGHT
72	NO ABNORMALITIES DETECTED	BOTH
73	NO ABNORMALITIES DETECTED	BOTH
74	NO ABNORMALITIES DETECTED	BOTH
75	NO ABNORMALITIES DETECTED	BOTH
76	CORNEAL OPACITY	RIGHT
77	NO ABNORMALITIES DETECTED	BOTH
78	NO ABNORMALITIES DETECTED	BOTH
79	NO ABNORMALITIES DETECTED	BOTH
80	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
81	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
82	NO ABNORMALITIES DETECTED	BOTH

GROUP 4 (2000 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
89	PERSISTENT HYALOID VESSEL IN VITREOUS	BOTH
90	PERSISTENT PUPILLARY MEMBRANE	RIGHT
91	NO ABNORMALITIES DETECTED	BOTH
92	CORNEAL OPACITY	RIGHT
93	NO ABNORMALITIES DETECTED	BOTH
94	NO ABNORMALITIES DETECTED	BOTH
95	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
96	NO ABNORMALITIES DETECTED	BOTH
97	NO ABNORMALITIES DETECTED	BOTH
98	NO ABNORMALITIES DETECTED	BOTH
99	NO ABNORMALITIES DETECTED	BOTH
100	NO ABNORMALITIES DETECTED	BOTH
101	PERSISTENT HYALOID VESSEL IN VITREOUS	BOTH
102	NO ABNORMALITIES DETECTED	BOTH
103	NO ABNORMALITIES DETECTED	BOTH
104	NO ABNORMALITIES DETECTED	BOTH
105	PERSISTENT PUPILLARY MEMBRANE	BOTH
106	NO ABNORMALITIES DETECTED	BOTH
107	NO ABNORMALITIES DETECTED	BOTH
108	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
109	NO ABNORMALITIES DETECTED	BOTH
110	NO ABNORMALITIES DETECTED	BOTH
111	NO ABNORMALITIES DETECTED	BOTH
112	NO ABNORMALITIES DETECTED	BOTH
113	NO ABNORMALITIES DETECTED	BOTH
114	NO ABNORMALITIES DETECTED	BOTH
115	NO ABNORMALITIES DETECTED	BOTH
116	NO ABNORMALITIES DETECTED	BOTH
117	NO ABNORMALITIES DETECTED	BOTH
118	NO ABNORMALITIES DETECTED	BOTH

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

OPHTHALMOSCOPIC EXAMINATIONS

MALES

AT WEEK 13

GROUP 1 (0 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
1	CORNEAL OPACITY	RIGHT
2	NO ABNORMALITIES DETECTED	BOTH
3	NO ABNORMALITIES DETECTED	BOTH
4	NO ABNORMALITIES DETECTED	BOTH
5	NO ABNORMALITIES DETECTED	BOTH
6	NO ABNORMALITIES DETECTED	BOTH
7	LENTICULAR OPACITY	RIGHT
8	NO ABNORMALITIES DETECTED	BOTH
9	PERSISTENT PUPILLARY MEMBRANE	LEFT
10	CORNEAL OPACITY	BOTH
11	CORNEAL OPACITY	RIGHT
	IRIS COLOBOMA	RIGHT
12	NO ABNORMALITIES DETECTED	BOTH
13	CORNEAL OPACITY	BOTH
14	NO ABNORMALITIES DETECTED	BOTH
15	NO ABNORMALITIES DETECTED	BOTH
16	CORNEAL OPACITY	BOTH
17	NO ABNORMALITIES DETECTED	BOTH
18	CORNEAL OPACITY	RIGHT
19	PERSISTENT PUPILLARY MEMBRANE	LEFT
20	NO ABNORMALITIES DETECTED	BOTH
21	NO ABNORMALITIES DETECTED	BOTH
22	CORNEAL OPACITY	LEFT
23	NO ABNORMALITIES DETECTED	BOTH
24	NO ABNORMALITIES DETECTED	BOTH
25	NO ABNORMALITIES DETECTED	BOTH
26	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
27	NO ABNORMALITIES DETECTED	BOTH
28	CORNEAL OPACITY	RIGHT
29	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
30	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT

GROUP 4 (2000 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
89	NO ABNORMALITIES DETECTED	BOTH
90	CORNEAL OPACITY	BOTH
91	NO ABNORMALITIES DETECTED	BOTH
92	LENTICULAR OPACITY	RIGHT
93	CORNEAL OPACITY	BOTH
94	CORNEAL OPACITY	BOTH
95	NO ABNORMALITIES DETECTED	BOTH
96	NO ABNORMALITIES DETECTED	BOTH
97	NO ABNORMALITIES DETECTED	BOTH
98	NO ABNORMALITIES DETECTED	BOTH
99	NO ABNORMALITIES DETECTED	BOTH
100	NO ABNORMALITIES DETECTED	BOTH
101	NO ABNORMALITIES DETECTED	BOTH
102	NO ABNORMALITIES DETECTED	BOTH
103	CORNEAL OPACITY	RIGHT
104	CORNEAL OPACITY	BOTH
105	NO ABNORMALITIES DETECTED	BOTH
106	CORNEAL OPACITY	RIGHT
107	NO ABNORMALITIES DETECTED	BOTH
108	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
109	NO ABNORMALITIES DETECTED	BOTH
110	NO ABNORMALITIES DETECTED	BOTH
111	NO ABNORMALITIES DETECTED	BOTH
112	NO ABNORMALITIES DETECTED	BOTH
113	CORNEAL OPACITY	RIGHT
114	NO ABNORMALITIES DETECTED	BOTH
115	CORNEAL OPACITY	LEFT
116	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
117	NO ABNORMALITIES DETECTED	BOTH
118	NO ABNORMALITIES DETECTED	BOTH

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

OPHTHALMOSCOPIC EXAMINATIONS

MALES

AT WEEK 17

GROUP 1 (0 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
21	CORNEAL OPACITY	BOTH
22	NO ABNORMALITIES DETECTED	BOTH
23	NO ABNORMALITIES DETECTED	BOTH
24	NO ABNORMALITIES DETECTED	BOTH
25	NO ABNORMALITIES DETECTED	BOTH
26	NO ABNORMALITIES DETECTED	BOTH
27	CORNEAL OPACITY	RIGHT
28	EYE DISCOLORATION WHITE	RIGHT
	EYE REDUCED IN SIZE	RIGHT
29	NO ABNORMALITIES DETECTED	BOTH
30	PERSISTENT HYALOID VESSEL IN VITREOUS	BOTH

GROUP 4 (2000 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
109	NO ABNORMALITIES DETECTED	BOTH
110	NO ABNORMALITIES DETECTED	BOTH
111	NO ABNORMALITIES DETECTED	BOTH
112	NO ABNORMALITIES DETECTED	BOTH
113	CORNEAL OPACITY	BOTH
114	NO ABNORMALITIES DETECTED	BOTH
115	NO ABNORMALITIES DETECTED	BOTH
116	PERSISTENT HYALOID VESSEL IN VITREOUS	BOTH
117	NO ABNORMALITIES DETECTED	BOTH
118	NO ABNORMALITIES DETECTED	BOTH

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

OPHTHALMOSCOPIC EXAMINATIONS

FEMALES

AT ACCLIMATIZATION

GROUP 1 (0 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
125	NO ABNORMALITIES DETECTED	BOTH
126	NO ABNORMALITIES DETECTED	BOTH
127	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
128	PERSISTENT PUPILLARY MEMBRANE	BOTH
129	NO ABNORMALITIES DETECTED	BOTH
130	NO ABNORMALITIES DETECTED	BOTH
131	NO ABNORMALITIES DETECTED	BOTH
132	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
133	NO ABNORMALITIES DETECTED	BOTH
134	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
135	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
136	NO ABNORMALITIES DETECTED	BOTH
137	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
138	NO ABNORMALITIES DETECTED	BOTH
139	NO ABNORMALITIES DETECTED	BOTH
140	PUPIL DOES NOT REACT TO MYDRIATIC	RIGHT
141	NO ABNORMALITIES DETECTED	BOTH
142	NO ABNORMALITIES DETECTED	BOTH
143	NO ABNORMALITIES DETECTED	BOTH
144	NO ABNORMALITIES DETECTED	BOTH
145	NO ABNORMALITIES DETECTED	BOTH
146	CORNEAL OPACITY	LEFT
147	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
148	NO ABNORMALITIES DETECTED	BOTH
149	NO ABNORMALITIES DETECTED	BOTH
150	NO ABNORMALITIES DETECTED	BOTH
151	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
152	NO ABNORMALITIES DETECTED	BOTH
153	NO ABNORMALITIES DETECTED	BOTH
154	NO ABNORMALITIES DETECTED	BOTH

GROUP 2 (500 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
161	NO ABNORMALITIES DETECTED	BOTH
162	PERSISTENT HYALOID VESSEL IN VITREOUS	BOTH
163	NO ABNORMALITIES DETECTED	BOTH
164	NO ABNORMALITIES DETECTED	BOTH
165	NO ABNORMALITIES DETECTED	BOTH
166	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
167	NO ABNORMALITIES DETECTED	BOTH
168	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
169	NO ABNORMALITIES DETECTED	BOTH
170	NO ABNORMALITIES DETECTED	BOTH
171	NO ABNORMALITIES DETECTED	BOTH
172	NO ABNORMALITIES DETECTED	BOTH
173	NO ABNORMALITIES DETECTED	BOTH
174	NO ABNORMALITIES DETECTED	BOTH
175	NO ABNORMALITIES DETECTED	BOTH
176	PERSISTENT PUPILLARY MEMBRANE	LEFT
177	NO ABNORMALITIES DETECTED	BOTH
178	NO ABNORMALITIES DETECTED	BOTH
179	NO ABNORMALITIES DETECTED	BOTH
180	NO ABNORMALITIES DETECTED	BOTH

GROUP 3 (1000 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
187	NO ABNORMALITIES DETECTED	BOTH
188	NO ABNORMALITIES DETECTED	BOTH
189	NO ABNORMALITIES DETECTED	BOTH
190	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT

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

OPHTHALMOSCOPIC EXAMINATIONS

FEMALES

AT ACCLIMATIZATION

GROUP 3 (1000 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
191	NO ABNORMALITIES DETECTED	BOTH
192	NO ABNORMALITIES DETECTED	BOTH
193	PERSISTENT HYALOID VESSEL IN VITREOUS	BOTH
194	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
195	NO ABNORMALITIES DETECTED	BOTH
196	NO ABNORMALITIES DETECTED	BOTH
197	NO ABNORMALITIES DETECTED	BOTH
198	NO ABNORMALITIES DETECTED	BOTH
199	NO ABNORMALITIES DETECTED	BOTH
200	NO ABNORMALITIES DETECTED	BOTH
201	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
202	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
203	NO ABNORMALITIES DETECTED	BOTH
204	NO ABNORMALITIES DETECTED	BOTH
205	NO ABNORMALITIES DETECTED	BOTH
206	NO ABNORMALITIES DETECTED	BOTH

GROUP 4 (2000 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
213	NO ABNORMALITIES DETECTED	BOTH
214	PERSISTENT HYALOID VESSEL IN VITREOUS	BOTH
215	NO ABNORMALITIES DETECTED	BOTH
216	CORNEAL OPACITY	RIGHT
	PERSISTENT HYALOID VESSEL IN VITREOUS	BOTH
217	NO ABNORMALITIES DETECTED	BOTH
218	NO ABNORMALITIES DETECTED	BOTH
219	PERSISTENT PUPILLARY MEMBRANE	LEFT
	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
220	NO ABNORMALITIES DETECTED	BOTH
221	NO ABNORMALITIES DETECTED	BOTH
222	CORNEAL OPACITY	RIGHT
	PERSISTENT PUPILLARY MEMBRANE	BOTH
223	NO ABNORMALITIES DETECTED	BOTH
224	NO ABNORMALITIES DETECTED	BOTH
225	NO ABNORMALITIES DETECTED	BOTH
226	CORNEAL OPACITY	LEFT
	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
227	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
228	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
229	NO ABNORMALITIES DETECTED	BOTH
230	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
231	CORNEAL OPACITY	RIGHT
232	NO ABNORMALITIES DETECTED	BOTH
233	NO ABNORMALITIES DETECTED	BOTH
234	CORNEAL OPACITY	RIGHT
	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
235	NO ABNORMALITIES DETECTED	BOTH
236	NO ABNORMALITIES DETECTED	BOTH
237	NO ABNORMALITIES DETECTED	BOTH
238	NO ABNORMALITIES DETECTED	BOTH
239	NO ABNORMALITIES DETECTED	BOTH
240	NO ABNORMALITIES DETECTED	BOTH
241	NO ABNORMALITIES DETECTED	BOTH
242	NO ABNORMALITIES DETECTED	BOTH

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

OPHTHALMOSCOPIC EXAMINATIONS

FEMALES

AT WEEK 13

GROUP 1 (0 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
125	PERSISTENT HYALOID VESSEL IN VITREOUS	LEFT
126	NO ABNORMALITIES DETECTED	BOTH
127	NO ABNORMALITIES DETECTED	BOTH
128	PERSISTENT PUPILLARY MEMBRANE	BOTH
129	NO ABNORMALITIES DETECTED	BOTH
130	NO ABNORMALITIES DETECTED	BOTH
131	NO ABNORMALITIES DETECTED	BOTH
132	NO ABNORMALITIES DETECTED	BOTH
133	CORNEAL OPACITY	BOTH
134	NO ABNORMALITIES DETECTED	BOTH
135	NO ABNORMALITIES DETECTED	BOTH
136	NO ABNORMALITIES DETECTED	BOTH
137	NO ABNORMALITIES DETECTED	BOTH
138	NO ABNORMALITIES DETECTED	BOTH
139	CORNEAL OPACITY	RIGHT
140	NO ABNORMALITIES DETECTED	BOTH
141	NO ABNORMALITIES DETECTED	BOTH
142	NO ABNORMALITIES DETECTED	BOTH
143	NO ABNORMALITIES DETECTED	BOTH
144	NO ABNORMALITIES DETECTED	BOTH
145	NO ABNORMALITIES DETECTED	BOTH
146	NO ABNORMALITIES DETECTED	BOTH
147	NO ABNORMALITIES DETECTED	BOTH
148	NO ABNORMALITIES DETECTED	BOTH
149	NO ABNORMALITIES DETECTED	BOTH
150	NO ABNORMALITIES DETECTED	BOTH
151	NO ABNORMALITIES DETECTED	BOTH
152	CORNEAL OPACITY	RIGHT
153	CORNEAL OPACITY	RIGHT
154	NO ABNORMALITIES DETECTED	BOTH

GROUP 4 (2000 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
213	NO ABNORMALITIES DETECTED	BOTH
214	NO ABNORMALITIES DETECTED	BOTH
215	CORNEAL OPACITY	BOTH
216	NO ABNORMALITIES DETECTED	BOTH
217	NO ABNORMALITIES DETECTED	BOTH
218	NO ABNORMALITIES DETECTED	BOTH
219	PERSISTENT PUPILLARY MEMBRANE	LEFT
220	NO ABNORMALITIES DETECTED	BOTH
221	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
222	PERSISTENT PUPILLARY MEMBRANE	BOTH
223	NO ABNORMALITIES DETECTED	BOTH
224	NO ABNORMALITIES DETECTED	BOTH
225	NO ABNORMALITIES DETECTED	BOTH
226	NO ABNORMALITIES DETECTED	BOTH
227	CORNEAL OPACITY	RIGHT
228	NO ABNORMALITIES DETECTED	BOTH
229	NO ABNORMALITIES DETECTED	BOTH
230	NO ABNORMALITIES DETECTED	BOTH
231	NO ABNORMALITIES DETECTED	BOTH
232	NO ABNORMALITIES DETECTED	BOTH
233	NO ABNORMALITIES DETECTED	BOTH
234	NO ABNORMALITIES DETECTED	BOTH
235	NO ABNORMALITIES DETECTED	BOTH
236	NO ABNORMALITIES DETECTED	BOTH
237	NO ABNORMALITIES DETECTED	BOTH
238	NO ABNORMALITIES DETECTED	BOTH
239	NO ABNORMALITIES DETECTED	BOTH
240	LENTICULAR OPACITY, POSTERIOR	RIGHT
241	NO ABNORMALITIES DETECTED	BOTH
242	NO ABNORMALITIES DETECTED	BOTH

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

OPHTHALMOSCOPIC EXAMINATIONS

FEMALES

AT WEEK 17

GROUP 1 (0 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
145	CORNEAL OPACITY	RIGHT
146	NO ABNORMALITIES DETECTED	BOTH
147	NO ABNORMALITIES DETECTED	BOTH
148	NO ABNORMALITIES DETECTED	BOTH
149	NO ABNORMALITIES DETECTED	BOTH
150	NO ABNORMALITIES DETECTED	BOTH
151	NO ABNORMALITIES DETECTED	BOTH
152	NO ABNORMALITIES DETECTED	BOTH
153	NO ABNORMALITIES DETECTED	BOTH
154	NO ABNORMALITIES DETECTED	BOTH

GROUP 4 (2000 MG/KG/DAY)

ANIMAL	OBSERVATION	LOCATION
233	NO ABNORMALITIES DETECTED	BOTH
234	NO ABNORMALITIES DETECTED	BOTH
235	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
236	CORNEAL OPACITY	BOTH
237	PERSISTENT HYALOID VESSEL IN VITREOUS	RIGHT
238	NO ABNORMALITIES DETECTED	BOTH
239	NO ABNORMALITIES DETECTED	BOTH
240	CORNEAL OPACITY	RIGHT
	LENTICULAR OPACITY	RIGHT
241	CORNEAL OPACITY	BOTH
242	NO ABNORMALITIES DETECTED	BOTH

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

FOOD CONSUMPTION (G/ANIMAL/DAY)
MALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION	TREATMENT						
	1-7 1	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
1	16.8	18.2	18.9	20.7	22.2	22.1	21.8	23.3
2	18.2	21.5	21.2	27.4	24.3	31.0	28.0	30.1
3	15.6	18.4	20.0	21.0	23.2	21.7	19.9	20.6
4	17.9	20.7	23.8	24.0	24.8	27.8	24.8	25.4
5	15.5	19.3	22.9	22.6	24.0	23.6	22.5	23.2
6	16.2	19.4	23.2	24.0	24.5	25.4	24.1	25.0
7	16.2	18.6	21.1	21.7	23.0	26.1	20.2	22.0
8	15.2	18.9	21.3	22.7	23.1	23.2	22.7	25.0
9	15.8	18.5	21.6	23.0	23.1	23.5	22.0	23.0
10	15.0	18.6	20.0	21.5	22.1	23.4	20.5	20.6
11	16.8	19.6	22.7	23.8	24.0	24.3	21.6	21.6
12	16.8	20.0	23.8	24.2	22.8	26.3	24.5	25.1
13	16.6	19.5	22.8	23.9	22.9	24.3	22.1	23.4
14	16.6	19.3	21.4	22.4	23.9	21.8	21.2	22.7
15	16.7	20.8	23.2	23.3	22.8	25.4	23.4	23.6
16	17.7	21.4	24.6	26.5	23.8	28.8	27.0	26.9
17	15.3	22.3	22.2	23.0	23.0	22.5	19.9	21.8
18	16.7	20.7	22.6	24.4	23.5	25.4	23.7	26.8
19	16.8	19.2	22.4	23.9	23.1	23.8	22.9	25.1
20	16.1	20.2	22.4	20.4	24.2	24.6	21.7	22.6
21	19.4	23.8	24.6	24.8	22.1	28.7	24.8	24.8
22	15.5	18.6	22.3	22.1	24.7	23.2	20.9	21.6
23	18.0	21.5	22.8	24.4	23.0	27.3	23.9	24.2
24	16.4	19.8	25.4	27.0	22.9	29.1	26.2	25.8
25	16.3	18.6	20.9	22.5	22.7	25.2	23.5	23.9
26	16.8	20.4	22.7	23.9	22.9	26.5	24.0	24.6
27	14.6	17.7	20.5	21.8	21.6	21.2	18.4	19.9
28	15.3	17.3	20.2	20.9	21.2	23.2	21.3	23.9
29	16.2	19.8	21.2	22.8	22.8	23.4	21.7	22.2
30	17.3	19.0	20.2	22.0	22.4	22.3	19.4	22.6
31	16.2	19.6	21.0	23.1	23.5	25.1	22.5	23.5
32	16.4	19.0	21.5	21.0	22.0	22.5	21.3	21.8
33	16.6	18.3	20.1	19.6	20.2	20.5	18.7	18.8
34	7.2	18.1	20.1	20.4	21.9	21.5	20.4	20.8
35	14.4	20.5	20.1	23.5	22.7	26.9	23.0	24.8
36	17.5	20.4	23.2	23.5	21.6	27.5	24.1	24.1

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

FOOD CONSUMPTION (G/ANIMAL/DAY)
MALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
1	23.7	23.1	23.1	22.8	23.5	22.9	---	---
2	27.8	26.3	25.4	25.0	25.6	24.7	---	---
3	19.7	19.2	19.3	18.5	19.0	18.7	---	---
4	24.7	25.1	24.1	22.3	23.9	23.2	---	---
5	22.6	22.4	22.5	22.2	21.9	21.5	---	---
6	25.1	23.3	22.9	22.4	21.9	22.8	---	---
7	21.4	19.1	19.6	19.4	20.6	20.9	---	---
8	23.1	21.4	22.7	22.8	21.9	22.8	---	---
9	22.1	22.8	21.2	20.4	20.8	20.8	---	---
10	20.3	20.0	20.2	21.4	19.6	19.5	---	---
11	21.9	21.0	20.0	19.9	19.9	20.2	---	---
12	24.6	23.5	24.3	23.8	23.3	23.4	---	---
13	22.3	21.6	22.7	22.4	21.0	22.1	---	---
14	21.0	20.4	20.1	19.9	19.3	20.6	---	---
15	22.7	21.7	22.4	22.6	21.3	21.1	---	---
16	26.8	26.9	26.5	25.6	26.2	26.5	---	---
17	20.6	21.1	20.9	20.8	20.0	20.9	---	---
18	25.4	25.7	24.4	24.5	22.1	23.9	---	---
19	23.7	22.5	22.2	22.4	21.5	21.1	---	---
20	22.2	20.6	21.4	21.3	20.7	21.5	---	---
21	24.5	25.0	24.4	24.5	23.1	24.5	20.4	26.4
22	20.8	21.2	20.8	21.0	20.6	22.5	19.3	21.9
23	24.1	23.5	22.3	22.8	23.0	24.1	21.6	22.5
24	27.2	25.5	25.8	26.4	25.6	27.5	25.2	27.1
25	24.3	22.6	18.7	23.5	22.4	23.3	23.0	24.5
26	24.8	22.9	22.3	21.8	20.7	22.0	20.7	22.9
27	19.7	19.4	19.7	19.6	19.7	20.3	21.6	20.9
28	23.1	22.3	22.0	20.7	22.1	20.7	22.0	22.2
29	21.2	20.2	20.7	20.7	20.2	20.7	22.1	20.5
30	21.0	20.1	20.5	20.5	20.3	19.7	21.2	21.4
31	22.7	22.0	22.0	22.1	21.0	21.8	---	---
32	21.0	20.9	20.7	20.6	19.9	20.9	---	---
33	18.5	17.7	17.9	18.4	17.7	17.9	---	---
34	19.6	19.5	19.7	19.5	19.5	19.3	---	---
35	23.1	21.3	21.3	21.9	20.4	19.7	---	---
36	23.7	22.6	23.3	22.8	22.8	23.5	---	---

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

FOOD CONSUMPTION (G/ANIMAL/DAY)
MALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY	
	14-21	21-28
	2/3	3/4
1	---	---
2	---	---
3	---	---
4	---	---
5	---	---
6	---	---
7	---	---
8	---	---
9	---	---
10	---	---
11	---	---
12	---	---
13	---	---
14	---	---
15	---	---
16	---	---
17	---	---
18	---	---
19	---	---
20	---	---
21	25.1	23.5
22	22.7	22.4
23	23.1	23.3
24	28.2	27.7
25	24.6	22.2
26	23.5	21.6
27	20.7	20.0
28	23.5	21.6
29	21.3	21.9
30	21.5	21.5
31	---	---
32	---	---
33	---	---
34	---	---
35	---	---
36	---	---

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

FOOD CONSUMPTION (G/ANIMAL/DAY)

MALES

GROUP 2 (500 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT					
	1-7 1	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
37	17.0	22.1	24.7	24.2	25.1	24.5	25.1	24.9
38	16.9	21.8	24.5	26.1	23.0	31.2	27.5	27.1
39	16.0	19.9	22.2	22.7	23.8	24.8	23.7	24.5
40	17.4	19.9	21.7	23.4	23.2	28.2	26.1	26.1
41	16.7	19.8	21.8	23.2	23.8	24.2	22.3	23.7
42	19.8	22.8	25.1	25.6	23.7	31.5	27.7	27.0
43	18.8	23.4	25.3	26.9	25.9	29.6	26.1	26.5
44	16.6	19.8	20.0	16.1	13.0	---	---	---
45	15.3	19.1	21.7	21.5	22.7	25.6	23.3	23.4
46	15.9	21.0	22.2	22.0	22.0	26.1	22.9	23.1
47	17.4	20.9	22.9	23.7	21.7	28.1	24.7	25.6
48	15.4	19.3	21.0	22.3	22.9	25.2	24.0	23.9
49	15.1	17.8	19.3	19.5	19.9	20.9	20.7	22.0
50	15.9	24.7	20.5	21.7	23.3	24.2	22.9	23.9
51	18.3	22.5	23.5	26.3	28.7	28.7	27.6	27.0
52	15.5	18.6	21.8	23.2	25.0	26.0	24.4	25.0
53	18.2	22.6	24.5	24.9	25.8	25.6	24.7	25.9
54	13.5	17.2	21.1	19.5	21.3	22.1	21.4	21.7
55	17.3	21.2	23.0	23.0	24.5	23.7	23.1	23.8
56	16.6	20.3	21.1	23.0	24.6	24.8	23.4	22.6
57	19.2	28.3	24.2	24.9	25.9	25.2	24.3	24.1
58	17.0	20.9	23.2	23.3	24.8	25.8	24.6	23.7
59	19.2	22.6	22.7	23.6	23.9	23.8	23.3	24.3
60	16.0	19.2	21.6	21.2	22.8	23.0	23.5	23.2
61	18.0	21.5	24.0	24.7	25.3	25.6	25.2	25.8
62	17.0	21.1	22.3	21.9	22.5	22.3	21.7	22.0

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
37	24.4	22.8	23.1	21.6	23.5	22.7	---	---
38	26.9	25.9	26.7	25.2	26.0	27.0	---	---
39	23.1	21.5	22.7	21.2	21.2	23.3	---	---
40	25.2	24.3	23.3	21.8	22.0	22.4	---	---
41	22.2	21.5	17.1	21.4	21.9	21.5	---	---
42	26.7	26.2	25.9	23.8	25.3	24.9	---	---
43	27.0	25.9	25.8	26.9	24.4	25.4	---	---
44	---	---	---	---	---	---	---	---
45	22.9	22.4	23.4	22.9	23.0	23.6	---	---
46	23.3	20.8	21.0	20.6	20.8	21.6	---	---
47	25.5	24.9	23.8	24.2	24.0	23.7	---	---
48	23.9	22.3	23.7	22.7	22.8	23.9	---	---
49	20.7	20.5	20.5	19.1	19.9	20.3	---	---
50	22.8	21.7	21.4	20.0	20.0	19.9	---	---
51	28.1	25.7	26.2	25.5	26.0	25.4	---	---
52	23.7	23.2	24.0	22.7	22.8	22.7	---	---
53	26.1	24.7	24.7	23.9	23.4	24.2	---	---
54	21.9	20.8	20.2	19.5	20.3	20.1	---	---
55	23.5	22.4	21.9	21.1	21.0	21.1	---	---
56	21.9	21.7	21.8	21.3	20.5	21.3	---	---
57	23.8	23.3	21.5	22.1	22.1	22.2	---	---
58	23.4	22.6	23.5	23.0	22.5	23.0	---	---
59	23.4	23.3	23.3	23.1	22.8	23.9	---	---
60	22.0	21.9	21.9	21.4	20.5	20.1	---	---
61	25.2	24.8	24.2	23.9	23.5	23.2	---	---
62	21.2	20.3	20.8	20.2	19.8	19.8	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

FOOD CONSUMPTION (G/ANIMAL/DAY)
MALES

GROUP 2 (500 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY	
	14-21	21-28
	2/3	3/4
37	---	---
38	---	---
39	---	---
40	---	---
41	---	---
42	---	---
43	---	---
44	---	---
45	---	---
46	---	---
47	---	---
48	---	---
49	---	---
50	---	---
51	---	---
52	---	---
53	---	---
54	---	---
55	---	---
56	---	---
57	---	---
58	---	---
59	---	---
60	---	---
61	---	---
62	---	---

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

FOOD CONSUMPTION (G/ANIMAL/DAY)

MALES

GROUP 3 (1000 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT						
	1-7 1		1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
63	17.2		21.0	23.2	24.8	27.0	25.1	24.2	24.1
64	18.5		22.3	24.6	23.1	24.9	24.4	24.2	23.5
65	16.7		20.2	23.0	23.5	26.4	24.1	24.1	25.9
66	13.3		21.4	24.2	23.5	25.1	25.2	25.1	26.1
67	14.2		17.7	19.3	19.2	21.8	20.2	20.0	20.9
68	16.0		20.3	22.5	22.7	25.1	24.1	24.8	25.8
69	16.2		20.8	22.1	22.5	24.2	22.2	21.0	21.6
70	19.8		24.4	26.5	27.5	28.2	30.5	28.1	27.5
71	17.3		20.8	19.6	23.7	24.7	23.4	24.0	24.0
72	16.9		20.7	21.9	22.7	24.4	22.8	22.4	22.3
73	17.2		20.0	22.3	22.5	24.0	23.5	24.1	25.9
74	16.4		15.9	21.8	22.4	23.6	23.2	22.3	22.5
75	15.2		18.1	20.3	21.1	23.0	21.6	21.6	22.7
76	17.9		21.4	22.9	23.1	25.2	24.1	24.1	24.4
77	18.8		21.9	23.7	23.7	25.7	25.0	24.7	24.4
78	16.1		20.2	21.9	22.6	24.7	23.9	22.7	22.4
79	15.8		19.5	22.3	23.3	25.5	24.7	25.2	26.0
80	17.0		21.8	22.7	23.1	24.3	23.8	23.4	24.7
81	17.3		21.7	24.1	24.9	26.4	24.3	24.2	24.8
82	17.9		21.4	23.5	23.8	26.7	26.4	26.0	25.9
83	18.8		22.6	24.8	25.7	26.8	25.6	25.4	25.8
84	15.9		19.2	18.1	20.8	21.1	19.9	19.1	19.4
85	15.6		19.7	21.2	19.8	20.9	20.2	21.1	21.0
86	16.0		19.7	21.4	21.2	23.2	22.8	22.6	23.1
87	19.3		26.6	26.1	26.6	27.0	25.6	26.3	---
88	15.3		18.5	20.5	20.9	21.4	19.8	19.7	19.9

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
63	22.7	22.0	22.5	22.3	20.3	20.2	---	---
64	24.0	23.8	24.2	24.0	23.2	23.3	---	---
65	24.6	25.7	24.2	24.2	24.2	24.5	---	---
66	24.8	24.7	24.4	24.5	24.0	24.5	---	---
67	19.7	18.7	19.5	19.2	18.5	19.3	---	---
68	26.0	25.8	26.1	24.6	25.2	25.0	---	---
69	21.1	21.1	20.6	20.2	20.2	20.1	---	---
70	27.6	27.5	26.5	25.6	25.5	26.7	---	---
71	24.5	24.0	23.9	23.1	22.7	23.9	---	---
72	22.8	21.9	21.4	20.5	21.4	22.0	---	---
73	25.2	25.7	24.4	24.3	24.0	23.0	---	---
74	22.1	21.7	23.5	23.3	23.4	23.0	---	---
75	23.3	22.2	21.9	21.5	21.1	21.8	---	---
76	23.1	23.2	23.7	22.4	22.3	23.0	---	---
77	25.2	24.6	23.9	23.5	22.1	22.8	---	---
78	23.4	24.6	24.6	24.0	23.2	22.9	---	---
79	25.1	24.8	24.5	24.6	24.7	22.9	---	---
80	23.3	23.5	23.0	22.8	23.6	23.7	---	---
81	24.2	23.3	22.4	22.8	22.2	22.2	---	---
82	27.1	26.7	25.3	25.1	24.7	25.2	---	---
83	27.1	25.6	26.3	25.9	25.8	25.8	---	---
84	20.0	20.2	20.4	19.8	19.8	20.5	---	---
85	21.4	21.5	22.4	21.3	20.8	20.9	---	---
86	22.8	23.1	22.4	22.6	21.8	21.7	---	---
87	---	---	---	---	---	---	---	---
88	19.9	20.0	20.8	19.3	19.6	20.7	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

FOOD CONSUMPTION (G/ANIMAL/DAY)
MALES

GROUP 3 (1000 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY	
	14-21	21-28
	2/3	3/4

63	---	---
64	---	---
65	---	---
66	---	---
67	---	---
68	---	---
69	---	---
70	---	---
71	---	---
72	---	---
73	---	---
74	---	---
75	---	---
76	---	---
77	---	---
78	---	---
79	---	---
80	---	---
81	---	---
82	---	---
83	---	---
84	---	---
85	---	---
86	---	---
87	---	---
88	---	---

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

FOOD CONSUMPTION (G/ANIMAL/DAY)
MALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION	TREATMENT						
	1-7 1	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
89	16.6	21.4	23.2	23.3	24.7	23.8	22.4	23.0
90	18.0	20.3	21.9	22.4	23.9	23.9	23.3	23.2
91	17.0	19.6	22.0	21.4	22.4	22.4	22.5	24.0
92	15.7	20.1	20.8	20.9	22.9	22.2	21.3	21.2
93	16.8	21.4	23.7	23.5	25.1	24.6	24.1	24.1
94	18.5	23.7	25.4	25.8	28.1	29.0	27.8	28.4
95	17.3	24.9	22.6	23.7	24.8	23.9	22.1	23.7
96	17.3	21.2	22.4	22.5	23.6	23.4	23.4	24.1
97	15.8	22.1	23.2	21.9	23.2	23.1	22.1	23.5
98	16.6	21.4	23.8	22.8	24.6	24.8	24.2	23.9
99	17.0	21.8	24.2	24.8	27.1	26.5	24.2	23.8
100	16.3	20.6	21.9	20.5	23.0	22.8	22.0	22.7
101	15.9	19.8	21.2	19.9	20.5	22.7	22.1	22.9
102	16.2	19.5	20.5	21.5	23.3	23.6	22.7	24.0
103	16.4	21.7	21.6	22.5	24.2	23.4	23.1	24.5
104	17.0	23.1	24.2	24.7	26.6	26.3	25.7	26.1
105	16.2	21.4	24.4	24.7	26.4	26.3	25.0	28.1
106	16.4	20.8	23.3	22.7	25.1	23.5	21.2	21.5
107	17.7	22.6	24.2	24.4	26.6	26.1	25.2	25.3
108	15.9	20.8	22.4	22.0	22.9	22.4	21.9	23.6
109	17.8	23.0	25.3	25.2	26.8	27.4	25.9	26.5
110	16.3	20.8	21.8	22.4	23.5	23.2	23.0	24.1
111	16.8	20.5	21.4	22.0	24.6	23.9	23.4	23.6
112	18.2	23.5	25.0	25.4	26.6	26.4	26.3	25.2
113	18.2	22.9	24.0	25.2	26.7	26.4	26.2	26.2
114	16.0	22.0	23.9	24.4	25.2	25.9	24.4	24.2
115	16.6	24.4	25.3	25.5	27.7	27.2	26.2	27.0
116	17.2	22.6	24.3	24.3	26.1	25.0	24.4	25.3
117	16.5	21.2	23.6	23.9	26.5	26.4	25.1	25.7
118	15.7	20.2	20.3	20.2	21.2	21.1	20.7	21.2
119	17.9	21.8	24.3	24.2	24.7	26.0	25.2	24.9
120	16.0	21.8	24.3	23.6	24.9	25.5	24.9	25.6
121	15.3	21.6	22.6	21.6	22.0	22.1	22.5	23.0
122	15.0	20.7	20.6	18.7	20.5	20.6	20.6	21.3
123	16.1	22.6	23.0	22.9	24.5	25.6	26.6	26.1
124	19.2	24.8	27.1	26.7	28.1	29.6	30.2	32.4

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

FOOD CONSUMPTION (G/ANIMAL/DAY)
MALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
89	22.0	21.3	20.9	20.3	18.9	20.3	---	---
90	24.2	23.1	21.5	20.2	20.1	20.5	---	---
91	21.8	20.3	20.7	19.7	19.8	21.0	---	---
92	21.2	20.9	20.0	20.7	20.0	19.6	---	---
93	23.1	24.1	22.2	22.0	21.4	22.5	---	---
94	27.8	27.3	26.3	26.8	24.7	24.8	---	---
95	23.0	22.5	21.8	22.1	21.5	22.3	---	---
96	23.1	22.8	22.4	21.5	21.1	22.6	---	---
97	24.5	24.4	23.6	22.5	22.2	21.7	---	---
98	25.2	24.3	23.3	23.7	21.4	21.8	---	---
99	24.1	23.9	22.9	22.8	22.6	22.8	---	---
100	21.4	21.9	21.4	21.0	20.1	20.9	---	---
101	22.7	22.1	21.6	21.7	20.4	23.0	---	---
102	23.6	22.7	22.1	22.0	22.2	22.1	---	---
103	22.7	22.5	21.8	21.0	21.6	22.1	---	---
104	26.2	24.5	23.2	23.2	22.6	23.7	---	---
105	25.5	25.3	25.3	24.1	23.9	24.6	---	---
106	22.1	21.2	21.3	20.6	20.4	21.1	---	---
107	24.8	23.8	22.7	22.5	21.9	23.1	---	---
108	22.4	21.7	20.9	19.9	20.4	20.8	---	---
109	27.1	26.9	26.5	25.5	24.3	24.5	25.9	25.1
110	22.5	22.0	22.3	20.8	21.1	21.5	20.4	20.0
111	22.9	22.2	22.5	22.5	21.0	22.1	21.4	21.7
112	25.4	25.0	23.2	23.7	22.3	23.1	21.3	22.8
113	25.9	26.6	25.2	24.3	23.2	24.3	24.5	24.4
114	24.2	23.8	23.7	22.7	21.8	23.1	26.4	23.5
115	26.1	27.7	25.0	25.4	24.4	24.3	27.1	23.4
116	24.5	24.3	22.8	22.1	21.6	23.1	24.7	24.0
117	24.8	24.0	23.3	24.3	21.7	23.0	26.2	23.7
118	19.4	20.7	20.1	19.2	18.9	19.9	21.1	19.4
119	25.0	25.2	24.5	24.8	24.7	25.4	---	---
120	23.7	23.8	23.4	23.9	22.5	23.7	---	---
121	22.5	23.4	21.9	21.0	20.9	23.1	---	---
122	20.5	20.5	20.0	19.4	19.5	21.4	---	---
123	24.4	23.5	23.2	23.5	22.4	23.0	---	---
124	30.2	30.0	24.4	30.4	28.7	29.2	---	---

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

FOOD CONSUMPTION (G/ANIMAL/DAY)
MALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY	
	14-21	21-28
	2/3	3/4
89	---	---
90	---	---
91	---	---
92	---	---
93	---	---
94	---	---
95	---	---
96	---	---
97	---	---
98	---	---
99	---	---
100	---	---
101	---	---
102	---	---
103	---	---
104	---	---
105	---	---
106	---	---
107	---	---
108	---	---
109	25.4	25.4
110	21.3	21.1
111	22.6	21.0
112	22.1	22.8
113	24.1	23.1
114	23.9	23.6
115	24.2	24.2
116	23.7	23.3
117	23.7	22.9
118	18.5	19.1
119	---	---
120	---	---
121	---	---
122	---	---
123	---	---
124	---	---

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

FOOD CONSUMPTION (G/ANIMAL/DAY)
FEMALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION	TREATMENT						
	1-7 1	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
125	13.4	15.2	16.0	16.5	17.7	17.6	16.6	18.6
126	12.5	15.5	16.3	16.5	17.3	17.0	15.0	16.3
127	14.6	17.7	18.4	19.0	19.3	19.4	18.5	21.0
128	13.3	15.4	16.6	17.1	19.1	18.6	17.0	19.1
129	13.7	16.5	17.9	16.8	19.1	18.5	17.2	17.5
130	13.1	15.0	16.5	16.4	17.6	16.7	15.3	16.7
131	11.4	13.2	13.8	14.5	15.6	14.5	13.8	15.1
132	12.3	13.7	14.4	14.8	15.8	15.8	14.6	15.5
133	13.7	16.2	17.5	17.7	18.4	17.4	16.2	17.1
134	14.1	16.3	18.4	18.9	20.7	19.3	18.5	20.5
135	14.1	15.1	16.7	16.8	17.6	17.1	17.0	19.2
136	14.6	16.3	17.5	17.2	18.0	18.6	17.5	19.0
137	12.4	14.7	16.7	16.5	17.9	17.1	16.5	18.8
138	11.5	12.1	13.0	13.7	14.0	13.7	12.8	14.9
139	15.5	17.3	19.6	19.0	22.0	21.6	20.0	20.2
140	13.5	14.6	15.0	15.5	17.0	16.4	16.1	17.6
141	13.7	15.9	15.0	14.8	15.6	16.3	15.5	17.5
142	13.4	15.0	17.7	18.1	20.3	21.0	21.8	25.1
143	12.8	12.8	15.4	14.3	15.8	15.1	15.3	16.7
144	15.2	17.1	16.8	17.4	18.0	17.4	16.4	18.3
145	12.5	12.0	15.5	14.4	14.8	15.1	13.3	14.0
146	13.0	14.1	15.4	16.0	17.1	16.3	15.8	17.3
147	13.3	15.3	17.4	16.3	17.5	17.8	16.1	18.4
148	14.9	16.6	18.8	19.5	19.2	19.1	18.5	19.7
149	12.5	14.9	16.8	16.8	19.0	18.0	17.1	19.3
150	12.8	14.5	16.2	16.4	17.5	17.1	16.3	18.3
151	14.9	17.0	17.9	18.7	19.8	18.3	17.6	18.7
152	11.2	12.6	14.3	14.2	14.8	14.8	13.5	15.4
153	14.7	16.7	19.0	20.0	20.6	19.7	19.7	21.5
154	16.2	18.7	17.8	17.3	19.2	17.4	16.3	17.2
155	12.3	14.2	16.4	15.4	15.8	14.9	14.1	15.2
156	13.0	14.5	15.9	15.0	16.6	16.3	14.7	16.3
157	13.4	16.9	16.2	16.0	17.5	16.7	15.5	17.4
158	12.5	14.7	17.0	17.1	16.5	16.5	15.3	17.1
159	15.2	15.6	16.9	16.0	16.6	16.3	15.7	17.8
160	14.7	16.7	18.0	17.3	17.7	16.5	16.3	18.0

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

FOOD CONSUMPTION (G/ANIMAL/DAY)
FEMALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
125	17.8	16.5	16.6	16.3	16.9	17.2	---	---
126	16.7	16.2	16.7	16.0	16.4	17.3	---	---
127	20.9	18.7	20.6	20.4	19.1	19.4	---	---
128	18.9	17.0	18.4	16.3	15.6	15.8	---	---
129	18.1	16.0	16.0	16.2	15.8	15.7	---	---
130	20.8	21.4	23.4	23.4	24.1	24.5	---	---
131	15.4	13.8	14.6	14.4	14.2	14.7	---	---
132	15.7	14.8	15.2	14.3	14.1	14.4	---	---
133	17.3	16.2	16.4	15.1	15.9	15.4	---	---
134	20.1	17.3	18.1	16.5	17.2	17.7	---	---
135	18.4	17.2	16.7	16.6	15.1	15.7	---	---
136	18.0	17.9	18.0	17.0	16.1	18.2	---	---
137	19.4	17.5	17.0	17.3	17.9	17.6	---	---
138	14.7	13.6	13.3	13.2	13.1	14.0	---	---
139	20.8	18.9	20.0	19.5	17.8	19.1	---	---
140	18.0	16.6	16.3	16.3	16.9	16.3	---	---
141	16.8	16.2	15.7	16.1	15.7	14.7	---	---
142	25.0	24.5	23.6	24.1	25.8	23.2	---	---
143	15.9	14.9	15.5	15.5	14.9	15.0	---	---
144	18.6	16.7	17.0	17.2	18.2	17.2	---	---
145	13.7	12.9	13.0	12.7	12.1	12.9	14.3	13.9
146	16.9	15.2	15.3	15.0	15.0	15.5	15.4	15.8
147	17.4	16.9	18.1	17.7	17.6	17.5	17.8	18.3
148	18.5	17.3	18.7	18.2	18.7	18.1	21.6	19.1
149	19.0	16.9	17.3	17.4	17.0	16.7	18.4	17.8
150	19.1	16.7	16.2	15.5	15.9	15.6	15.7	16.9
151	19.6	17.8	17.7	18.4	18.4	18.1	19.2	20.7
152	13.9	13.8	13.7	13.6	13.5	14.0	15.5	14.4
153	20.3	20.3	19.4	18.8	18.1	17.7	20.9	20.4
154	18.7	16.8	16.5	15.6	16.4	15.5	16.8	17.1
155	14.5	14.5	15.3	14.6	13.7	13.8	---	---
156	16.8	14.9	15.3	15.6	15.1	14.1	---	---
157	16.3	15.9	18.1	13.5	14.0	17.6	---	---
158	16.4	15.7	18.2	15.1	14.9	14.8	---	---
159	17.3	16.1	17.0	15.8	15.3	15.5	---	---
160	15.9	16.2	17.6	16.2	16.6	17.0	---	---

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

FOOD CONSUMPTION (G/ANIMAL/DAY)
FEMALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY	
	14-21	21-28
	2/3	3/4

125	---	---
126	---	---
127	---	---
128	---	---
129	---	---
130	---	---
131	---	---
132	---	---
133	---	---
134	---	---
135	---	---
136	---	---
137	---	---
138	---	---
139	---	---
140	---	---
141	---	---
142	---	---
143	---	---
144	---	---
145	12.9	12.9
146	16.0	15.7
147	17.6	18.4
148	18.5	18.2
149	18.0	17.3
150	16.0	15.5
151	21.3	19.2
152	14.5	14.8
153	19.9	20.3
154	17.6	16.4
155	---	---
156	---	---
157	---	---
158	---	---
159	---	---
160	---	---

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300

RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)FOOD CONSUMPTION (G/ANIMAL/DAY)
FEMALES

GROUP 2 (500 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT						
	1-7 1		1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
161	15.2		17.6	18.1	17.4	17.8	18.5	17.9	19.8
162	12.9		15.9	16.1	15.6	17.6	16.3	16.2	16.7
163	12.6		13.9	14.4	14.0	15.9	14.8	13.9	15.8
164	13.0		15.8	16.6	16.5	18.3	18.2	17.2	18.3
165	13.3		15.9	16.6	17.2	18.6	18.2	17.2	18.4
166	13.9		15.6	16.4	16.2	17.4	15.8	16.0	16.8
167	13.6		15.6	17.1	16.2	18.0	17.5	16.7	17.2
168	14.4		16.2	17.1	16.7	18.2	17.8	16.7	18.1
169	13.6		16.1	16.5	16.9	18.3	18.5	18.2	19.5
170	13.6		15.2	16.7	17.3	17.9	17.9	17.4	17.9
171	13.3		15.6	16.1	15.8	17.8	18.7	17.1	18.4
172	14.7		17.4	18.5	17.3	18.2	17.9	17.2	18.5
173	14.4		16.8	16.7	15.9	17.9	18.2	18.4	18.0
174	12.8		16.2	16.3	15.7	17.1	17.1	16.5	16.6
175	14.2		15.9	17.0	15.4	17.9	17.8	16.5	17.2
176	12.4		15.9	15.8	16.9	18.5	18.4	17.4	18.5
177	12.2		13.7	13.8	14.2	14.7	14.3	14.5	14.4
178	13.6		15.4	14.8	13.5	15.4	15.7	14.6	15.1
179	14.0		17.5	17.3	16.7	18.4	18.0	17.7	18.5
180	14.0		15.9	16.0	16.0	17.4	17.9	17.8	18.9
181	14.9		17.6	17.1	15.0	18.0	19.3	18.3	20.8
182	12.5		14.0	14.4	13.1	14.5	14.2	14.4	15.8
183	14.5		16.8	17.1	15.8	15.8	17.9	16.1	17.2
184	14.8		17.2	18.4	18.8	18.8	19.0	18.0	19.4
185	13.8		18.0	18.8	18.8	18.7	18.9	18.3	19.5
186	13.8		14.6	15.1	14.3	11.7	15.9	15.8	16.7

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
161	18.6	17.8	18.3	17.4	16.7	16.8	---	---
162	17.6	15.8	16.2	14.1	15.4	15.1	---	---
163	16.1	14.4	14.5	13.7	14.4	13.0	---	---
164	18.2	17.5	16.7	16.7	17.3	16.6	---	---
165	19.0	18.0	17.3	16.7	16.6	15.8	---	---
166	16.2	15.2	16.1	17.3	16.5	16.2	---	---
167	18.3	17.3	16.6	15.3	16.5	16.6	---	---
168	17.1	16.2	17.9	16.2	16.9	16.5	---	---
169	18.4	17.6	17.4	16.8	17.4	16.7	---	---
170	17.9	17.3	17.3	16.2	15.5	16.3	---	---
171	18.3	18.2	18.4	17.6	19.1	19.6	---	---
172	18.0	17.5	17.0	16.2	15.0	16.3	---	---
173	18.9	18.4	17.6	17.5	16.4	16.0	---	---
174	16.8	16.3	16.2	14.6	15.1	14.6	---	---
175	18.0	18.1	17.7	17.5	16.6	17.7	---	---
176	19.1	17.7	18.0	16.5	17.3	16.5	---	---
177	15.2	14.4	15.3	15.5	15.8	15.1	---	---
178	15.0	15.1	15.4	14.4	14.7	14.7	---	---
179	19.4	18.2	18.2	17.7	18.0	17.2	---	---
180	18.5	19.5	18.3	20.3	14.9	16.3	---	---
181	21.2	20.7	19.3	19.9	20.5	20.1	---	---
182	16.4	15.9	16.2	15.7	15.9	16.1	---	---
183	17.0	16.8	16.0	15.6	15.3	13.9	---	---
184	18.4	17.8	18.1	17.9	17.5	16.6	---	---
185	19.8	19.2	18.8	19.0	19.1	16.6	---	---
186	17.3	16.2	15.7	15.0	15.7	15.5	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

FOOD CONSUMPTION (G/ANIMAL/DAY)
FEMALES

GROUP 2 (500 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY	
	14-21	21-28
	2/3	3/4
	-----	-----
161	---	---
162	---	---
163	---	---
164	---	---
165	---	---
166	---	---
167	---	---
168	---	---
169	---	---
170	---	---
171	---	---
172	---	---
173	---	---
174	---	---
175	---	---
176	---	---
177	---	---
178	---	---
179	---	---
180	---	---
181	---	---
182	---	---
183	---	---
184	---	---
185	---	---
186	---	---

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302

RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)FOOD CONSUMPTION (G/ANIMAL/DAY)
FEMALES

GROUP 3 (1000 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT					
	1-7 1	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
187	13.9	16.0	16.3	15.2	17.3	17.4	17.3	19.4
188	13.4	15.4	16.7	17.0	19.0	17.8	17.4	18.6
189	14.3	16.3	16.4	15.9	17.6	16.7	15.6	18.1
190	13.3	14.8	16.1	15.5	17.2	16.1	15.8	17.2
191	14.3	16.5	16.9	17.1	18.9	19.0	18.3	19.0
192	13.9	16.4	16.4	16.9	18.5	17.6	17.4	17.8
193	14.9	17.3	18.2	17.9	17.7	19.9	19.7	20.3
194	13.4	14.8	15.2	14.9	16.3	15.0	15.4	16.2
195	13.5	16.7	17.2	15.8	18.7	17.2	17.5	17.5
196	12.8	15.5	16.0	17.7	20.1	14.4	20.4	21.1
197	12.8	15.3	16.4	15.7	18.3	15.8	16.8	17.5
198	12.3	14.3	14.3	13.6	16.2	15.3	15.0	16.4
199	14.2	16.3	17.5	16.2	18.5	17.4	16.6	19.0
200	13.7	17.5	17.9	17.0	20.5	20.4	18.9	20.9
201	11.8	15.4	15.9	15.3	16.7	16.9	16.6	16.9
202	13.6	15.9	16.3	15.3	17.3	16.5	16.0	17.8
203	12.6	15.2	16.0	15.3	18.5	18.5	16.5	19.1
204	11.3	13.2	14.0	13.1	14.2	13.7	13.2	14.2
205	11.6	14.0	15.0	14.6	16.5	15.7	14.9	15.7
206	13.8	16.2	16.7	17.0	19.6	19.2	19.0	19.4
207	14.1	16.3	16.5	14.5	16.6	16.3	15.2	15.5
208	13.2	16.9	18.0	17.2	19.4	18.5	18.5	19.3
209	11.8	15.1	15.1	14.2	15.8	15.9	15.4	16.4
210	13.8	15.9	17.1	16.0	17.3	17.0	15.6	16.8
211	14.7	17.0	17.5	16.5	17.8	16.9	16.7	17.7
212	13.0	15.0	15.9	14.9	16.2	15.0	15.0	15.3

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
187	20.1	20.7	20.6	20.7	21.6	21.4	---	---
188	18.0	17.6	16.7	16.1	16.4	16.2	---	---
189	17.6	16.5	16.5	15.5	16.2	16.3	---	---
190	16.1	16.0	16.0	15.2	15.3	14.9	---	---
191	20.2	18.1	16.8	16.3	16.1	15.0	---	---
192	18.4	16.9	16.7	15.5	15.6	15.3	---	---
193	19.6	18.9	19.6	19.0	19.7	20.2	---	---
194	15.5	16.0	13.4	17.0	16.4	16.3	---	---
195	17.5	17.5	16.9	16.7	17.6	17.4	---	---
196	20.7	20.8	20.4	19.1	19.7	18.5	---	---
197	17.5	16.8	16.6	16.1	16.1	16.0	---	---
198	15.9	16.3	17.1	15.4	16.2	15.5	---	---
199	19.5	18.8	17.8	16.7	18.0	16.5	---	---
200	20.4	20.8	20.3	18.9	19.3	18.4	---	---
201	17.0	16.9	17.1	16.2	16.1	16.2	---	---
202	17.8	17.3	16.9	16.6	16.8	16.5	---	---
203	19.5	20.4	19.9	19.1	18.0	19.3	---	---
204	13.8	13.6	13.5	12.8	13.1	12.7	---	---
205	14.6	14.6	14.7	14.7	14.7	14.8	---	---
206	19.8	18.7	18.2	17.7	18.3	17.3	---	---
207	15.4	15.6	15.0	15.4	14.4	15.2	---	---
208	18.4	19.3	19.3	17.9	15.8	17.3	---	---
209	16.3	15.9	15.9	14.8	15.9	15.3	---	---
210	15.9	17.8	17.2	15.7	16.1	15.2	---	---
211	17.1	17.2	16.6	16.8	17.2	15.9	---	---
212	15.2	15.6	15.1	14.0	15.0	14.3	---	---

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

FOOD CONSUMPTION (G/ANIMAL/DAY)
FEMALES

GROUP 3 (1000 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY	
	14-21	21-28
	2/3	3/4
	-----	-----
187	---	---
188	---	---
189	---	---
190	---	---
191	---	---
192	---	---
193	---	---
194	---	---
195	---	---
196	---	---
197	---	---
198	---	---
199	---	---
200	---	---
201	---	---
202	---	---
203	---	---
204	---	---
205	---	---
206	---	---
207	---	---
208	---	---
209	---	---
210	---	---
211	---	---
212	---	---

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

FOOD CONSUMPTION (G/ANIMAL/DAY)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION	TREATMENT						
	1-7 1	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
213	12.4	14.9	15.8	15.9	17.9	16.6	15.8	16.8
214	15.1	17.1	18.0	15.8	18.4	16.2	16.1	16.8
215	14.7	17.3	17.9	16.6	20.0	19.3	20.2	21.6
216	14.1	16.8	18.2	16.8	19.9	19.5	20.4	20.8
217	13.9	16.8	17.4	16.7	18.7	18.3	17.7	18.3
218	12.5	14.5	16.4	15.6	18.6	16.6	16.7	17.3
219	14.2	17.4	18.0	17.6	19.8	19.7	16.6	14.8
220	13.9	15.3	15.6	12.9	14.5	13.4	14.7	15.5
221	13.2	16.8	17.8	18.7	19.7	19.3	16.4	18.7
222	12.2	15.6	16.4	15.8	18.2	17.4	16.7	18.1
223	13.9	17.0	18.0	18.0	20.3	19.9	19.5	20.6
224	16.1	18.7	19.1	18.3	20.4	19.4	19.3	23.0
225	13.1	15.2	14.9	14.6	15.8	15.5	15.0	15.5
226	13.0	15.6	17.0	15.7	17.9	17.7	18.5	20.2
227	11.7	15.2	15.2	16.1	18.2	16.4	17.5	18.3
228	14.4	17.4	17.7	17.5	19.6	18.0	18.1	18.5
229	14.1	18.2	18.2	17.3	20.4	19.3	19.0	18.3
230	13.1	16.2	16.8	17.5	18.6	17.6	17.3	16.6
231	13.7	17.4	18.1	17.4	18.4	17.7	17.8	18.5
232	13.8	17.4	17.9	18.4	21.7	19.7	19.4	19.2
233	13.7	16.6	16.8	16.5	19.2	17.1	16.5	17.5
234	16.9	18.6	19.3	18.3	21.6	19.6	20.2	20.9
235	13.4	15.9	16.0	16.5	17.6	17.4	17.6	19.4
236	11.3	13.9	14.4	15.0	16.7	16.2	14.1	14.8
237	14.2	18.2	19.0	18.5	21.1	20.4	18.1	18.3
238	12.8	15.3	17.0	17.2	19.4	17.8	18.8	24.4
239	13.5	15.2	16.1	16.7	18.0	16.2	15.6	17.6
240	15.5	16.9	20.2	21.6	19.4	18.7	19.7	21.6
241	15.2	17.2	18.8	18.3	19.9	19.0	18.9	19.9
242	14.4	16.5	17.3	17.0	18.9	17.5	17.3	18.1
243	15.4	17.7	18.6	17.8	20.5	18.5	18.9	19.2
244	13.4	15.2	16.8	15.8	18.5	17.0	17.1	17.1
245	13.5	16.6	16.9	16.7	18.4	18.0	18.2	19.0
246	14.8	18.9	19.2	18.7	20.6	19.6	20.2	21.4
247	13.7	16.7	17.3	17.7	19.3	18.7	19.5	18.6
248	14.0	16.3	15.4	15.1	16.5	15.8	16.1	17.4

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

FOOD CONSUMPTION (G/ANIMAL/DAY)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
213	17.2	16.3	15.6	14.0	13.7	15.0	---	---
214	15.6	16.4	16.3	15.5	15.4	15.4	---	---
215	22.8	23.1	21.5	20.2	20.9	20.2	---	---
216	20.5	20.9	20.7	18.8	18.5	18.7	---	---
217	18.5	17.4	17.4	16.7	16.7	17.3	---	---
218	17.3	17.1	16.6	16.1	16.2	16.2	---	---
219	18.5	18.8	18.1	17.4	16.4	16.7	---	---
220	13.2	14.4	13.9	13.2	11.7	12.9	---	---
221	18.4	18.8	19.3	18.6	17.8	19.0	---	---
222	17.5	16.9	16.9	15.5	15.3	15.3	---	---
223	20.3	20.4	20.1	18.1	18.5	18.7	---	---
224	20.7	20.0	17.9	17.5	16.9	18.1	---	---
225	15.3	14.7	14.3	13.5	13.9	15.0	---	---
226	19.5	19.9	20.7	22.1	16.9	19.1	---	---
227	17.7	17.0	17.6	16.9	15.7	16.0	---	---
228	19.4	18.2	18.0	17.5	17.3	18.0	---	---
229	18.7	19.0	17.4	16.1	16.3	17.2	---	---
230	17.6	18.3	17.7	16.4	15.2	16.9	---	---
231	18.7	17.6	16.5	15.8	16.4	16.8	---	---
232	21.6	24.2	26.0	29.3	22.1	23.8	---	---
233	18.3	16.7	16.7	15.3	15.2	15.6	17.2	16.7
234	20.4	20.2	19.9	18.4	17.7	19.3	22.4	20.8
235	17.6	17.2	17.1	16.0	16.2	16.5	17.4	16.7
236	14.7	14.7	13.7	12.9	13.3	15.2	15.2	15.2
237	20.1	19.4	18.5	16.8	17.7	19.6	21.6	20.8
238	18.9	18.0	18.3	17.2	17.4	18.4	19.4	18.2
239	17.8	16.4	17.1	16.4	15.3	17.0	18.2	18.1
240	21.2	20.6	19.2	18.8	18.1	19.2	20.4	19.9
241	19.1	19.0	18.5	17.4	17.4	19.1	18.5	18.2
242	18.0	16.9	16.9	16.2	15.0	16.0	17.2	16.4
243	19.1	18.5	18.2	18.3	17.0	17.6	---	---
244	16.9	17.4	17.9	16.0	16.5	16.4	---	---
245	17.0	17.2	18.8	16.9	16.2	17.4	---	---
246	20.6	21.9	22.3	21.6	20.2	21.2	---	---
247	17.7	17.1	17.8	16.4	16.1	17.5	---	---
248	16.7	16.5	16.3	14.9	14.9	15.2	---	---

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

FOOD CONSUMPTION (G/ANIMAL/DAY)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY	
	14-21	21-28
	2/3	3/4
	-----	-----
213	---	---
214	---	---
215	---	---
216	---	---
217	---	---
218	---	---
219	---	---
220	---	---
221	---	---
222	---	---
223	---	---
224	---	---
225	---	---
226	---	---
227	---	---
228	---	---
229	---	---
230	---	---
231	---	---
232	---	---
233	17.3	15.5
234	21.1	18.9
235	17.5	16.6
236	17.4	16.5
237	21.5	19.9
238	18.9	17.7
239	18.3	17.2
240	19.5	18.3
241	19.0	17.5
242	16.3	15.5
243	---	---
244	---	---
245	---	---
246	---	---
247	---	---
248	---	---

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

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
MALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT						
	1-7	1-8	8-15	17-22	22-29	29-36	36-42	44-50	
	1	1/2	2/3	3/4	4/5	5/6	6	7/8	
1	156	103	89	87	82	73	67	66	
2	154	101	80	87	73	78	67	67	
3	143	95	85	79	77	67	59	58	
4	154	100	94	84	80	79	68	66	
5	151	99	95	85	80	73	66	65	
6	152	102	97	89	83	77	71	70	
7	132	94	89	83	80	83	63	66	
8	148	97	88	83	76	69	63	66	
9	143	94	88	82	75	70	63	63	
10	147	99	88	83	77	75	62	61	
11	144	100	93	90	84	78	66	64	
12	155	100	94	85	75	77	68	67	
13	158	100	94	89	77	76	66	68	
14	157	101	91	86	82	70	64	67	
15	141	100	93	85	77	78	68	66	
16	157	103	95	91	78	82	73	70	
17	145	119	96	89	81	75	65	67	
18	141	101	92	88	80	80	70	76	
19	139	93	87	83	73	69	63	66	
20	156	105	96	78	84	77	66	65	
21	163	114	97	87	74	83	69	67	
22	154	100	99	86	87	78	67	67	
23	147	103	88	85	76	80	66	65	
24	135	91	96	89	71	79	67	63	
25	138	97	89	85	78	79	70	69	
26	149	99	89	83	75	75	65	64	
27	133	97	93	88	80	73	62	65	
28	148	92	88	82	74	74	64	70	
29	135	94	84	82	75	71	63	64	
30	160	99	87	86	80	73	61	68	
31	152	104	90	85	81	78	67	66	
32	141	90	84	74	70	68	62	60	
33	143	99	93	82	81	78	70	67	
34	72	112	97	82	78	72	64	62	
35	139	109	85	84	76	79	64	65	
36	154	98	89	79	68	75	63	60	

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
MALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
1	65	62	58	55	56	52	---	---
2	59	55	50	48	49	46	---	---
3	54	52	49	47	47	45	---	---
4	61	61	56	51	53	51	---	---
5	60	61	55	53	51	49	---	---
6	67	60	58	55	52	53	---	---
7	60	53	52	51	52	51	---	---
8	58	53	54	51	49	49	---	---
9	58	58	51	49	48	47	---	---
10	57	55	53	55	49	48	---	---
11	62	58	54	52	50	49	---	---
12	62	58	57	54	52	51	---	---
13	61	58	57	55	51	52	---	---
14	59	56	53	51	48	50	---	---
15	62	57	56	55	51	49	---	---
16	66	65	60	55	56	55	---	---
17	62	61	58	57	53	53	---	---
18	68	66	60	58	52	55	---	---
19	60	55	52	51	48	46	---	---
20	61	56	55	54	51	52	---	---
21	63	62	57	56	52	54	44	57
22	62	61	57	56	53	56	50	54
23	61	58	53	52	51	53	48	49
24	63	57	54	53	50	52	48	50
25	65	60	47	57	54	54	54	56
26	61	56	52	50	47	48	46	50
27	61	59	56	55	53	53	57	54
28	64	61	57	53	54	49	53	52
29	58	55	53	53	50	51	55	50
30	61	56	55	53	51	48	53	52
31	62	59	57	55	52	52	---	---
32	56	55	52	51	48	49	---	---
33	64	61	60	60	57	55	---	---
34	56	55	53	52	51	49	---	---
35	58	52	50	50	46	44	---	---
36	57	53	52	50	48	47	---	---

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

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
MALES

GROUP 1 (0 MG/KG/DAY)

	RECOVERY	
	14-21	21-28
DAYS	2/3	3/4
WEEKS		
ANIMAL		
1	---	---
2	---	---
3	---	---
4	---	---
5	---	---
6	---	---
7	---	---
8	---	---
9	---	---
10	---	---
11	---	---
12	---	---
13	---	---
14	---	---
15	---	---
16	---	---
17	---	---
18	---	---
19	---	---
20	---	---
21	53	49
22	54	53
23	49	49
24	50	48
25	54	49
26	50	46
27	51	50
28	53	49
29	50	50
30	51	51
31	---	---
32	---	---
33	---	---
34	---	---
35	---	---
36	---	---

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

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
MALES

GROUP 2 (500 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT						
	1-7 1		1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
37	165		114	102	90	83	75	74	70
38	167		115	102	94	78	90	75	71
39	159		103	94	86	81	78	71	72
40	158		100	87	81	74	79	69	67
41	139		98	89	84	78	72	64	66
42	167		106	94	83	73	85	70	65
43	164		109	94	88	79	82	69	67
44	156		105	87	67	60	---	---	---
45	146		107	96	85	81	82	72	69
46	139		107	91	82	76	81	68	68
47	154		101	91	84	72	83	71	69
48	145		101	88	82	75	74	67	64
49	143		99	89	82	76	73	70	71
50	151		133	90	86	82	79	71	70
51	161		108	91	89	86	80	73	69
52	130		97	90	84	79	75	67	65
53	150		109	96	88	83	76	70	70
54	140		101	99	84	81	77	71	69
55	155		110	98	86	83	75	70	69
56	155		103	88	85	81	75	67	63
57	164		140	97	88	83	76	70	66
58	147		102	90	80	76	72	66	60
59	159		104	87	80	74	69	64	63
60	152		98	88	73	69	64	62	58
61	178		116	103	92	86	81	77	73
62	156		104	88	76	72	67	63	61

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
37	65	59	58	53	56	53	---	---
38	67	62	61	55	55	55	---	---
39	65	61	61	56	54	57	---	---
40	61	58	54	49	49	48	---	---
41	59	56	42	51	52	50	---	---
42	62	59	56	50	52	50	---	---
43	65	61	57	58	51	52	---	---
44	---	---	---	---	---	---	---	---
45	65	63	62	59	57	57	---	---
46	65	57	56	53	51	52	---	---
47	66	62	58	57	55	53	---	---
48	60	56	55	51	50	52	---	---
49	64	61	58	53	54	54	---	---
50	65	61	57	52	51	50	---	---
51	68	61	59	56	56	53	---	---
52	61	57	56	51	50	49	---	---
53	68	62	59	57	54	55	---	---
54	66	62	57	54	55	54	---	---
55	66	61	57	54	52	52	---	---
56	58	56	54	51	48	49	---	---
57	63	60	54	53	53	52	---	---
58	57	55	54	52	49	49	---	---
59	59	57	54	52	50	50	---	---
60	52	50	48	46	43	41	---	---
61	68	66	61	59	57	55	---	---
62	57	53	52	50	48	47	---	---

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

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
MALES

GROUP 2 (500 MG/KG/DAY)

	RECOVERY	
	14-21	21-28
DAYS	2/3	3/4
WEEKS		
ANIMAL		
37	---	---
38	---	---
39	---	---
40	---	---
41	---	---
42	---	---
43	---	---
44	---	---
45	---	---
46	---	---
47	---	---
48	---	---
49	---	---
50	---	---
51	---	---
52	---	---
53	---	---
54	---	---
55	---	---
56	---	---
57	---	---
58	---	---
59	---	---
60	---	---
61	---	---
62	---	---

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

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
MALES

GROUP 3 (1000 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION	TREATMENT						
	1-7 1	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
63	162	108	94	87	85	73	66	64
64	158	105	94	79	77	71	68	64
65	142	106	97	88	90	76	71	74
66	121	112	101	87	83	76	72	72
67	139	102	90	79	80	68	65	64
68	154	110	97	87	85	76	72	73
69	160	110	92	83	80	68	62	62
70	167	112	100	90	87	82	72	68
71	154	104	79	85	81	71	68	66
72	165	108	93	85	82	71	68	66
73	146	101	92	84	80	72	70	71
74	154	84	92	84	81	72	66	66
75	144	103	93	85	83	72	69	69
76	166	108	94	84	83	73	69	68
77	162	104	91	82	79	71	66	64
78	155	108	93	84	81	73	66	61
79	144	102	94	85	82	73	70	69
80	168	113	95	86	80	73	68	68
81	161	108	97	87	82	70	67	67
82	150	103	93	83	83	74	69	66
83	171	107	92	82	77	68	65	62
84	158	110	84	86	79	70	65	62
85	155	109	98	78	76	68	66	63
86	153	106	93	80	79	71	68	65
87	175	124	99	86	79	69	67	---
88	143	103	91	84	79	68	65	63

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
63	57	53	53	51	46	45	---	---
64	61	59	57	55	52	51	---	---
65	66	66	60	58	57	56	---	---
66	65	63	60	58	56	56	---	---
67	58	54	54	52	49	50	---	---
68	68	66	64	59	58	56	---	---
69	58	57	54	51	50	49	---	---
70	65	62	58	55	53	54	---	---
71	64	61	57	54	52	54	---	---
72	64	61	57	53	54	54	---	---
73	66	65	59	57	55	52	---	---
74	61	58	59	56	54	52	---	---
75	67	62	58	56	54	54	---	---
76	62	61	59	55	53	53	---	---
77	63	59	55	53	49	50	---	---
78	60	61	57	54	51	49	---	---
79	64	61	57	55	54	49	---	---
80	62	61	56	53	54	53	---	---
81	63	59	55	54	52	51	---	---
82	66	62	57	55	52	52	---	---
83	62	58	56	54	52	50	---	---
84	63	62	60	56	55	55	---	---
85	61	59	59	55	51	51	---	---
86	63	63	58	57	53	52	---	---
87	---	---	---	---	---	---	---	---
88	61	60	61	54	53	54	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
MALES

GROUP 3 (1000 MG/KG/DAY)

	RECOVERY	
	14-21	21-28
DAYS	2/3	3/4
WEEKS		
ANIMAL		
63	---	---
64	---	---
65	---	---
66	---	---
67	---	---
68	---	---
69	---	---
70	---	---
71	---	---
72	---	---
73	---	---
74	---	---
75	---	---
76	---	---
77	---	---
78	---	---
79	---	---
80	---	---
81	---	---
82	---	---
83	---	---
84	---	---
85	---	---
86	---	---
87	---	---
88	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
MALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION	TREATMENT						
	1-7 1	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
89	144	113	100	90	86	78	70	71
90	153	104	94	87	84	76	71	68
91	151	99	92	81	77	70	67	70
92	137	107	92	84	82	74	68	65
93	167	110	98	87	81	74	68	66
94	159	111	96	86	86	80	73	71
95	159	126	95	91	86	78	71	74
96	149	104	89	80	77	70	67	67
97	147	118	102	87	85	78	72	73
98	156	106	97	85	83	77	71	68
99	141	108	98	89	88	80	70	67
100	138	107	94	81	82	76	70	71
101	152	104	92	78	74	75	69	68
102	147	104	90	85	82	77	71	71
103	153	111	90	82	79	71	66	67
104	153	111	94	87	84	76	71	70
105	162	109	99	87	85	78	72	78
106	139	105	94	83	82	73	63	63
107	158	108	94	84	83	75	69	66
108	152	110	96	84	79	72	67	70
109	163	110	97	86	81	76	68	67
110	143	105	90	83	79	72	69	70
111	154	107	92	83	83	75	70	68
112	152	113	99	90	86	78	73	68
113	156	106	90	84	81	73	68	66
114	157	114	99	90	84	79	71	68
115	175	127	104	92	88	78	71	71
116	152	117	102	91	89	79	73	73
117	144	109	99	88	87	80	73	71
118	138	104	86	78	74	69	64	63
119	175	109	97	84	78	75	69	64
120	160	115	102	85	81	76	70	69
121	133	110	95	81	77	72	70	67
122	124	106	90	73	74	69	67	65
123	141	113	95	82	80	77	75	69
124	168	115	101	87	84	81	79	80

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
MALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
89	65	62	60	56	52	55	---	---
90	68	63	57	52	51	51	---	---
91	61	56	54	50	50	52	---	---
92	62	60	55	55	52	50	---	---
93	61	62	54	53	50	51	---	---
94	67	64	59	58	53	53	---	---
95	68	65	60	59	55	56	---	---
96	62	59	55	52	50	53	---	---
97	73	71	66	62	59	58	---	---
98	69	64	59	59	52	51	---	---
99	65	63	58	57	55	54	---	---
100	64	64	60	58	54	55	---	---
101	65	61	57	56	51	55	---	---
102	66	63	59	57	56	54	---	---
103	60	58	53	51	51	49	---	---
104	67	62	56	55	53	53	---	---
105	66	64	60	56	53	54	---	---
106	62	58	56	52	50	51	---	---
107	63	60	55	53	51	52	---	---
108	62	59	55	52	52	52	---	---
109	65	62	59	56	52	51	54	51
110	62	60	58	53	53	53	51	50
111	64	59	58	56	51	52	51	51
112	65	62	56	56	51	52	49	51
113	62	62	56	53	49	51	52	51
114	65	63	60	56	53	55	63	55
115	65	66	57	57	53	52	58	50
116	68	66	60	57	55	56	60	57
117	65	61	58	58	51	53	61	54
118	56	57	54	50	48	50	53	48
119	62	63	57	57	55	55	---	---
120	61	60	57	57	52	54	---	---
121	63	64	58	54	52	56	---	---
122	60	59	55	52	51	54	---	---
123	62	58	55	55	51	51	---	---
124	71	69	57	67	62	61	---	---

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

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
MALES

GROUP 4 (2000 MG/KG/DAY)

	RECOVERY	
	14-21	21-28
DAYS	2/3	3/4
WEEKS		
ANIMAL		
89	---	---
90	---	---
91	---	---
92	---	---
93	---	---
94	---	---
95	---	---
96	---	---
97	---	---
98	---	---
99	---	---
100	---	---
101	---	---
102	---	---
103	---	---
104	---	---
105	---	---
106	---	---
107	---	---
108	---	---
109	50	50
110	51	50
111	51	47
112	48	49
113	49	46
114	54	53
115	51	50
116	55	53
117	53	50
118	45	46
119	---	---
120	---	---
121	---	---
122	---	---
123	---	---
124	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
FEMALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION	TREATMENT						
	1-7 1	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
125	127	108	99	96	100	90	83	90
126	133	100	91	86	84	78	67	72
127	134	109	99	97	93	90	80	87
128	132	103	98	97	96	87	81	83
129	139	105	101	89	93	82	75	73
130	151	107	102	95	95	84	76	82
131	126	95	88	88	87	76	71	75
132	130	98	90	86	85	80	69	72
133	149	107	101	93	90	80	71	73
134	142	102	98	92	91	79	73	77
135	145	98	95	87	85	79	73	78
136	139	106	102	91	89	87	77	79
137	143	110	110	99	97	87	81	88
138	112	87	85	84	83	75	68	76
139	154	106	103	92	101	89	78	76
140	150	104	94	93	92	82	78	82
141	149	108	93	85	82	80	74	81
142	133	99	102	99	101	96	98	111
143	141	97	105	90	92	84	81	85
144	153	104	90	89	85	78	72	77
145	137	92	102	90	88	82	70	73
146	148	105	101	96	95	85	78	85
147	131	103	105	94	94	90	77	85
148	152	108	104	102	94	87	81	83
149	144	107	104	95	99	88	80	86
150	142	104	98	92	88	79	73	77
151	141	104	96	96	94	81	77	80
152	122	94	92	85	82	78	69	76
153	155	109	106	101	95	85	80	83
154	154	107	94	87	87	74	68	70
155	141	103	102	86	85	76	68	70
156	129	93	91	80	82	76	67	72
157	142	110	95	87	87	80	72	75
158	137	106	105	97	90	86	77	83
159	144	96	92	84	81	75	70	75
160	153	110	102	90	86	78	73	77

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

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
FEMALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
125	85	77	74	73	76	75	---	---
126	70	67	66	63	63	64	---	---
127	83	74	77	74	71	71	---	---
128	82	72	75	69	67	67	---	---
129	72	63	62	61	59	59	---	---
130	99	99	102	103	104	103	---	---
131	74	64	67	65	63	64	---	---
132	71	66	66	60	59	61	---	---
133	72	66	66	58	61	60	---	---
134	72	61	63	57	58	58	---	---
135	73	67	64	62	58	59	---	---
136	74	72	70	64	63	67	---	---
137	86	77	72	74	74	72	---	---
138	74	67	63	64	61	66	---	---
139	78	69	70	66	63	64	---	---
140	79	72	69	68	68	65	---	---
141	76	71	67	67	63	60	---	---
142	106	99	93	98	103	91	---	---
143	79	72	75	70	68	68	---	---
144	74	67	65	66	67	62	---	---
145	70	63	65	62	57	62	68	65
146	79	70	69	67	65	68	68	69
147	77	72	77	71	70	69	71	71
148	78	71	73	70	70	68	81	70
149	83	72	73	71	68	66	74	69
150	79	67	64	60	61	58	60	63
151	81	71	70	72	70	67	71	77
152	67	66	63	62	62	64	69	63
153	77	75	70	66	63	61	70	68
154	72	64	61	58	59	55	59	60
155	66	65	65	61	57	58	---	---
156	70	61	62	63	59	57	---	---
157	70	65	73	54	56	66	---	---
158	78	74	83	68	68	66	---	---
159	70	66	66	61	58	58	---	---
160	67	69	71	64	66	67	---	---

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

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
FEMALES

GROUP 1 (0 MG/KG/DAY)

	RECOVERY	
	14-21	21-28
	WEEKS	WEEKS
	2/3	3/4
ANIMAL		
125	---	---
126	---	---
127	---	---
128	---	---
129	---	---
130	---	---
131	---	---
132	---	---
133	---	---
134	---	---
135	---	---
136	---	---
137	---	---
138	---	---
139	---	---
140	---	---
141	---	---
142	---	---
143	---	---
144	---	---
145	59	59
146	67	64
147	68	68
148	67	67
149	68	66
150	59	56
151	74	66
152	62	64
153	66	67
154	60	55
155	---	---
156	---	---
157	---	---
158	---	---
159	---	---
160	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**RELATIVE FOOD CONSUMPTION**
(G/KG BODY WEIGHT/DAY)
FEMALES**GROUP 2 (500 MG/KG/DAY)**

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT					
	1-7 1	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
161	164	115	100	90	88	88	80	84
162	139	109	97	89	90	80	77	78
163	141	98	89	83	85	76	71	78
164	128	108	94	87	89	85	77	78
165	133	110	96	92	91	84	75	78
166	149	104	93	88	88	78	74	77
167	134	107	100	88	94	86	77	78
168	149	105	95	89	90	82	74	77
169	141	107	95	87	88	85	79	82
170	133	98	92	87	83	79	74	73
171	141	111	97	89	93	92	80	83
172	158	112	102	89	88	83	76	79
173	149	117	104	90	87	90	87	83
174	132	108	95	86	89	82	76	74
175	146	109	104	90	90	90	83	81
176	125	111	99	95	102	91	82	84
177	117	94	88	81	75	73	70	68
178	140	105	91	78	84	81	72	72
179	156	116	101	92	94	87	83	83
180	141	107	90	85	84	85	78	78
181	146	115	101	85	95	95	89	96
182	136	98	90	74	78	74	71	73
183	158	110	97	84	82	85	74	74
184	161	118	108	100	93	90	84	87
185	136	116	105	98	93	88	82	82
186	132	96	90	80	60	77	75	76

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
161	78	75	74	68	65	68	---	---
162	77	68	68	60	62	61	---	---
163	74	65	64	61	62	58	---	---
164	76	71	66	64	65	64	---	---
165	77	70	67	65	62	58	---	---
166	72	66	67	69	65	65	---	---
167	81	74	69	65	67	66	---	---
168	72	67	70	62	64	62	---	---
169	75	72	68	66	65	62	---	---
170	71	68	65	61	58	61	---	---
171	81	79	78	74	80	85	---	---
172	74	71	69	63	58	63	---	---
173	83	79	75	72	66	65	---	---
174	72	69	67	61	61	59	---	---
175	83	82	76	75	72	74	---	---
176	84	75	74	68	71	65	---	---
177	68	64	65	64	63	60	---	---
178	71	69	67	62	64	62	---	---
179	82	75	74	72	71	68	---	---
180	74	75	66	72	53	58	---	---
181	96	90	90	86	84	82	---	---
182	73	70	68	65	65	64	---	---
183	73	70	64	62	61	56	---	---
184	80	77	77	74	70	65	---	---
185	84	78	73	73	74	66	---	---
186	75	69	66	63	64	62	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
FEMALES

GROUP 2 (500 MG/KG/DAY)

	RECOVERY	
	14-21	21-28
DAYS	2/3	3/4
WEEKS		
ANIMAL		
161	---	---
162	---	---
163	---	---
164	---	---
165	---	---
166	---	---
167	---	---
168	---	---
169	---	---
170	---	---
171	---	---
172	---	---
173	---	---
174	---	---
175	---	---
176	---	---
177	---	---
178	---	---
179	---	---
180	---	---
181	---	---
182	---	---
183	---	---
184	---	---
185	---	---
186	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
FEMALES****GROUP 3 (1000 MG/KG/DAY)**

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT						
	1-7 1		1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
187	137		108	97	87	92	85	83	88
188	142		110	102	97	99	89	84	88
189	141		105	91	82	85	77	69	76
190	140		107	101	89	91	81	77	81
191	132		108	95	90	94	85	78	79
192	157		121	105	100	103	91	85	85
193	146		113	103	93	89	91	85	84
194	144		111	104	91	94	83	83	85
195	145		114	101	88	94	82	81	80
196	122		106	98	103	108	71	94	95
197	136		106	98	86	92	78	78	78
198	137		112	98	87	95	84	81	85
199	143		108	96	85	90	80	73	80
200	135		114	102	92	105	96	84	90
201	120		109	99	89	91	89	82	81
202	149		117	103	91	100	89	83	90
203	125		107	95	85	98	90	78	88
204	127		104	95	83	86	80	72	75
205	128		104	98	90	92	85	77	78
206	138		112	100	97	98	90	85	84
207	142		109	99	82	88	81	74	74
208	131		111	104	89	93	85	83	82
209	137		110	95	81	85	81	73	74
210	137		110	103	90	92	86	77	80
211	144		111	99	87	88	80	76	76
212	139		111	104	89	93	81	79	78

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
187	88	87	82	82	82	81	---	---
188	82	79	73	68	69	68	---	---
189	72	69	65	60	61	65	---	---
190	72	71	70	65	64	62	---	---
191	82	71	63	61	60	56	---	---
192	82	76	71	65	65	63	---	---
193	78	75	75	70	72	74	---	---
194	79	80	66	81	76	76	---	---
195	78	76	70	69	72	70	---	---
196	90	87	83	79	78	72	---	---
197	76	73	69	65	65	64	---	---
198	80	81	79	70	71	69	---	---
199	77	74	67	63	65	60	---	---
200	86	86	79	76	75	71	---	---
201	78	76	73	69	67	69	---	---
202	90	84	78	76	78	75	---	---
203	89	89	84	80	77	80	---	---
204	71	68	66	61	63	61	---	---
205	72	71	69	66	66	67	---	---
206	81	75	70	68	68	64	---	---
207	70	70	65	67	63	64	---	---
208	76	78	77	70	63	69	---	---
209	72	68	66	61	65	61	---	---
210	72	79	74	68	68	65	---	---
211	71	71	67	66	67	62	---	---
212	74	74	70	66	69	65	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
FEMALES

GROUP 3 (1000 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY	
	14-21	21-28
	2/3	3/4
187	---	---
188	---	---
189	---	---
190	---	---
191	---	---
192	---	---
193	---	---
194	---	---
195	---	---
196	---	---
197	---	---
198	---	---
199	---	---
200	---	---
201	---	---
202	---	---
203	---	---
204	---	---
205	---	---
206	---	---
207	---	---
208	---	---
209	---	---
210	---	---
211	---	---
212	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION	TREATMENT						
	1-7 1	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8
213	125	104	94	87	91	79	72	75
214	151	110	102	87	91	78	75	76
215	149	110	101	84	95	86	86	88
216	155	119	109	94	106	95	95	92
217	135	106	95	88	91	83	77	76
218	138	112	106	93	102	87	84	85
219	158	121	106	96	96	91	77	65
220	137	102	94	75	78	70	73	77
221	126	111	100	94	90	83	70	78
222	126	115	105	95	103	94	85	88
223	147	114	101	93	96	89	81	82
224	153	115	103	92	95	84	81	92
225	146	113	97	88	89	82	77	77
226	138	115	111	96	103	98	95	101
227	121	110	102	98	99	86	87	89
228	148	118	106	101	103	90	87	88
229	132	122	107	96	103	94	87	84
230	137	110	101	93	92	82	78	74
231	154	121	108	98	95	86	83	84
232	133	112	100	97	102	86	84	81
233	153	113	101	90	97	82	77	78
234	163	120	107	95	103	89	86	87
235	135	115	98	95	94	88	91	90
236	126	109	97	94	98	90	75	77
237	142	115	104	94	101	91	79	79
238	141	111	108	98	101	88	87	112
239	147	110	102	99	100	83	81	87
240	146	107	104	105	89	80	84	87
241	156	114	105	94	94	86	82	85
242	149	107	100	88	92	80	77	79
243	147	110	99	88	92	79	79	76
244	144	111	104	89	97	87	83	79
245	141	119	102	92	96	92	86	86
246	151	120	104	93	95	88	85	85
247	137	108	96	85	85	79	77	70
248	147	114	96	86	88	83	79	82

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT						RECOVERY	
	50-57 8/9	57-64 9/10	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14	4-7 1	7-14 1/2
213	73	67	63	57	54	60	---	---
214	68	70	69	63	62	62	---	---
215	89	88	80	74	77	76	---	---
216	87	87	82	73	71	74	---	---
217	74	69	67	63	63	64	---	---
218	82	80	75	71	71	70	---	---
219	76	76	71	67	62	62	---	---
220	63	66	64	59	52	56	---	---
221	75	77	75	70	67	73	---	---
222	82	79	76	68	67	68	---	---
223	79	78	73	66	67	67	---	---
224	78	75	66	65	61	64	---	---
225	73	70	65	61	62	65	---	---
226	97	96	92	89	73	82	---	---
227	82	79	78	73	68	68	---	---
228	87	82	78	76	73	76	---	---
229	83	83	74	68	69	71	---	---
230	75	77	70	63	59	67	---	---
231	81	75	70	66	67	67	---	---
232	86	95	94	99	78	82	---	---
233	77	70	69	64	62	62	69	68
234	83	82	77	72	69	74	84	78
235	80	78	73	67	67	69	72	69
236	75	73	66	62	63	72	71	71
237	83	79	72	66	69	74	83	79
238	83	79	78	72	72	75	80	74
239	85	77	78	72	68	75	80	77
240	81	77	70	69	64	67	72	70
241	79	78	73	68	68	72	70	69
242	76	71	69	64	59	62	68	64
243	72	70	66	66	60	62	---	---
244	76	78	76	67	68	71	---	---
245	75	78	80	70	67	74	---	---
246	81	86	83	78	73	77	---	---
247	65	63	63	57	55	60	---	---
248	76	76	73	65	64	67	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

RELATIVE FOOD CONSUMPTION
(G/KG BODY WEIGHT/DAY)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

	RECOVERY	
	14-21	21-28
DAYS	2/3	3/4
WEEKS		
ANIMAL		
213	---	---
214	---	---
215	---	---
216	---	---
217	---	---
218	---	---
219	---	---
220	---	---
221	---	---
222	---	---
223	---	---
224	---	---
225	---	---
226	---	---
227	---	---
228	---	---
229	---	---
230	---	---
231	---	---
232	---	---
233	67	59
234	77	67
235	69	66
236	79	72
237	79	72
238	74	69
239	77	73
240	67	62
241	70	64
242	62	59
243	---	---
244	---	---
245	---	---
246	---	---
247	---	---
248	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
MALES

GROUP 1 (0 MG/KG/DAY)

	ACCLIMATIZATION		TREATMENT						
DAYS	1	1	1	8	15	22	29	36	42
WEEKS	1	1	1	2	3	4	5	6	6
ANIMAL									
1	108	147	176	213	238	270	302	327	
2	118	162	213	267	315	335	399	419	
3	108	149	193	236	267	301	325	337	
4	117	157	207	254	287	310	352	367	
5	103	144	195	241	267	299	323	340	
6	107	145	191	238	268	297	327	339	
7	122	158	199	238	263	288	313	323	
8	102	145	194	241	273	304	337	357	
9	111	150	196	245	278	307	334	351	
10	102	143	188	228	258	285	313	332	
11	116	152	195	244	264	286	313	327	
12	108	151	200	253	285	303	342	358	
13	105	146	195	243	270	297	321	336	
14	106	147	192	236	262	290	313	328	
15	119	162	208	251	273	296	326	343	
16	112	158	208	258	291	305	352	372	
17	106	147	188	230	259	283	302	308	
18	119	159	204	246	279	293	319	338	
19	120	162	206	257	286	316	344	363	
20	103	144	192	235	263	287	319	330	
21	119	159	209	254	286	300	343	361	
22	101	137	187	226	256	285	298	313	
23	122	164	210	258	285	304	340	361	
24	121	162	218	263	304	320	368	390	
25	118	154	192	235	264	290	320	336	
26	113	156	207	255	287	304	352	370	
27	109	144	184	221	247	271	289	295	
28	103	146	188	230	255	289	312	330	
29	120	161	211	252	278	304	331	342	
30	109	152	193	233	257	279	304	317	
31	107	147	188	233	272	292	324	336	
32	116	161	210	255	286	313	332	342	
33	116	150	185	216	239	251	264	267	
34	100	89	162	206	250	280	299	316	
35	104	117	188	237	281	298	342	357	
36	114	158	208	261	299	317	365	380	

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

BODY WEIGHTS (GRAM)
MALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50 8	57 9	64 10	71 11	78 12	85 13	92 14	7 1
1	351	364	376	400	413	424	440	---
2	450	472	479	507	517	525	538	---
3	353	368	373	391	395	404	412	---
4	383	402	412	432	435	447	458	---
5	355	376	369	406	416	426	437	---
6	356	377	385	397	408	417	432	---
7	335	355	357	376	382	398	410	---
8	378	396	404	421	442	446	466	---
9	364	383	396	412	418	430	438	---
10	340	354	365	383	392	403	408	---
11	340	355	363	372	384	396	410	---
12	376	397	409	429	439	448	457	---
13	346	364	374	395	405	413	427	---
14	341	356	361	378	387	398	411	---
15	356	368	382	402	410	422	428	---
16	386	406	417	441	461	471	480	---
17	323	333	344	360	368	380	391	---
18	354	374	389	406	420	428	436	---
19	382	396	407	425	439	450	455	---
20	348	364	371	387	397	404	416	---
21	371	392	403	425	434	444	457	460
22	325	336	350	364	376	389	403	386
23	374	394	405	422	435	449	453	448
24	407	432	446	478	494	514	531	527
25	347	372	376	400	413	418	435	427
26	383	405	409	427	435	445	458	455
27	306	322	330	349	357	371	382	380
28	342	361	367	385	394	410	419	414
29	350	366	368	388	394	406	408	402
30	331	346	355	373	386	397	408	401
31	357	368	371	388	400	407	416	---
32	363	376	381	395	401	412	426	---
33	281	287	289	299	306	312	323	---
34	335	347	351	371	376	384	394	---
35	382	398	411	424	436	443	448	---
36	402	418	429	446	459	473	499	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
MALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY		
	14 2	21 3	28 4
1	---	---	---
2	---	---	---
3	---	---	---
4	---	---	---
5	---	---	---
6	---	---	---
7	---	---	---
8	---	---	---
9	---	---	---
10	---	---	---
11	---	---	---
12	---	---	---
13	---	---	---
14	---	---	---
15	---	---	---
16	---	---	---
17	---	---	---
18	---	---	---
19	---	---	---
20	---	---	---
21	461	473	480
22	403	419	426
23	456	472	474
24	543	563	576
25	440	454	454
26	460	471	474
27	387	402	400
28	424	444	444
29	412	426	435
30	409	419	423
31	---	---	---
32	---	---	---
33	---	---	---
34	---	---	---
35	---	---	---
36	---	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
MALES

GROUP 2 (500 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT					
	1	1	8	15	22	29	36	42
	1	1	2	3	4	5	6	6
37	103	148	195	242	269	302	326	340
38	101	143	189	240	276	295	345	366
39	101	142	193	237	265	294	317	334
40	111	156	198	249	287	315	357	376
41	120	155	202	245	275	308	333	346
42	118	167	215	268	308	325	372	395
43	114	160	215	268	305	328	359	378
44	107	144	188	229	240	217	---	---
45	105	140	179	226	253	282	313	323
46	114	151	197	244	270	291	324	336
47	113	157	207	252	282	302	337	349
48	106	144	191	237	272	303	338	357
49	105	142	180	216	239	261	285	297
50	106	142	185	227	252	284	306	323
51	113	159	210	258	294	334	359	378
52	119	148	191	241	276	315	345	365
53	122	162	207	255	283	312	337	353
54	96	128	170	213	234	264	287	301
55	111	148	192	236	266	296	318	332
56	107	150	196	240	270	306	329	347
57	117	158	202	250	284	312	333	345
58	116	158	206	258	293	327	356	372
59	120	168	217	261	297	324	345	362
60	106	150	196	245	292	332	357	378
61	102	142	185	233	268	294	316	328
62	109	156	204	252	287	312	334	344

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50	57	64	71	78	85	92	/
	8	9	10	11	12	13	14	1
37	354	376	383	398	407	419	428	---
38	383	405	417	440	456	473	488	---
39	339	357	354	372	379	393	406	---
40	391	411	416	434	444	452	468	---
41	361	374	382	405	416	423	431	---
42	415	431	442	461	480	490	501	---
43	398	416	426	451	467	475	487	---
44	---	---	---	---	---	---	---	---
45	338	352	357	378	387	403	411	---
46	341	357	361	377	392	404	412	---
47	370	385	400	414	429	439	448	---
48	373	396	403	428	445	454	464	---
49	308	325	335	351	358	366	378	---
50	339	352	358	376	383	392	396	---
51	391	412	418	441	454	462	475	---
52	387	392	409	430	447	455	466	---
53	370	387	396	417	420	431	442	---
54	315	332	338	352	359	366	374	---
55	347	358	370	387	394	404	409	---
56	357	374	385	404	415	422	431	---
57	363	381	390	400	414	420	429	---
58	395	408	413	437	445	456	472	---
59	383	396	409	432	446	460	476	---
60	402	421	435	455	464	477	486	---
61	354	370	376	394	402	414	423	---
62	362	374	379	396	400	412	418	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
MALES

GROUP 2 (500 MG/KG/DAY)

	RECOVERY		
	14	21	28
DAYS	2	3	4
WEEKS			
ANIMAL			
37	---	---	---
38	---	---	---
39	---	---	---
40	---	---	---
41	---	---	---
42	---	---	---
43	---	---	---
44	---	---	---
45	---	---	---
46	---	---	---
47	---	---	---
48	---	---	---
49	---	---	---
50	---	---	---
51	---	---	---
52	---	---	---
53	---	---	---
54	---	---	---
55	---	---	---
56	---	---	---
57	---	---	---
58	---	---	---
59	---	---	---
60	---	---	---
61	---	---	---
62	---	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
MALES

GROUP 3 (1000 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT					
	1	1	8	15	22	29	36	42
	1	1	2	3	4	5	6	6
63	106	149	195	247	286	318	346	367
64	117	162	214	263	290	321	345	353
65	117	147	192	236	266	293	319	338
66	110	141	191	240	268	303	330	350
67	102	134	173	215	242	274	296	309
68	104	142	185	232	261	294	318	343
69	101	142	190	241	271	303	326	339
70	119	166	217	265	304	324	373	392
71	112	153	200	248	278	305	332	352
72	103	146	192	236	266	297	320	330
73	118	158	198	243	269	301	325	345
74	106	144	190	237	267	294	323	337
75	105	139	176	218	248	277	300	315
76	108	149	198	245	274	305	331	349
77	116	161	211	259	290	326	353	372
78	104	141	188	235	270	304	330	345
79	109	147	191	237	273	311	337	358
80	101	148	194	238	269	303	326	344
81	108	152	201	249	287	321	347	360
82	119	161	207	253	285	321	356	374
83	110	157	212	271	313	349	376	393
84	100	137	174	217	243	268	286	294
85	101	138	181	217	252	275	300	317
86	105	145	186	230	265	293	320	332
87	110	160	215	264	310	341	369	393
88	107	142	180	224	250	271	290	301

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50	57	64	71	78	85	92	/
	8	9	10	11	12	13	14	1
63	376	398	411	428	435	441	447	---
64	369	391	405	424	439	447	461	---
65	353	374	389	405	414	428	439	---
66	365	380	392	404	424	432	442	---
67	326	339	346	361	367	380	389	---
68	355	379	394	409	420	435	443	---
69	348	362	368	385	393	401	406	---
70	405	424	445	457	468	477	492	---
71	362	384	394	417	425	437	446	---
72	339	358	362	378	387	396	407	---
73	364	382	396	414	428	435	441	---
74	343	363	375	402	420	436	443	---
75	328	349	358	375	385	388	403	---
76	358	371	381	399	411	423	435	---
77	382	403	418	435	447	449	454	---
78	365	387	405	434	446	458	464	---
79	378	394	409	432	445	459	468	---
80	362	377	389	408	426	438	449	---
81	371	384	391	408	419	427	439	---
82	394	411	429	446	458	472	485	---
83	418	434	444	467	483	497	516	---
84	310	320	328	341	353	361	370	---
85	333	350	363	383	389	404	407	---
86	353	364	366	385	397	412	418	---
87	---	---	---	---	---	---	---	---
88	316	328	332	345	360	368	385	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
MALES
GROUP 3 (1000 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY		
	14	21	28
	2	3	4
63	---	---	---
64	---	---	---
65	---	---	---
66	---	---	---
67	---	---	---
68	---	---	---
69	---	---	---
70	---	---	---
71	---	---	---
72	---	---	---
73	---	---	---
74	---	---	---
75	---	---	---
76	---	---	---
77	---	---	---
78	---	---	---
79	---	---	---
80	---	---	---
81	---	---	---
82	---	---	---
83	---	---	---
84	---	---	---
85	---	---	---
86	---	---	---
87	---	---	---
88	---	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)

MALES

GROUP 4 (2000 MG/KG/DAY)

	ACCLIMATIZATION	TREATMENT						
DAYS	1	1	8	15	22	29	36	42
WEEKS	1	1	2	3	4	5	6	6
ANIMAL								
89	116	147	190	233	260	285	305	319
90	118	157	194	233	257	285	313	327
91	112	152	197	240	266	292	319	336
92	114	148	188	225	250	280	299	314
93	101	148	194	242	272	310	334	352
94	117	161	213	264	299	328	363	381
95	109	153	197	237	262	288	306	311
96	116	162	203	251	283	306	333	347
97	108	142	188	227	252	274	296	308
98	107	151	201	244	267	296	320	339
99	121	156	201	247	279	308	331	345
100	118	154	193	233	254	280	302	314
101	105	146	190	230	257	276	302	320
102	110	146	188	228	253	282	307	322
103	108	149	196	240	273	306	331	349
104	111	158	209	258	285	318	345	362
105	100	145	196	246	282	311	336	350
106	118	155	198	247	273	307	323	336
107	112	158	209	259	291	323	347	366
108	105	145	190	235	263	290	311	326
109	109	158	210	260	294	331	362	379
110	114	154	198	242	269	297	320	335
111	109	151	191	234	264	297	319	336
112	120	163	207	252	283	310	336	361
113	117	166	216	266	301	331	360	383
114	102	146	193	241	271	301	329	343
115	95	142	192	243	279	315	348	369
116	113	153	194	238	268	295	316	333
117	115	154	195	239	273	305	331	346
118	114	155	195	236	260	285	306	324
119	102	151	199	250	288	317	346	364
120	100	143	190	238	279	308	334	354
121	115	154	197	239	266	287	308	321
122	121	156	195	230	256	278	298	308
123	114	153	200	241	280	306	331	353
124	114	163	215	267	306	336	364	382

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
MALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50 8	57 9	64 10	71 11	78 12	85 13	92 14	7 1
89	325	338	342	351	362	363	371	---
90	339	357	367	379	389	396	406	---
91	343	358	363	381	390	395	406	---
92	325	341	348	362	376	381	393	---
93	364	380	390	408	418	432	441	---
94	400	417	429	446	459	465	470	---
95	320	336	349	362	377	388	400	---
96	360	376	389	405	411	419	428	---
97	324	337	343	359	363	373	374	---
98	350	367	382	395	406	413	426	---
99	356	372	378	397	402	409	424	---
100	320	334	342	354	360	370	380	---
101	337	349	363	378	386	401	416	---
102	336	355	361	378	387	395	408	---
103	366	380	388	409	415	427	447	---
104	372	391	397	411	421	428	443	---
105	362	385	394	419	431	447	458	---
106	343	358	365	383	397	406	414	---
107	382	396	399	415	423	429	444	---
108	339	359	365	378	381	394	401	---
109	393	418	432	452	455	470	480	478
110	346	361	369	384	390	399	405	396
111	347	361	373	388	401	410	426	417
112	370	389	401	413	425	433	442	438
113	397	416	432	449	462	469	477	472
114	354	370	377	393	403	412	420	421
115	381	400	418	437	448	459	467	465
116	345	363	370	381	388	396	415	408
117	360	380	391	403	419	424	433	428
118	337	349	362	375	383	393	399	397
119	387	403	403	428	436	451	463	---
120	374	389	398	413	421	433	440	---
121	341	358	369	377	386	399	415	---
122	329	342	347	361	373	381	394	---
123	380	395	402	418	431	441	450	---
124	407	425	434	426	457	466	481	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
MALES

GROUP 4 (2000 MG/KG/DAY)

	RECOVERY		
DAYS	14	21	28
WEEKS	2	3	4
ANIMAL			
89	---	---	---
90	---	---	---
91	---	---	---
92	---	---	---
93	---	---	---
94	---	---	---
95	---	---	---
96	---	---	---
97	---	---	---
98	---	---	---
99	---	---	---
100	---	---	---
101	---	---	---
102	---	---	---
103	---	---	---
104	---	---	---
105	---	---	---
106	---	---	---
107	---	---	---
108	---	---	---
109	489	504	509
110	400	417	419
111	428	446	446
112	446	458	467
113	481	496	506
114	427	442	449
115	467	478	485
116	418	429	439
117	438	450	457
118	402	413	419
119	---	---	---
120	---	---	---
121	---	---	---
122	---	---	---
123	---	---	---
124	---	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
FEMALES

GROUP 1 (0 MG/KG/DAY)

	ACCLIMATIZATION		TREATMENT						
DAYS	1	1	8	15	22	29	36	42	
WEEKS	1	1	2	3	4	5	6	6	
ANIMAL									
125	106	117	141	161	172	177	195	199	
126	94	136	155	180	191	204	220	223	
127	109	137	162	186	197	208	215	231	
128	101	125	149	169	177	199	214	209	
129	99	129	158	177	189	206	225	231	
130	87	116	140	162	172	187	198	202	
131	91	118	138	157	165	179	191	195	
132	95	122	140	160	172	186	197	210	
133	92	127	151	174	191	205	218	230	
134	99	134	159	188	206	229	244	254	
135	98	127	154	176	193	208	216	234	
136	106	133	154	171	189	202	214	227	
137	86	113	134	152	166	184	196	203	
138	102	122	140	153	163	169	181	189	
139	101	132	163	191	206	218	242	256	
140	90	120	141	159	168	186	199	208	
141	92	123	147	162	175	189	203	208	
142	100	129	152	173	182	202	218	223	
143	91	115	132	146	159	172	179	188	
144	99	140	165	187	195	213	224	229	
145	92	115	131	151	160	168	184	190	
146	88	115	134	153	166	180	191	201	
147	102	125	148	165	174	187	198	210	
148	98	130	155	181	190	203	218	228	
149	87	112	139	162	176	193	204	212	
150	90	117	139	165	179	198	215	223	
151	106	137	164	187	196	212	225	228	
152	92	116	134	156	167	180	189	197	
153	95	129	154	180	198	218	231	246	
154	105	144	174	189	200	222	235	240	
155	87	118	139	161	178	187	197	207	
156	101	130	156	175	187	203	215	218	
157	94	123	153	172	184	201	209	215	
158	91	117	139	162	176	183	191	201	
159	106	140	162	182	191	205	219	224	
160	96	129	152	176	193	206	212	224	

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
FEMALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50 8	57 9	64 10	71 11	78 12	85 13	92 14	7 1
125	206	209	214	223	225	223	229	---
126	228	237	241	253	255	259	271	---
127	241	251	252	266	277	271	272	---
128	229	232	236	245	236	235	237	---
129	241	250	254	256	265	268	268	---
130	205	211	217	230	227	232	238	---
131	201	209	215	217	223	225	231	---
132	215	222	225	231	240	241	235	---
133	233	238	243	250	258	260	254	---
134	265	277	283	288	290	298	304	---
135	245	251	256	260	269	259	265	---
136	240	242	247	258	268	258	273	---
137	214	226	228	235	235	241	245	---
138	195	198	201	210	205	214	211	---
139	265	266	274	287	294	285	299	---
140	214	227	231	236	239	248	250	---
141	218	221	230	233	241	247	244	---
142	226	236	247	254	247	250	255	---
143	197	200	207	206	220	221	220	---
144	238	251	252	260	261	271	275	---
145	193	196	203	201	204	212	208	212
146	205	214	217	220	225	230	230	226
147	216	226	235	236	251	252	253	251
148	238	237	243	255	261	267	265	266
149	225	230	234	239	245	252	252	249
150	237	243	249	255	261	262	269	263
151	234	242	252	255	255	263	270	270
152	202	206	210	217	219	219	218	225
153	258	265	270	277	285	288	287	297
154	245	260	263	271	269	278	282	284
155	217	221	224	233	239	240	238	---
156	228	240	243	246	247	255	250	---
157	231	234	246	249	249	253	268	---
158	207	211	213	221	222	219	223	---
159	239	245	244	256	258	262	267	---
160	233	238	234	247	251	253	253	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
FEMALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY		
	14 2	21 3	28 4
125	---	---	---
126	---	---	---
127	---	---	---
128	---	---	---
129	---	---	---
130	---	---	---
131	---	---	---
132	---	---	---
133	---	---	---
134	---	---	---
135	---	---	---
136	---	---	---
137	---	---	---
138	---	---	---
139	---	---	---
140	---	---	---
141	---	---	---
142	---	---	---
143	---	---	---
144	---	---	---
145	215	218	218
146	229	238	244
147	256	259	271
148	273	276	273
149	256	263	263
150	269	273	276
151	270	287	289
152	228	232	232
153	302	302	302
154	283	293	296
155	---	---	---
156	---	---	---
157	---	---	---
158	---	---	---
159	---	---	---
160	---	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
FEMALES

GROUP 2 (500 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT						
	1		1	8	15	22	29	36	42
	1		1	2	3	4	5	6	6
161	92		132	153	182	194	202	209	225
162	93		123	146	166	175	194	205	211
163	89		120	142	161	169	186	193	197
164	102		126	147	177	189	206	214	225
165	100		123	145	172	187	204	217	229
166	93		128	150	175	184	197	203	215
167	101		126	145	171	184	192	204	217
168	97		128	155	180	188	202	218	226
169	96		127	151	174	193	209	219	231
170	102		132	156	182	199	215	227	236
171	94		118	141	166	177	192	203	214
172	93		130	156	181	194	206	216	227
173	96		124	144	161	177	206	203	211
174	98		124	150	170	182	192	209	218
175	97		126	145	163	172	200	197	199
176	100		124	143	161	178	182	202	211
177	104		128	146	158	176	194	196	207
178	97		124	147	163	174	183	195	204
179	90		124	152	171	182	197	207	214
180	99		129	149	178	189	206	212	230
181	102		131	153	170	175	189	203	205
182	92		124	143	160	177	187	192	203
183	92		127	152	176	189	192	211	218
184	92		122	147	171	189	202	210	214
185	101		129	155	180	193	200	215	222
186	104		132	152	168	179	195	207	209

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY	
	50	57	64	71	78	85	92	7	
	8	9	10	11	12	13	14	1	
161	236	238	238	249	258	258	248	---	
162	216	228	233	238	235	247	246	---	
163	203	219	221	226	223	233	225	---	
164	235	241	245	252	262	266	260	---	
165	237	246	255	257	259	265	271	---	
166	217	224	230	238	251	253	250	---	
167	221	226	232	240	235	248	252	---	
168	235	238	243	258	262	264	265	---	
169	238	245	246	257	257	266	268	---	
170	245	251	256	265	267	268	267	---	
171	222	225	230	235	238	238	232	---	
172	233	242	245	248	257	258	258	---	
173	217	229	233	233	242	247	246	---	
174	223	232	234	243	240	246	247	---	
175	212	218	220	233	234	231	238	---	
176	220	227	234	244	244	245	253	---	
177	211	223	227	235	244	252	254	---	
178	209	212	219	229	233	231	236	---	
179	223	236	241	246	246	254	254	---	
180	244	248	260	280	283	281	282	---	
181	217	221	231	236	230	244	245	---	
182	216	226	228	237	240	245	250	---	
183	232	232	239	251	252	251	247	---	
184	222	231	232	236	243	251	255	---	
185	238	237	246	256	259	256	253	---	
186	221	231	234	239	237	244	250	---	

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
FEMALES

GROUP 2 (500 MG/KG/DAY)

	RECOVERY		
DAYS	14	21	28
WEEKS	2	3	4
ANIMAL			
161	---	---	---
162	---	---	---
163	---	---	---
164	---	---	---
165	---	---	---
166	---	---	---
167	---	---	---
168	---	---	---
169	---	---	---
170	---	---	---
171	---	---	---
172	---	---	---
173	---	---	---
174	---	---	---
175	---	---	---
176	---	---	---
177	---	---	---
178	---	---	---
179	---	---	---
180	---	---	---
181	---	---	---
182	---	---	---
183	---	---	---
184	---	---	---
185	---	---	---
186	---	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
FEMALES

GROUP 3 (1000 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT					
	1		1	8	15	22	29	36
	1		1	2	3	4	5	6
187	101		127	148	168	175	189	205
188	94		120	141	164	175	191	200
189	101		133	156	181	195	207	218
190	95		120	138	160	174	188	200
191	108		130	153	178	190	202	223
192	88		117	136	157	169	180	194
193	102		131	154	177	193	198	219
194	93		119	133	146	164	174	181
195	93		123	147	170	181	199	208
196	104		126	147	163	172	187	204
197	94		125	144	168	183	199	202
198	90		114	128	146	157	170	182
199	99		127	152	181	191	205	219
200	102		125	154	175	185	195	213
201	98		119	141	160	172	183	189
202	92		118	136	158	167	172	185
203	101		125	142	169	180	190	206
204	89		109	126	148	158	165	172
205	91		113	134	153	162	180	184
206	100		124	145	167	176	200	213
207	100		129	149	166	177	188	202
208	101		131	153	173	192	209	216
209	86		115	137	158	175	186	197
210	100		123	144	167	178	188	198
211	102		132	153	178	190	203	211
212	94		117	135	154	167	175	185
								191
DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50	57	64	71	78	85	92	7
	8	9	10	11	12	13	14	1
187	220	228	238	252	252	263	265	---
188	211	221	224	230	235	238	239	---
189	237	243	241	254	260	263	252	---
190	213	223	224	229	234	239	241	---
191	240	245	256	267	269	270	268	---
192	210	223	222	236	238	239	243	---
193	241	251	251	263	270	276	274	---
194	190	196	201	205	211	215	214	---
195	217	225	231	240	242	247	250	---
196	222	230	239	247	243	253	257	---
197	223	229	230	242	247	248	248	---
198	193	199	201	217	220	226	224	---
199	239	253	254	266	265	276	274	---
200	233	236	243	258	250	257	260	---
201	208	218	221	234	236	239	234	---
202	198	198	206	216	219	216	220	---
203	216	220	229	237	240	233	242	---
204	189	195	199	204	209	208	208	---
205	200	203	207	213	222	223	221	---
206	230	243	248	260	260	268	272	---
207	211	219	223	230	228	229	237	---
208	235	243	248	250	256	251	251	---
209	221	226	233	241	243	245	251	---
210	212	221	224	233	231	238	235	---
211	231	241	242	249	256	257	257	---
212	195	205	210	215	213	218	221	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
FEMALES

GROUP 3 (1000 MG/KG/DAY)

	RECOVERY		
	14	21	28
DAYS			
WEEKS	2	3	4
ANIMAL			
187	---	---	---
188	---	---	---
189	---	---	---
190	---	---	---
191	---	---	---
192	---	---	---
193	---	---	---
194	---	---	---
195	---	---	---
196	---	---	---
197	---	---	---
198	---	---	---
199	---	---	---
200	---	---	---
201	---	---	---
202	---	---	---
203	---	---	---
204	---	---	---
205	---	---	---
206	---	---	---
207	---	---	---
208	---	---	---
209	---	---	---
210	---	---	---
211	---	---	---
212	---	---	---

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

	ACCLIMATIZATION		TREATMENT					
DAYS	1	1	8	15	22	29	36	42
WEEKS	1	1	2	3	4	5	6	6
ANIMAL								
213	99	126	144	169	183	196	210	218
214	100	131	155	177	182	203	207	214
215	99	133	158	178	197	211	224	236
216	91	119	142	167	179	188	204	214
217	103	131	159	183	191	205	222	231
218	91	113	130	154	168	182	190	199
219	90	119	144	171	183	206	216	217
220	101	126	150	166	172	185	191	201
221	105	132	151	179	199	219	231	234
222	96	116	135	157	166	177	184	197
223	95	126	149	178	194	212	224	239
224	106	137	162	186	199	216	233	238
225	90	115	135	154	166	178	188	194
226	94	118	136	153	164	173	180	196
227	96	117	138	150	165	183	190	200
228	97	125	148	167	174	191	201	208
229	106	129	149	170	181	197	206	219
230	96	125	148	167	189	203	215	222
231	89	121	143	168	178	195	206	215
232	103	128	155	179	190	213	229	230
233	90	125	147	167	184	199	208	213
234	104	133	154	181	192	209	222	234
235	100	122	139	163	173	187	198	193
236	89	109	128	148	159	170	180	187
237	100	129	158	183	196	209	224	230
238	90	120	138	158	175	192	203	216
239	92	120	139	158	169	180	196	193
240	107	135	159	195	205	218	234	235
241	97	131	151	179	194	211	221	231
242	97	135	154	173	193	207	219	224
243	105	135	161	187	203	223	233	240
244	93	118	137	161	178	190	196	207
245	96	118	140	166	180	191	195	212
246	98	127	157	184	201	215	223	239
247	100	132	154	180	207	228	238	253
248	96	125	143	161	176	187	191	203

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

BODY WEIGHTS (GRAM)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50 8	57 9	64 10	71 11	78 12	85 13	92 14	7 1
213	224	237	243	247	247	253	251	---
214	220	230	235	237	246	249	247	---
215	246	255	261	267	272	273	265	---
216	225	236	242	252	257	262	252	---
217	239	249	251	261	265	264	270	---
218	203	212	214	220	227	227	231	---
219	228	242	248	256	258	263	267	---
220	203	211	216	218	225	224	231	---
221	240	245	245	257	264	266	261	---
222	205	213	212	224	229	230	226	---
223	251	257	260	274	273	276	281	---
224	250	265	267	272	268	278	281	---
225	200	209	212	219	221	225	229	---
226	199	202	208	224	248	230	233	---
227	205	214	216	226	231	231	233	---
228	211	223	223	231	229	236	237	---
229	218	225	230	236	239	238	243	---
230	225	236	238	252	258	258	254	---
231	222	231	236	237	239	244	253	---
232	238	251	254	275	294	284	289	---
233	224	236	237	242	239	246	250	250
234	240	247	248	258	257	258	262	267
235	215	221	222	234	238	241	239	241
236	192	197	200	207	208	210	210	215
237	232	242	245	257	257	257	265	261
238	218	228	228	233	241	243	245	244
239	201	210	212	218	227	226	227	227
240	248	263	268	275	274	282	286	282
241	233	240	244	254	255	257	265	264
242	230	237	239	243	254	256	259	254
243	253	265	264	275	276	281	282	---
244	217	223	224	235	240	240	231	---
245	221	225	220	236	243	242	237	---
246	251	254	254	268	275	278	275	---
247	265	273	271	281	285	291	293	---
248	212	219	217	225	229	232	228	---

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

BODY WEIGHTS (GRAM)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY		
	14	21	28
	2	3	4
213	---	---	---
214	---	---	---
215	---	---	---
216	---	---	---
217	---	---	---
218	---	---	---
219	---	---	---
220	---	---	---
221	---	---	---
222	---	---	---
223	---	---	---
224	---	---	---
225	---	---	---
226	---	---	---
227	---	---	---
228	---	---	---
229	---	---	---
230	---	---	---
231	---	---	---
232	---	---	---
233	247	259	262
234	268	274	280
235	242	254	251
236	216	221	229
237	264	271	276
238	246	256	254
239	234	237	235
240	285	294	295
241	265	270	272
242	257	265	264
243	---	---	---
244	---	---	---
245	---	---	---
246	---	---	---
247	---	---	---
248	---	---	---

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

BODY WEIGHT GAIN (%)
MALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION	TREATMENT						
	1	1	8	15	22	29	36	42
	1	1	2	3	4	5	6	6
1	-26.6	0.0	19.9	44.9	61.7	83.7	105.0	122.4
2	-27.3	0.0	31.1	64.2	94.1	106.2	145.6	158.3
3	-27.3	0.0	29.6	58.2	78.7	101.5	117.6	126.1
4	-25.6	0.0	32.3	62.1	83.6	98.0	124.6	134.4
5	-28.6	0.0	36.0	68.0	85.7	108.1	124.9	136.9
6	-26.3	0.0	32.3	64.5	85.5	105.0	126.3	134.6
7	-22.3	0.0	26.4	50.9	66.7	83.0	98.7	104.8
8	-29.4	0.0	33.7	66.5	88.3	109.7	132.8	146.4
9	-26.4	0.0	30.3	62.8	85.2	104.4	122.1	133.6
10	-28.9	0.0	31.1	58.8	79.8	98.7	118.0	131.7
11	-23.3	0.0	28.8	60.8	74.3	88.7	106.5	116.1
12	-28.3	0.0	32.4	67.8	89.2	101.1	126.7	137.5
13	-28.2	0.0	32.9	65.9	84.5	103.2	119.5	129.5
14	-27.8	0.0	30.4	60.6	78.4	97.5	112.7	123.5
15	-26.8	0.0	28.5	54.7	68.7	82.8	101.2	111.7
16	-28.9	0.0	31.8	63.2	84.0	93.2	122.7	135.3
17	-28.1	0.0	27.8	56.4	75.7	92.5	105.1	109.0
18	-25.2	0.0	28.4	54.6	75.3	84.5	100.7	112.4
19	-25.6	0.0	27.4	59.1	77.2	95.7	112.8	125.0
20	-28.3	0.0	33.6	63.3	83.0	99.7	121.8	129.8
21	-25.0	0.0	31.4	59.5	79.3	88.2	115.6	126.8
22	-26.8	0.0	36.2	64.8	86.2	107.4	117.0	127.9
23	-25.6	0.0	27.7	57.3	73.5	84.7	106.9	119.5
24	-25.4	0.0	34.3	62.3	87.5	97.2	127.1	140.3
25	-23.8	0.0	24.8	52.6	71.4	87.8	107.6	117.8
26	-27.5	0.0	32.9	63.8	84.4	95.7	126.4	137.9
27	-23.8	0.0	27.9	53.7	72.4	88.5	101.1	105.6
28	-29.6	0.0	28.3	57.1	74.0	97.3	113.0	125.5
29	-25.6	0.0	30.8	56.3	72.3	88.4	105.1	112.3
30	-28.8	0.0	26.4	52.9	68.9	83.2	99.6	108.2
31	-27.4	0.0	27.8	58.6	84.9	98.6	120.2	128.7
32	-27.7	0.0	30.8	58.5	77.7	94.5	106.7	112.8
33	-22.2	0.0	23.3	44.0	59.4	67.7	76.4	78.4
34	12.2	0.0	81.6	131.8	180.7	215.1	236.1	255.3
35	-11.5	0.0	60.7	102.4	139.7	154.8	192.6	205.4
36	-28.0	0.0	32.0	65.4	89.6	100.8	131.4	140.6

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

BODY WEIGHT GAIN (%)
MALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50 8	57 9	64 10	71 11	78 12	85 13	92 14	7 1
1	138.8	147.8	155.6	171.7	180.4	187.9	199.3	---
2	177.5	190.9	195.4	212.2	218.5	223.5	231.3	---
3	137.0	146.7	149.9	162.3	164.6	171.0	176.2	---
4	144.6	156.9	163.0	175.8	177.7	185.9	192.6	---
5	147.1	162.1	156.9	182.7	189.8	196.9	204.4	---
6	146.3	160.6	166.4	174.0	182.2	188.5	198.6	---
7	112.5	125.2	126.9	138.5	142.7	152.7	160.4	---
8	160.6	173.4	179.1	190.3	205.3	208.0	221.5	---
9	141.8	154.6	163.8	174.3	177.9	186.3	191.1	---
10	137.1	147.1	154.7	166.9	173.3	181.4	184.7	---
11	124.1	134.1	139.8	145.4	153.5	161.4	170.3	---
12	149.6	163.5	171.5	184.6	191.2	197.2	203.4	---
13	136.6	148.7	155.8	170.2	177.0	182.6	192.0	---
14	131.8	142.2	145.8	157.1	163.8	170.7	180.1	---
15	119.4	127.5	135.5	148.1	153.4	160.4	164.3	---
16	144.2	156.9	164.0	179.3	192.0	198.0	203.5	---
17	119.5	125.9	133.6	144.3	149.7	158.3	165.6	---
18	122.9	135.2	145.1	155.7	164.3	169.4	174.6	---
19	136.7	145.1	151.8	163.3	171.6	178.3	181.6	---
20	141.9	153.2	158.0	169.4	176.2	181.4	189.8	---
21	133.3	146.0	153.4	166.8	172.7	178.8	186.8	189.0
22	136.7	144.4	154.9	165.0	173.6	183.3	193.3	181.2
23	127.8	139.9	146.3	157.1	164.9	173.1	175.8	172.5
24	150.9	166.5	175.2	194.8	204.3	216.7	227.4	225.2
25	125.3	141.2	143.8	159.7	168.0	171.0	181.9	176.7
26	146.6	160.8	162.8	174.3	180.0	186.2	194.5	192.3
27	113.4	124.6	130.0	143.2	149.1	158.6	166.1	164.5
28	133.9	146.9	151.1	163.5	169.6	180.4	186.4	182.8
29	117.0	127.0	128.0	140.9	144.4	151.7	153.2	149.2
30	117.1	127.2	133.3	144.9	153.5	160.8	168.0	163.2
31	142.8	150.8	152.4	164.2	172.4	177.0	183.0	---
32	125.8	133.6	137.0	145.4	149.6	156.3	165.2	---
33	87.6	91.5	93.1	99.8	104.5	108.5	115.6	---
34	276.9	289.5	294.5	317.0	323.0	331.1	343.2	---
35	226.8	240.1	250.9	262.7	272.3	279.0	282.8	---
36	154.8	164.7	172.0	182.9	190.8	200.0	216.3	---

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

BODY WEIGHT GAIN (%)
MALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY		
	14 2	21 3	28 4
1	---	---	---
2	---	---	---
3	---	---	---
4	---	---	---
5	---	---	---
6	---	---	---
7	---	---	---
8	---	---	---
9	---	---	---
10	---	---	---
11	---	---	---
12	---	---	---
13	---	---	---
14	---	---	---
15	---	---	---
16	---	---	---
17	---	---	---
18	---	---	---
19	---	---	---
20	---	---	---
21	189.3	197.4	201.7
22	193.3	204.8	209.9
23	177.7	187.4	188.4
24	234.8	246.9	254.9
25	185.2	194.5	194.4
26	195.7	203.0	204.8
27	170.0	180.4	178.7
28	189.9	203.4	203.7
29	155.8	164.0	170.0
30	168.8	175.3	177.6
31	---	---	---
32	---	---	---
33	---	---	---
34	---	---	---
35	---	---	---
36	---	---	---

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)BODY WEIGHT GAIN (%)
MALES

GROUP 2 (500 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT						
	1		1	8	15	22	29	36	42
	1		1	2	3	4	5	6	6
37	-30.1		0.0	31.8	63.3	81.7	104.0	120.3	129.7
38	-29.0		0.0	32.5	67.8	93.4	106.5	141.6	156.2
39	-29.2		0.0	35.9	66.8	86.3	107.3	122.9	135.4
40	-28.9		0.0	27.5	60.1	84.8	102.3	129.6	141.7
41	-22.9		0.0	30.7	58.0	77.6	98.5	115.2	123.4
42	-29.4		0.0	28.6	60.5	84.0	94.3	122.6	136.4
43	-28.7		0.0	34.5	67.3	90.4	105.1	124.4	135.9
44	-25.8		0.0	30.8	59.8	67.4	51.3	---	---
45	-24.7		0.0	27.8	61.7	80.8	101.7	123.7	131.1
46	-24.5		0.0	30.1	61.8	79.0	92.8	114.4	122.3
47	-28.4		0.0	31.3	60.2	79.0	91.9	114.0	121.7
48	-26.4		0.0	32.7	65.2	89.1	111.1	135.2	148.3
49	-25.8		0.0	26.9	52.2	68.3	83.7	100.6	109.2
50	-25.7		0.0	29.9	59.7	77.3	99.5	114.9	126.7
51	-28.5		0.0	32.2	62.8	85.6	110.9	126.7	138.5
52	-19.7		0.0	29.1	62.8	86.4	112.7	132.9	146.5
53	-24.9		0.0	27.8	57.4	74.5	92.2	107.8	118.0
54	-24.9		0.0	32.7	66.3	82.0	105.5	123.8	134.6
55	-24.6		0.0	30.2	59.6	80.0	100.6	115.0	124.4
56	-28.3		0.0	31.4	60.7	80.7	104.6	120.2	132.1
57	-25.9		0.0	27.6	58.3	79.4	96.9	110.4	118.2
58	-26.9		0.0	30.3	62.9	85.1	106.8	125.3	135.0
59	-28.4		0.0	29.2	55.4	76.4	92.8	105.0	115.5
60	-29.3		0.0	31.2	63.9	95.3	121.9	139.1	152.8
61	-28.7		0.0	29.9	63.6	88.2	106.5	121.8	130.2
62	-30.0		0.0	31.0	62.0	84.3	100.4	114.7	121.4

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50	57	64	71	78	85	92	7
	8	9	10	11	12	13	14	1
37	139.1	154.1	158.7	169.1	175.4	183.6	189.7	---
38	167.9	183.4	191.8	207.8	218.8	231.0	241.3	---
39	138.7	151.1	149.3	162.0	167.2	176.7	186.2	---
40	151.6	164.1	167.8	179.0	185.5	190.9	200.8	---
41	133.1	141.4	146.7	161.1	168.7	172.9	178.4	---
42	148.2	157.9	164.2	175.8	187.3	193.1	199.8	---
43	148.6	160.0	165.9	181.6	191.5	196.6	204.3	---
44	---	---	---	---	---	---	---	---
45	141.6	151.6	155.1	170.3	176.6	188.3	194.3	---
46	125.9	136.6	139.4	150.0	159.7	167.7	172.8	---
47	135.3	144.7	154.4	162.9	172.4	178.7	184.9	---
48	159.5	175.4	180.2	197.9	209.5	215.6	222.9	---
49	117.4	129.1	136.3	147.1	152.0	158.0	166.1	---
50	138.2	147.5	151.8	164.0	169.0	175.6	178.2	---
51	146.4	160.2	164.0	178.2	186.2	191.6	199.6	---
52	161.2	164.8	176.3	190.5	202.0	207.4	215.0	---
53	128.4	138.6	144.5	157.4	159.2	165.6	172.5	---
54	145.5	158.4	163.5	174.3	180.1	185.3	191.3	---
55	134.7	142.2	150.3	162.0	166.5	173.8	177.0	---
56	138.8	150.3	157.4	170.2	177.6	182.4	188.5	---
57	129.2	140.6	146.7	152.7	161.7	165.4	170.9	---
58	149.9	158.2	161.4	176.1	181.7	188.4	198.5	---
59	128.0	135.4	143.4	157.0	165.1	173.8	183.2	---
60	168.9	181.5	190.7	204.6	210.6	218.8	225.1	---
61	148.5	159.6	163.7	176.9	182.4	190.7	197.3	---
62	132.7	140.4	143.8	154.6	157.1	164.7	168.6	---

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

BODY WEIGHT GAIN (%)
MALES

GROUP 2 (500 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY		
	14 2	21 3	28 4
37	---	---	---
38	---	---	---
39	---	---	---
40	---	---	---
41	---	---	---
42	---	---	---
43	---	---	---
44	---	---	---
45	---	---	---
46	---	---	---
47	---	---	---
48	---	---	---
49	---	---	---
50	---	---	---
51	---	---	---
52	---	---	---
53	---	---	---
54	---	---	---
55	---	---	---
56	---	---	---
57	---	---	---
58	---	---	---
59	---	---	---
60	---	---	---
61	---	---	---
62	---	---	---

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

BODY WEIGHT GAIN (%)
MALES

GROUP 3 (1000 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT						
	1	1	8	15	22	29	36	42	
	1	1	2	3	4	5	6	6	
63	-28.8	0.0	31.4	65.9	92.2	113.7	132.6	146.7	
64	-27.6	0.0	31.6	61.8	79.0	98.2	112.8	117.8	
65	-20.3	0.0	30.2	60.2	81.0	99.3	116.5	129.4	
66	-21.6	0.0	36.2	70.5	91.0	115.7	134.6	149.0	
67	-24.3	0.0	28.6	60.3	80.3	104.0	119.9	130.1	
68	-26.5	0.0	30.6	63.7	83.8	107.6	124.5	142.0	
69	-28.5	0.0	33.7	69.9	91.4	114.0	130.1	139.1	
70	-28.4	0.0	31.0	59.7	83.3	95.7	125.3	136.3	
71	-26.8	0.0	30.8	62.1	82.1	99.9	117.1	130.5	
72	-29.7	0.0	31.5	61.9	82.4	103.2	119.0	125.9	
73	-25.6	0.0	25.5	53.6	70.4	90.4	105.7	118.2	
74	-25.9	0.0	32.3	64.9	85.6	104.4	124.7	134.7	
75	-24.5	0.0	26.3	56.1	77.9	98.4	115.4	126.2	
76	-27.2	0.0	32.8	64.4	83.7	104.6	122.2	133.9	
77	-27.7	0.0	31.2	61.3	80.6	103.1	119.6	132.0	
78	-26.2	0.0	33.3	66.5	91.2	115.2	133.8	144.6	
79	-25.4	0.0	30.1	61.3	85.8	111.7	129.9	143.9	
80	-31.7	0.0	31.0	60.7	82.2	105.0	120.6	133.0	
81	-29.3	0.0	32.1	63.5	88.6	110.6	128.0	136.6	
82	-26.3	0.0	28.5	57.1	76.8	99.4	120.8	131.7	
83	-30.1	0.0	34.9	72.5	99.4	122.1	139.5	150.2	
84	-26.9	0.0	26.9	57.9	77.0	95.0	108.3	114.0	
85	-27.0	0.0	31.4	57.5	82.6	99.1	117.2	129.9	
86	-27.6	0.0	28.1	58.7	82.6	101.8	120.6	128.8	
87	-30.9	0.0	34.3	65.1	93.7	113.6	131.0	146.1	
88	-24.7	0.0	27.0	58.4	76.5	91.2	104.7	112.5	

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY	
	50	57	64	71	78	85	92	7	
	8	9	10	11	12	13	14	1	
63	153.2	167.5	176.3	187.8	192.7	196.8	201.1	---	
64	127.2	140.8	149.7	161.3	170.7	175.3	184.2	---	
65	139.7	154.1	164.2	175.1	181.1	190.7	198.3	---	
66	159.8	170.2	179.3	187.7	201.8	207.5	214.5	---	
67	142.9	152.0	157.3	168.3	173.4	182.9	189.7	---	
68	150.6	167.7	178.3	188.3	196.2	206.9	213.0	---	
69	145.4	155.4	159.7	171.4	177.5	182.9	186.7	---	
70	144.5	156.0	168.4	175.7	182.3	187.8	196.8	---	
71	137.2	151.5	158.1	173.2	178.5	186.3	192.3	---	
72	132.6	145.1	147.9	159.0	165.2	171.2	179.0	---	
73	130.3	141.9	150.7	162.1	170.9	175.1	178.9	---	
74	139.0	152.6	161.0	179.8	192.2	203.6	208.3	---	
75	135.5	150.6	156.5	169.3	176.2	178.6	189.2	---	
76	140.5	149.3	155.4	167.7	175.6	183.6	191.7	---	
77	138.1	151.2	160.2	171.1	178.2	179.5	182.6	---	
78	158.7	174.4	187.3	207.7	216.1	224.5	228.9	---	
79	157.9	168.8	178.9	194.6	203.3	212.7	218.8	---	
80	145.1	155.2	162.9	176.0	188.3	196.6	203.6	---	
81	143.8	152.3	156.8	168.1	175.2	180.3	188.5	---	
82	144.1	154.8	166.2	176.7	184.4	193.0	201.2	---	
83	166.4	176.7	182.5	197.5	207.5	216.6	228.5	---	
84	125.8	132.9	139.0	148.6	157.0	163.5	169.6	---	
85	141.2	154.0	163.4	178.0	181.8	192.8	195.1	---	
86	143.5	151.1	152.5	165.8	173.9	183.8	188.6	---	
87	---	---	---	---	---	---	---	---	
88	123.1	131.5	134.9	143.5	154.4	159.9	172.4	---	

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

BODY WEIGHT GAIN (%)
MALES

GROUP 3 (1000 MG/KG/DAY)

	RECOVERY		
	14	21	28
DAYS	2	3	4
WEEKS			
ANIMAL			
63	---	---	---
64	---	---	---
65	---	---	---
66	---	---	---
67	---	---	---
68	---	---	---
69	---	---	---
70	---	---	---
71	---	---	---
72	---	---	---
73	---	---	---
74	---	---	---
75	---	---	---
76	---	---	---
77	---	---	---
78	---	---	---
79	---	---	---
80	---	---	---
81	---	---	---
82	---	---	---
83	---	---	---
84	---	---	---
85	---	---	---
86	---	---	---
87	---	---	---
88	---	---	---

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

BODY WEIGHT GAIN (%)
MALES

GROUP 4 (2000 MG/KG/DAY)

	ACCLIMATIZATION	TREATMENT						
DAYS	1	1	8	15	22	29	36	42
WEEKS	1	1	2	3	4	5	6	6
ANIMAL								
89	-21.2	0.0	29.5	59.2	77.4	94.7	108.1	118.0
90	-24.9	0.0	23.9	48.7	63.9	82.2	99.7	108.6
91	-26.0	0.0	29.6	58.2	75.1	92.5	109.8	121.3
92	-23.0	0.0	26.5	51.7	68.3	88.6	101.7	111.9
93	-31.9	0.0	31.3	64.3	84.1	110.2	126.3	138.8
94	-27.2	0.0	32.4	64.6	86.2	104.3	126.0	137.5
95	-28.9	0.0	28.5	54.6	71.3	88.4	99.8	103.0
96	-27.9	0.0	25.7	55.4	75.0	89.7	106.1	114.8
97	-24.2	0.0	32.2	60.0	77.5	92.9	108.3	117.1
98	-29.2	0.0	33.0	61.7	77.0	96.1	112.1	125.1
99	-22.7	0.0	28.5	57.9	78.2	96.9	111.5	120.7
100	-23.2	0.0	25.1	51.3	64.9	81.9	96.0	104.0
101	-28.6	0.0	30.1	57.3	75.3	88.7	106.6	118.8
102	-24.5	0.0	29.1	56.6	73.8	93.6	110.8	120.7
103	-28.0	0.0	31.5	60.5	82.8	104.6	121.7	133.7
104	-29.4	0.0	32.6	63.6	80.9	102.0	119.0	129.6
105	-30.6	0.0	35.7	69.8	95.0	115.2	132.1	141.6
106	-23.6	0.0	27.6	59.3	75.8	97.9	108.6	117.0
107	-29.0	0.0	32.3	63.7	84.3	104.2	119.6	131.9
108	-27.9	0.0	31.0	62.0	81.0	100.3	114.4	124.7
109	-30.9	0.0	32.7	64.2	86.2	109.7	129.3	139.6
110	-26.2	0.0	28.7	57.0	74.2	92.8	107.5	117.0
111	-27.6	0.0	27.0	55.1	75.4	96.9	111.5	123.2
112	-26.6	0.0	27.1	54.2	73.5	90.0	106.0	121.0
113	-29.6	0.0	30.2	59.8	81.1	99.5	116.7	130.6
114	-30.2	0.0	32.3	65.5	86.1	106.9	125.8	135.6
115	-33.2	0.0	35.0	71.5	96.3	122.1	145.0	160.2
116	-26.0	0.0	26.7	55.6	75.1	92.8	106.7	117.5
117	-25.3	0.0	27.2	55.8	77.7	98.4	115.8	125.5
118	-26.4	0.0	25.4	52.2	67.9	83.6	97.5	108.8
119	-32.1	0.0	32.4	65.9	90.9	110.4	129.7	141.8
120	-30.1	0.0	32.8	66.6	95.7	115.6	134.1	148.2
121	-25.2	0.0	27.8	55.3	73.1	86.3	100.1	108.5
122	-22.8	0.0	24.5	47.1	63.7	77.7	90.7	96.6
123	-25.5	0.0	30.3	57.3	82.6	100.1	116.1	130.7
124	-30.0	0.0	32.1	64.4	88.2	106.6	123.9	135.0

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

BODY WEIGHT GAIN (%)
MALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50 8	57 9	64 10	71 11	78 12	85 13	92 14	7 1
89	121.8	130.9	133.1	139.7	146.8	147.9	153.1	---
90	116.4	128.1	134.3	142.3	148.5	152.8	159.0	---
91	125.7	135.5	139.2	150.7	157.0	160.2	167.6	---
92	119.0	129.5	134.6	143.8	153.2	156.8	164.9	---
93	146.5	157.5	164.4	176.9	183.2	192.6	199.3	---
94	149.3	159.9	167.1	177.9	185.9	189.8	193.1	---
95	108.8	119.8	128.2	136.7	146.2	153.1	161.6	---
96	122.7	132.9	140.9	150.7	154.6	159.4	164.8	---
97	128.0	137.7	141.4	152.9	155.5	163.1	163.3	---
98	131.8	143.1	153.2	161.8	169.1	174.0	182.5	---
99	127.7	138.2	141.5	154.1	157.2	161.4	170.8	---
100	107.8	117.0	121.7	130.0	133.5	140.3	146.6	---
101	130.2	138.9	148.3	158.3	164.0	174.0	184.2	---
102	130.6	143.7	147.8	159.0	165.6	171.1	179.7	---
103	144.7	154.7	159.7	173.8	177.6	185.7	199.0	---
104	136.1	147.8	152.0	160.6	167.4	171.5	181.0	---
105	150.3	166.0	172.2	189.7	197.7	209.2	216.6	---
106	121.6	130.8	135.8	147.0	156.0	162.0	166.9	---
107	141.9	150.9	152.4	162.8	167.7	171.6	181.0	---
108	134.1	147.5	151.5	161.0	163.1	171.9	176.6	---
109	148.6	164.4	173.6	185.9	188.1	197.4	203.5	202.7
110	124.3	134.2	139.2	149.0	152.9	158.5	162.8	157.1
111	130.0	139.6	147.7	157.7	166.2	172.1	182.6	176.5
112	127.0	138.1	145.5	153.3	160.2	165.4	170.6	168.1
113	139.3	150.2	159.8	170.5	178.4	182.1	187.4	184.5
114	143.0	154.2	159.0	170.2	176.7	183.3	188.6	189.0
115	168.4	182.1	194.3	208.1	216.0	223.6	229.0	227.7
116	125.8	137.5	142.0	149.5	153.7	158.9	171.6	167.0
117	134.2	147.4	154.4	162.7	173.0	176.2	182.0	178.9
118	117.0	125.0	133.1	141.6	146.7	153.3	157.5	156.0
119	156.8	167.8	167.9	184.1	189.5	199.4	207.4	---
120	161.8	172.6	178.7	189.8	194.9	203.2	208.3	---
121	122.0	132.5	140.1	145.4	150.7	159.4	169.9	---
122	110.1	118.5	121.9	130.8	138.7	143.6	151.6	---
123	148.4	158.0	162.6	172.8	181.6	187.8	193.8	---
124	150.1	161.2	167.1	162.1	181.0	186.8	195.9	---

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

BODY WEIGHT GAIN (%)
MALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY		
	14 2	21 3	28 4
89	---	---	---
90	---	---	---
91	---	---	---
92	---	---	---
93	---	---	---
94	---	---	---
95	---	---	---
96	---	---	---
97	---	---	---
98	---	---	---
99	---	---	---
100	---	---	---
101	---	---	---
102	---	---	---
103	---	---	---
104	---	---	---
105	---	---	---
106	---	---	---
107	---	---	---
108	---	---	---
109	209.6	218.7	222.1
110	159.2	170.2	171.8
111	183.7	195.7	196.2
112	173.4	180.7	186.2
113	189.4	198.5	204.7
114	193.0	203.6	208.6
115	229.2	236.8	242.1
116	173.4	180.4	187.3
117	185.1	193.1	197.7
118	159.4	166.5	170.2
119	---	---	---
120	---	---	---
121	---	---	---
122	---	---	---
123	---	---	---
124	---	---	---

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

BODY WEIGHT GAIN (%)
FEMALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT					
	1	1	8	15	22	29	36	42
	1	1	2	3	4	5	6	6
125	-9.8	0.0	20.3	38.1	46.7	51.4	66.5	70.6
126	-30.7	0.0	14.2	32.3	40.6	50.2	61.5	63.7
127	-20.5	0.0	18.7	36.2	44.1	52.0	57.1	69.3
128	-19.7	0.0	19.3	35.3	41.4	59.2	70.7	66.9
129	-23.3	0.0	23.1	37.7	46.7	60.4	75.2	79.5
130	-25.3	0.0	20.5	39.0	48.3	60.5	70.7	73.9
131	-22.9	0.0	17.5	33.1	39.9	52.3	62.2	65.5
132	-22.3	0.0	15.0	31.6	41.0	52.8	62.0	72.9
133	-27.8	0.0	18.9	37.2	50.4	61.2	71.8	80.9
134	-25.8	0.0	18.9	40.2	54.0	70.9	81.9	89.5
135	-22.7	0.0	21.4	38.9	52.7	63.9	70.5	84.7
136	-20.6	0.0	15.7	28.7	42.4	52.3	61.1	71.1
137	-23.7	0.0	18.7	34.5	46.9	63.2	73.9	79.9
138	-16.1	0.0	14.3	25.3	33.3	38.3	48.5	54.7
139	-23.5	0.0	23.8	45.1	56.3	65.1	83.7	94.1
140	-25.0	0.0	17.1	32.7	39.6	54.7	65.7	72.9
141	-25.3	0.0	20.3	32.2	42.4	54.5	65.4	69.6
142	-22.1	0.0	17.7	34.2	41.6	56.4	69.6	73.0
143	-20.9	0.0	14.1	27.0	37.5	49.3	55.2	63.1
144	-28.8	0.0	18.6	33.8	39.6	52.5	60.5	63.9
145	-20.6	0.0	13.3	31.3	38.5	45.8	59.7	64.8
146	-23.3	0.0	17.0	32.9	44.7	56.6	66.3	75.3
147	-18.9	0.0	18.0	31.7	38.9	49.4	58.0	67.2
148	-24.4	0.0	19.3	39.2	46.6	56.5	68.2	76.0
149	-23.0	0.0	24.0	44.3	56.8	71.7	82.0	89.0
150	-22.8	0.0	19.1	41.4	53.4	69.3	84.5	90.7
151	-22.8	0.0	19.7	36.5	42.7	54.5	64.5	66.4
152	-20.4	0.0	16.3	35.3	44.2	56.1	63.4	70.7
153	-26.7	0.0	19.4	39.3	53.2	68.6	79.3	90.3
154	-26.7	0.0	21.1	31.6	38.9	54.2	63.1	66.6
155	-25.6	0.0	17.9	37.4	51.2	58.9	67.2	76.4
156	-22.2	0.0	19.9	34.6	44.0	55.9	65.4	67.6
157	-23.4	0.0	24.7	39.4	49.5	63.6	70.3	74.7
158	-21.8	0.0	18.6	38.4	50.9	56.8	63.7	71.7
159	-24.7	0.0	15.7	30.1	36.5	46.5	56.1	59.8
160	-25.7	0.0	17.6	36.5	49.5	59.5	64.1	73.2

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

BODY WEIGHT GAIN (%)
FEMALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50 8	57 9	64 10	71 11	78 12	85 13	92 14	7 1
125	75.8	78.9	83.0	91.1	92.4	90.8	95.9	---
126	67.7	74.2	76.9	86.0	87.0	90.6	99.1	---
127	76.4	83.6	84.7	94.7	103.0	98.1	98.9	---
128	82.5	85.2	88.6	95.6	88.9	87.7	89.3	---
129	87.3	94.4	97.8	99.2	106.5	108.7	108.9	---
130	76.5	81.5	86.3	98.0	95.5	99.5	104.7	---
131	70.4	77.0	82.4	84.3	89.6	91.2	95.9	---
132	76.8	82.3	84.6	89.8	97.1	97.8	93.4	---
133	83.6	87.8	91.7	97.3	103.6	104.9	100.4	---
134	98.2	106.6	111.4	115.4	116.2	122.6	127.0	---
135	93.8	98.0	102.6	105.4	112.3	104.3	109.2	---
136	80.3	82.0	86.2	94.5	101.5	93.9	105.3	---
137	89.9	100.5	101.6	107.9	107.9	113.2	116.7	---
138	60.1	61.9	64.8	72.0	68.1	75.5	72.7	---
139	100.9	101.8	108.1	117.8	123.1	116.2	126.8	---
140	78.2	89.3	92.6	96.9	98.8	106.7	108.3	---
141	77.8	80.4	87.7	89.8	97.0	101.6	99.1	---
142	75.5	83.1	91.7	96.9	91.6	94.4	98.0	---
143	70.6	73.8	79.3	78.7	90.4	91.5	91.1	---
144	70.7	79.8	80.3	86.1	87.1	94.2	97.1	---
145	67.2	69.9	76.0	74.7	77.1	84.3	80.7	83.9
146	78.4	86.8	89.1	91.9	95.9	99.9	99.9	96.8
147	72.6	80.6	87.9	88.2	100.3	101.4	102.1	100.5
148	83.3	82.7	87.7	96.5	101.5	106.1	104.3	105.3
149	100.0	104.5	108.5	112.9	118.1	124.5	124.4	121.8
150	103.1	108.0	113.3	118.1	123.8	124.1	130.1	125.0
151	70.7	76.3	84.1	86.0	86.1	91.8	96.7	97.1
152	74.5	78.4	81.4	88.2	89.7	89.9	89.0	94.9
153	99.5	105.6	109.3	114.3	121.1	123.2	122.7	129.8
154	70.7	80.7	83.2	88.2	87.3	93.1	96.2	97.4
155	84.7	88.1	90.4	98.4	103.7	104.1	102.4	---
156	75.7	84.7	87.3	89.4	90.0	96.0	92.5	---
157	87.9	90.4	99.6	102.3	102.3	105.5	118.2	---
158	77.1	80.7	82.2	89.1	89.8	87.3	90.8	---
159	70.6	74.8	74.1	82.8	83.9	86.7	90.4	---
160	80.6	84.1	81.3	91.2	94.4	95.9	95.6	---

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

BODY WEIGHT GAIN (%)
FEMALES

GROUP 1 (0 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY		
	14 2	21 3	28 4
125	---	---	---
126	---	---	---
127	---	---	---
128	---	---	---
129	---	---	---
130	---	---	---
131	---	---	---
132	---	---	---
133	---	---	---
134	---	---	---
135	---	---	---
136	---	---	---
137	---	---	---
138	---	---	---
139	---	---	---
140	---	---	---
141	---	---	---
142	---	---	---
143	---	---	---
144	---	---	---
145	86.7	89.5	89.6
146	99.5	107.4	112.1
147	104.2	107.0	116.5
148	110.4	112.5	110.4
149	128.1	134.4	134.0
150	130.2	133.8	136.8
151	97.1	109.4	111.1
152	97.4	101.0	100.6
153	134.1	133.7	134.0
154	97.1	103.4	106.0
155	---	---	---
156	---	---	---
157	---	---	---
158	---	---	---
159	---	---	---
160	---	---	---

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)BODY WEIGHT GAIN (%)
FEMALES

GROUP 2 (500 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT						
	1	1	1	8	15	22	29	36	42
	1	1	1	2	3	4	5	6	6
161	-29.8		0.0	16.3	38.1	47.3	53.6	58.8	70.7
162	-24.8		0.0	18.4	35.3	42.3	57.9	66.3	71.6
163	-25.6		0.0	17.9	33.8	40.9	54.8	61.1	63.9
164	-19.7		0.0	16.0	40.0	49.1	63.2	69.4	78.3
165	-18.3		0.0	17.9	40.3	52.6	66.6	76.6	86.9
166	-27.3		0.0	17.4	37.0	43.8	53.6	58.3	68.1
167	-19.7		0.0	15.3	35.7	46.0	52.2	62.0	71.8
168	-24.4		0.0	21.3	40.7	46.8	57.9	70.3	76.5
169	-23.9		0.0	19.3	36.9	52.4	64.6	72.9	82.0
170	-22.8		0.0	18.0	38.1	50.6	62.8	72.4	78.7
171	-20.3		0.0	19.0	39.9	49.7	62.2	71.3	80.7
172	-28.6		0.0	19.6	39.1	49.1	58.2	65.5	73.9
173	-22.5		0.0	16.0	29.5	42.5	66.3	63.8	69.6
174	-21.4		0.0	20.8	37.3	46.7	54.6	68.1	75.7
175	-22.8		0.0	15.2	29.5	36.0	58.7	56.5	57.6
176	-19.5		0.0	15.8	30.0	44.2	46.7	63.5	70.5
177	-18.3		0.0	14.5	23.8	38.2	52.5	53.4	62.0
178	-21.8		0.0	17.9	30.8	39.6	47.1	56.6	63.6
179	-27.2		0.0	22.4	37.8	46.7	59.0	67.0	72.3
180	-23.0		0.0	15.6	38.5	46.6	60.3	64.5	78.8
181	-21.8		0.0	17.2	29.9	34.2	45.1	55.9	57.2
182	-25.7		0.0	14.8	29.0	42.1	50.6	54.8	63.6
183	-27.6		0.0	20.0	38.5	48.6	51.1	66.3	72.1
184	-24.7		0.0	19.9	40.1	54.3	65.5	71.9	74.9
185	-21.7		0.0	19.9	38.8	48.8	54.4	65.8	71.9
186	-21.3		0.0	14.7	27.2	35.7	47.8	56.6	58.5

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50	57	64	71	78	85	92	7
	8	9	10	11	12	13	14	1
161	79.1	81.0	80.7	89.0	96.2	95.9	88.7	---
162	75.5	85.5	89.4	93.5	90.8	100.5	100.4	---
163	69.3	82.3	84.5	87.9	86.1	93.8	87.7	---
164	86.3	90.6	94.2	99.6	107.5	110.8	105.9	---
165	93.7	100.6	108.4	109.9	111.0	116.2	121.2	---
166	69.8	75.0	80.1	86.1	96.1	97.7	95.0	---
167	75.4	79.0	84.3	90.7	86.0	96.9	99.7	---
168	83.6	86.0	89.7	101.4	105.0	106.8	107.3	---
169	87.8	93.4	94.0	103.1	102.9	109.6	111.9	---
170	86.0	90.6	93.9	101.1	102.2	103.3	102.6	---
171	87.9	90.3	94.3	98.6	101.4	100.9	95.7	---
172	78.7	85.7	87.5	90.4	97.0	98.1	97.7	---
173	74.5	84.4	87.6	88.1	94.6	98.7	98.2	---
174	79.6	86.8	88.5	95.9	93.4	98.3	99.0	---
175	67.8	72.7	74.8	84.9	85.2	83.6	89.0	---
176	77.9	83.5	89.2	97.1	97.6	98.0	104.3	---
177	65.7	75.3	77.8	84.3	91.4	97.3	99.0	---
178	67.6	70.5	75.9	83.9	87.1	85.4	89.7	---
179	79.8	90.7	94.8	98.3	98.3	105.0	104.8	---
180	89.8	92.9	102.3	117.6	120.3	118.7	119.6	---
181	66.2	69.5	76.9	81.0	76.5	86.6	87.5	---
182	74.2	81.7	83.3	90.6	93.5	97.4	101.6	---
183	82.4	82.9	88.3	97.6	98.5	97.5	95.0	---
184	82.0	88.9	89.9	93.1	98.8	105.2	109.0	---
185	83.7	83.1	90.2	97.6	99.9	98.2	95.4	---
186	67.0	74.6	77.4	81.1	79.2	85.0	89.0	---

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

BODY WEIGHT GAIN (%)
FEMALES

GROUP 2 (500 MG/KG/DAY)

	RECOVERY		
DAYS	14	21	28
WEEKS	2	3	4
ANIMAL			
161	---	---	---
162	---	---	---
163	---	---	---
164	---	---	---
165	---	---	---
166	---	---	---
167	---	---	---
168	---	---	---
169	---	---	---
170	---	---	---
171	---	---	---
172	---	---	---
173	---	---	---
174	---	---	---
175	---	---	---
176	---	---	---
177	---	---	---
178	---	---	---
179	---	---	---
180	---	---	---
181	---	---	---
182	---	---	---
183	---	---	---
184	---	---	---
185	---	---	---
186	---	---	---

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)BODY WEIGHT GAIN (%)
FEMALES

GROUP 3 (1000 MG/KG/DAY)

DAYS WEEKS ANIMAL	ACCLIMATIZATION		TREATMENT						
	1	1	1	8	15	22	29	36	42
	1	1	1	2	3	4	5	6	6
187	-20.3		0.0	16.2	31.7	37.5	48.2	61.1	64.6
188	-21.5		0.0	17.5	36.4	45.7	59.5	66.9	72.5
189	-23.8		0.0	17.2	36.7	46.6	56.1	64.2	70.8
190	-20.7		0.0	15.3	33.6	45.0	57.3	66.6	71.1
191	-16.8		0.0	17.5	36.4	46.3	55.0	71.1	79.8
192	-24.3		0.0	16.1	34.3	44.8	54.2	65.8	75.2
193	-21.9		0.0	17.4	35.5	47.5	51.8	67.7	77.8
194	-21.3		0.0	12.2	23.3	38.0	46.2	52.6	56.3
195	-24.5		0.0	19.4	37.9	46.9	61.3	69.0	75.0
196	-17.4		0.0	16.3	28.8	36.3	48.3	61.6	72.0
197	-24.6		0.0	15.5	35.0	46.5	59.3	61.7	72.6
198	-21.5		0.0	12.1	28.1	37.1	49.0	59.6	61.3
199	-22.0		0.0	19.4	42.7	50.5	61.4	72.0	78.0
200	-18.5		0.0	23.5	40.1	48.4	56.3	70.5	80.0
201	-17.4		0.0	18.1	34.5	44.1	53.7	58.9	70.8
202	-22.6		0.0	14.4	33.4	41.1	45.5	56.1	63.0
203	-19.5		0.0	13.7	35.4	44.2	51.8	64.8	68.4
204	-18.7		0.0	15.8	35.1	44.2	50.9	57.6	67.1
205	-19.9		0.0	18.5	35.5	43.6	58.8	62.5	71.2
206	-19.6		0.0	16.6	35.0	42.0	61.1	72.2	81.4
207	-22.7		0.0	15.5	29.2	37.5	46.0	56.6	59.0
208	-23.1		0.0	16.5	32.0	46.4	59.5	64.9	70.6
209	-24.7		0.0	19.8	37.8	52.4	62.0	71.9	83.2
210	-18.3		0.0	17.6	35.9	44.8	52.9	61.4	65.9
211	-22.6		0.0	15.9	34.5	43.8	53.4	59.9	66.5
212	-19.5		0.0	15.9	31.8	43.3	50.1	58.5	63.9

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50	57	64	71	78	85	92	7
	8	9	10	11	12	13	14	1
187	73.2	79.0	87.1	97.6	98.0	106.9	107.8	---
188	76.2	83.9	86.5	92.0	95.9	98.1	99.5	---
189	78.8	82.7	81.3	91.0	95.7	98.5	89.6	---
190	77.9	86.0	87.2	91.3	95.6	99.8	101.4	---
191	84.2	88.6	97.0	105.0	106.5	107.3	105.7	---
192	80.0	90.9	90.6	102.1	104.4	104.7	108.4	---
193	84.8	91.9	91.9	100.9	106.3	110.9	109.5	---
194	59.8	65.5	68.9	72.7	77.6	81.0	80.2	---
195	76.6	82.8	87.5	95.1	96.7	100.3	102.9	---
196	75.6	82.0	89.1	95.6	92.3	100.4	103.4	---
197	79.1	83.7	84.9	94.0	98.0	99.4	99.4	---
198	69.3	74.2	76.4	89.9	92.5	98.2	96.3	---
199	87.7	98.8	99.6	109.2	108.9	117.3	115.6	---
200	86.8	89.4	95.0	106.9	100.7	106.2	108.5	---
201	74.8	82.6	85.5	96.1	98.1	100.7	96.0	---
202	67.1	67.2	74.2	82.3	84.6	82.5	86.1	---
203	73.4	76.1	83.8	89.6	92.0	86.9	93.7	---
204	72.7	78.4	82.2	87.0	91.0	90.8	90.8	---
205	77.2	79.5	83.2	88.7	96.5	97.0	95.0	---
206	85.5	96.3	100.5	109.7	109.5	116.1	119.3	---
207	63.9	70.2	73.1	78.7	76.9	77.9	84.3	---
208	79.0	85.1	89.3	90.5	94.9	91.5	91.3	---
209	93.0	97.2	102.8	110.4	112.2	113.7	118.9	---
210	72.5	79.8	82.9	90.2	88.5	94.1	91.7	---
211	75.0	82.7	83.6	88.7	93.8	94.9	94.3	---
212	67.8	76.2	80.3	84.4	83.1	87.4	89.5	---

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

BODY WEIGHT GAIN (%)
FEMALES

GROUP 3 (1000 MG/KG/DAY)

	RECOVERY		
	14	21	28
DAYS	2	3	4
WEEKS			
ANIMAL			
187	---	---	---
188	---	---	---
189	---	---	---
190	---	---	---
191	---	---	---
192	---	---	---
193	---	---	---
194	---	---	---
195	---	---	---
196	---	---	---
197	---	---	---
198	---	---	---
199	---	---	---
200	---	---	---
201	---	---	---
202	---	---	---
203	---	---	---
204	---	---	---
205	---	---	---
206	---	---	---
207	---	---	---
208	---	---	---
209	---	---	---
210	---	---	---
211	---	---	---
212	---	---	---

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

BODY WEIGHT GAIN (%)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

	ACCLIMATIZATION	TREATMENT						
DAYS	1	1	8	15	22	29	36	42
WEEKS	1	1	2	3	4	5	6	6
ANIMAL								
213	-21.1	0.0	14.9	34.4	45.9	56.4	67.5	73.9
214	-23.5	0.0	18.7	35.1	39.3	55.3	58.2	63.3
215	-25.9	0.0	18.6	33.5	48.0	58.8	68.5	77.4
216	-23.3	0.0	19.0	40.3	50.0	57.8	71.8	80.0
217	-21.1	0.0	21.6	39.9	46.1	56.1	69.2	76.2
218	-20.1	0.0	14.7	35.9	48.4	60.9	67.9	75.3
219	-24.7	0.0	21.2	43.3	53.9	73.1	81.6	82.5
220	-20.2	0.0	18.4	31.6	36.2	46.7	50.9	58.8
221	-20.0	0.0	14.9	35.6	51.4	66.7	75.4	77.9
222	-17.3	0.0	16.3	34.9	42.6	52.0	58.4	69.6
223	-25.0	0.0	18.1	40.9	54.0	67.9	77.7	89.2
224	-23.0	0.0	17.8	35.4	44.8	57.1	69.5	73.3
225	-21.9	0.0	17.3	34.1	44.8	54.9	63.8	69.1
226	-20.2	0.0	15.2	29.5	39.0	46.6	53.1	66.0
227	-17.6	0.0	17.9	28.1	41.2	56.7	62.8	71.3
228	-22.5	0.0	17.7	33.3	38.4	52.1	60.3	65.8
229	-17.4	0.0	16.1	32.6	40.9	53.2	60.0	70.6
230	-23.8	0.0	18.0	33.0	50.5	61.6	71.6	77.2
231	-26.5	0.0	18.9	39.5	47.5	61.5	70.5	78.6
232	-19.5	0.0	21.2	39.2	47.9	66.3	78.4	79.4
233	-28.3	0.0	17.8	33.4	47.2	59.5	66.7	71.0
234	-22.0	0.0	15.9	36.0	44.7	57.3	66.5	75.9
235	-18.1	0.0	13.9	34.0	42.5	53.5	62.5	58.9
236	-18.2	0.0	17.6	36.3	46.0	56.5	65.6	71.5
237	-22.5	0.0	22.7	41.4	51.5	62.0	73.2	77.8
238	-24.7	0.0	14.8	31.8	45.5	59.7	69.6	80.2
239	-23.4	0.0	15.7	32.0	41.0	50.0	63.5	61.0
240	-21.2	0.0	17.6	44.6	52.0	61.4	73.2	74.0
241	-25.8	0.0	15.2	36.1	48.0	60.7	68.4	76.4
242	-28.5	0.0	13.7	27.9	42.4	52.8	61.9	65.8
243	-22.4	0.0	19.1	38.2	50.0	64.7	72.3	77.1
244	-21.7	0.0	16.2	36.3	50.3	60.7	65.8	75.0
245	-18.6	0.0	18.7	40.4	52.7	62.2	65.3	79.7
246	-22.9	0.0	24.0	45.1	58.6	69.7	75.9	88.1
247	-24.1	0.0	16.8	36.3	56.5	72.2	80.1	91.6
248	-23.7	0.0	14.5	28.9	40.7	49.8	53.0	62.6

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

BODY WEIGHT GAIN (%)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	TREATMENT							RECOVERY
	50 8	57 9	64 10	71 11	78 12	85 13	92 14	7 1
213	78.0	88.5	93.8	96.4	96.8	101.1	100.2	---
214	68.4	75.8	79.3	81.0	88.2	90.5	88.9	---
215	84.8	91.7	96.4	100.6	104.5	105.1	99.2	---
216	89.4	98.6	103.1	111.6	116.1	119.8	111.7	---
217	82.2	90.1	91.6	99.0	102.6	101.8	106.3	---
218	79.6	87.0	89.2	94.6	99.9	100.3	104.0	---
219	91.1	103.6	107.8	115.2	116.7	121.0	124.4	---
220	60.5	67.1	71.2	72.6	77.6	77.0	83.0	---
221	82.5	86.0	86.1	95.3	100.9	102.3	98.7	---
222	76.3	83.0	82.4	92.4	96.7	97.2	94.4	---
223	98.5	103.5	106.0	117.4	116.6	118.4	122.4	---
224	81.9	93.0	94.2	98.6	95.6	102.7	105.1	---
225	73.9	82.2	84.5	90.4	92.7	95.9	99.6	---
226	68.7	70.9	76.3	90.1	110.1	95.1	97.3	---
227	75.4	83.1	84.5	93.1	97.3	97.5	99.5	---
228	68.3	78.0	77.5	83.8	82.6	88.5	89.2	---
229	69.4	75.3	78.7	83.7	85.8	85.0	89.1	---
230	79.3	88.7	90.3	101.5	105.8	105.5	102.8	---
231	83.9	91.8	95.5	96.6	98.2	102.6	109.4	---
232	85.9	95.6	98.3	114.4	129.5	121.3	125.3	---
233	79.2	89.2	89.7	93.5	91.6	96.7	100.6	100.1
234	80.2	85.7	86.1	94.2	93.1	93.9	97.0	101.0
235	76.6	81.5	82.2	92.3	95.7	98.5	96.9	98.0
236	76.0	81.3	84.1	90.0	91.1	93.2	93.2	97.2
237	79.6	87.1	89.8	99.4	99.1	99.2	105.0	102.3
238	82.1	89.9	90.0	94.3	100.7	102.4	104.2	103.2
239	68.1	75.1	76.7	82.3	89.5	88.5	89.5	89.2
240	83.9	94.5	98.3	103.3	102.5	108.5	111.7	108.9
241	77.7	83.1	85.6	93.6	94.1	96.0	101.8	101.5
242	70.1	75.2	76.7	79.5	87.6	88.9	91.3	87.8
243	87.1	96.2	95.3	103.2	103.9	107.3	108.4	---
244	83.2	88.9	89.5	99.0	102.9	103.3	95.8	---
245	87.6	90.8	86.5	99.7	105.5	105.0	100.7	---
246	98.1	100.4	100.2	111.3	117.1	118.9	116.4	---
247	100.6	106.7	104.7	112.2	115.9	119.8	121.4	---
248	69.3	75.0	73.2	79.9	82.7	85.2	82.1	---

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

BODY WEIGHT GAIN (%)
FEMALES

GROUP 4 (2000 MG/KG/DAY)

DAYS WEEKS ANIMAL	RECOVERY		
	14	21	28
	2	3	4
213	---	---	---
214	---	---	---
215	---	---	---
216	---	---	---
217	---	---	---
218	---	---	---
219	---	---	---
220	---	---	---
221	---	---	---
222	---	---	---
223	---	---	---
224	---	---	---
225	---	---	---
226	---	---	---
227	---	---	---
228	---	---	---
229	---	---	---
230	---	---	---
231	---	---	---
232	---	---	---
233	97.7	107.4	110.3
234	101.7	105.9	110.5
235	98.7	108.9	106.6
236	98.2	102.9	110.3
237	104.8	109.9	113.7
238	104.9	113.1	112.0
239	95.5	97.4	96.6
240	111.1	117.3	118.1
241	102.0	105.8	107.2
242	89.6	95.9	95.1
243	---	---	---
244	---	---	---
245	---	---	---
246	---	---	---
247	---	---	---
248	---	---	---

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

TEST ITEM INTAKE
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
MALES

DAYS WEEKS ANIMAL	TREATMENT								
	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8	50-57 8/9	57-64 9/10
GROUP 1 (0 MG/KG/DAY)									
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GROUP 2 (500 MG/KG/DAY)									
37	504.9	586.1	517.5	551.1	532.9	555.7	562.6	519.7	479.9
38	510.8	584.1	543.8	517.4	641.0	564.8	564.6	531.9	501.6
39	458.2	537.3	494.0	537.1	555.0	535.0	576.2	518.7	490.8
40	446.4	499.5	469.1	489.0	561.1	522.8	533.1	490.7	470.1
41	435.7	509.2	486.4	514.0	514.2	485.0	524.8	475.0	454.6
42	471.3	536.2	478.7	482.6	600.2	527.0	519.0	495.6	478.5
43	483.2	540.7	507.5	522.4	583.9	520.7	532.2	519.2	490.6
44	468.2	498.8	386.8	395.6	---	---	---	---	---
45	475.3	550.3	489.0	534.5	581.3	543.2	554.2	519.4	507.6
46	475.6	521.3	469.6	500.6	572.8	513.6	541.2	520.5	463.4
47	448.9	520.3	485.1	477.0	592.1	532.1	552.4	528.8	501.1
48	449.1	505.8	471.7	500.0	528.1	505.6	511.9	482.3	448.0
49	438.3	510.3	470.6	506.1	520.3	524.4	570.5	510.2	494.1
50	592.8	515.4	494.4	543.3	561.8	534.3	562.0	518.0	489.7
51	478.0	520.3	514.5	570.0	566.7	549.0	551.9	545.6	495.1
52	433.0	517.3	484.5	525.4	535.2	503.2	515.8	484.2	457.7
53	486.0	550.8	506.7	549.4	538.7	526.5	557.8	540.1	503.8
54	449.0	566.7	481.5	536.5	546.5	536.0	551.1	527.0	497.0
55	491.0	559.4	497.6	548.9	529.6	525.3	548.9	524.2	489.6
56	459.9	503.5	489.9	533.8	533.6	508.4	506.4	467.1	454.4

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

TEST ITEM INTAKE
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
MALES

DAYS WEEKS ANIMAL	TREATMENT			
	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14
GROUP 1 (0 MG/KG/DAY)				
1	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0
GROUP 2 (500 MG/KG/DAY)				
37	483.5	446.1	501.4	493.3
38	503.8	466.5	492.4	515.3
39	507.6	472.2	483.6	534.8
40	445.9	413.5	434.9	446.4
41	352.3	433.3	464.2	464.8
42	466.6	417.7	462.1	462.4
43	475.0	485.5	458.7	485.3
44	---	---	---	---
45	514.4	498.6	509.6	533.7
46	463.4	443.8	460.2	487.6
47	478.4	476.4	488.6	491.5
48	459.4	431.1	450.3	479.7
49	485.9	451.0	485.1	500.8
50	472.6	440.8	455.7	468.1
51	493.9	474.1	502.4	497.7
52	464.7	428.7	448.1	454.4
53	491.9	479.0	486.8	509.3
54	477.5	458.0	495.7	500.1
55	470.1	452.2	465.2	480.4
56	447.8	431.7	433.7	460.6

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REPORT

TEST ITEM INTAKE
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
MALES

DAYS WEEKS ANIMAL	TREATMENT								
	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8	50-57 8/9	57-64 9/10
GROUP 2 (500 MG/KG/DAY)									
57	622.2	554.5	505.0	551.9	536.9	529.2	530.8	500.9	481.0
58	451.7	516.1	458.5	502.7	513.6	497.8	478.1	459.3	441.2
59	462.5	496.7	458.0	489.2	489.4	485.3	506.9	473.6	460.5
60	435.3	505.1	418.9	455.0	457.2	468.8	460.3	417.6	406.3
61	515.8	589.3	531.5	569.5	575.8	578.3	581.8	546.1	532.1
62	460.0	506.5	439.6	477.7	474.3	474.9	484.9	452.9	431.2
GROUP 3 (1000 MG/KG/DAY)									
63	955.7	1077.6	1007.1	1133.4	1035.4	992.5	984.5	911.7	864.2
64	930.2	1071.5	921.4	1031.7	1008.6	1029.8	978.4	983.8	947.9
65	939.1	1116.0	1021.6	1202.4	1078.5	1076.6	1129.5	1054.0	1070.0
66	993.7	1157.4	1013.8	1103.8	1088.5	1080.8	1098.5	1047.1	1017.5
67	909.2	1026.5	918.4	1060.5	975.4	973.7	983.6	932.1	874.0
68	974.8	1111.3	1012.3	1135.3	1078.6	1091.1	1114.5	1095.8	1058.9
69	975.5	1049.8	962.1	1065.6	969.4	933.8	953.8	930.7	925.8
70	998.9	1148.7	1048.3	1160.3	1162.9	1079.4	1042.0	1042.5	1001.1
71	925.8	906.4	988.5	1080.6	1004.9	1025.8	1019.6	1022.4	983.1
72	960.3	1061.4	989.0	1096.6	1016.5	1023.9	1011.4	1020.6	978.3
73	895.3	1051.5	969.0	1065.4	1031.9	1051.2	1092.9	1056.1	1050.0
74	744.2	1053.1	973.7	1074.2	1025.6	998.1	1007.1	974.4	937.2
75	914.2	1067.3	985.8	1110.2	1027.6	1032.1	1062.6	1065.0	1002.1
76	960.5	1072.2	976.5	1101.0	1036.2	1040.4	1046.0	996.1	985.1
77	923.1	1046.9	947.5	1050.6	1012.0	997.9	982.1	1001.2	952.1
78	955.9	1066.5	969.6	1085.5	1034.4	990.3	942.3	965.4	980.8
79	907.1	1078.1	990.0	1093.1	1044.9	1060.4	1055.1	1019.0	978.6
80	1003.0	1093.0	993.7	1068.5	1039.9	1022.9	1048.0	990.3	978.0
81	957.7	1108.9	1003.7	1097.2	997.8	1011.6	1028.1	1006.0	961.2
82	917.7	1065.0	967.5	1108.3	1058.1	1046.8	1010.2	1054.8	1006.9
83	949.5	1048.6	950.3	1024.3	971.0	973.6	945.6	997.7	931.8
84	978.2	959.2	992.0	1050.3	991.0	981.0	959.8	1001.4	997.8
85	968.0	1116.9	909.7	1015.7	962.7	1001.7	970.7	977.7	958.4
86	940.8	1062.7	927.5	1057.8	1018.1	1024.2	1005.0	1002.4	1018.5
87	1102.9	1132.1	996.7	1054.3	987.2	1006.8	---	---	---
88	912.6	1046.2	969.1	1055.7	973.4	984.5	967.4	974.2	972.5
GROUP 4 (2000 MG/KG/DAY)									
89	2001.9	2282.4	2006.1	2223.9	2148.7	2040.5	2172.8	2016.1	1957.3
90	1856.6	2150.5	1954.3	2157.1	2107.1	2075.1	2099.2	2103.6	1969.9
91	1766.8	2098.9	1805.2	1969.6	1938.3	1945.7	2151.8	1890.5	1752.3
92	1903.6	2118.1	1877.4	2103.1	2046.8	1969.4	1999.6	1932.6	1877.8
93	1963.5	2237.4	1939.4	2079.1	2035.5	1992.4	2032.5	1886.9	1936.8
94	1981.1	2203.2	1931.6	2200.2	2207.6	2127.5	2181.6	2068.7	1993.5
95	2248.1	2186.0	2027.8	2214.0	2152.5	2073.5	2281.0	2125.9	2020.2
96	1856.6	2043.2	1783.1	1983.6	1940.3	1965.5	2055.5	1910.5	1835.0
97	2092.0	2342.2	1948.9	2181.0	2156.8	2087.6	2233.4	2252.9	2232.1
98	1893.1	2231.6	1913.2	2140.9	2134.2	2080.5	2103.6	2134.6	1994.5
99	1927.2	2244.5	1996.1	2262.0	2207.7	2045.5	2050.3	2010.0	1981.5
100	1895.2	2155.7	1808.6	2111.7	2085.6	2036.5	2173.6	1982.6	2005.0
101	1848.9	2112.3	1737.5	1911.4	2067.8	2007.2	2084.6	2017.4	1903.6
102	1842.6	2056.2	1896.7	2120.9	2114.9	2056.9	2196.5	2058.4	1971.1
103	1964.8	2067.4	1846.8	2038.8	1950.6	1926.7	2060.2	1849.3	1812.2
104	1968.8	2148.3	1938.7	2148.9	2104.6	2072.5	2157.6	2081.8	1935.3
105	1936.6	2275.2	1957.8	2180.3	2157.4	2086.4	2381.9	2057.0	2013.8
106	1873.6	2157.2	1865.6	2108.4	2001.2	1839.2	1926.2	1921.4	1817.3
107	1926.9	2148.0	1874.8	2122.4	2074.8	2002.5	2033.9	1940.5	1869.2
108	1950.2	2187.4	1880.4	2028.7	1988.2	1955.7	2136.2	1936.6	1859.8
109	1952.6	2229.1	1918.4	2079.2	2084.5	1994.6	2071.2	2017.0	1951.5

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

TEST ITEM INTAKE
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
MALES

	TREATMENT			
DAYS	64-71	71-78	78-85	85-92
WEEKS	10/11	11/12	12/13	13/14
ANIMAL				
GROUP 2 (500 MG/KG/DAY)				
57	446.8	449.1	470.4	482.6
58	448.0	434.9	441.4	453.6
59	448.7	436.3	443.6	467.0
60	400.1	389.0	385.4	385.8
61	509.4	501.5	508.0	509.7
62	435.9	425.3	430.8	440.4
GROUP 3 (1000 MG/KG/DAY)				
63	875.6	879.6	825.9	834.0
64	946.9	937.2	928.7	935.0
65	994.1	1003.6	1015.6	1028.8
66	1002.6	993.3	994.4	1024.9
67	898.4	898.1	869.5	916.0
68	1059.3	1005.5	1039.4	1039.8
69	890.4	881.1	903.6	911.5
70	961.9	939.0	958.1	1002.2
71	949.9	932.0	930.3	989.7
72	942.1	908.9	969.0	996.4
73	979.1	973.6	987.5	963.5
74	972.9	953.2	960.3	957.4
75	969.8	960.4	971.9	997.4
76	988.1	937.0	943.7	975.7
77	911.8	902.3	883.8	927.7
78	942.7	924.9	908.2	911.6
79	942.9	950.1	965.8	905.8
80	936.5	916.4	963.0	974.4
81	911.8	932.4	930.9	934.5
82	943.2	940.9	935.9	957.9
83	934.9	919.5	930.9	923.2
84	992.1	964.5	979.8	1023.3
85	972.4	940.3	922.1	946.9
86	963.5	978.6	947.5	956.0
87	---	---	---	---
88	1005.0	919.9	954.5	993.4
GROUP 4 (2000 MG/KG/DAY)				
89	1924.1	1853.5	1798.1	1956.2
90	1831.9	1713.5	1756.0	1802.1
91	1756.2	1661.3	1736.5	1842.0
92	1782.2	1812.6	1815.7	1777.2
93	1757.2	1737.4	1715.5	1818.0
94	1903.7	1921.1	1835.7	1882.7
95	1941.7	1935.5	1918.4	1981.8
96	1781.7	1721.6	1740.5	1881.4
97	2118.2	2048.5	2056.0	2069.9
98	1906.6	1927.6	1788.6	1825.3
99	1859.6	1866.5	1914.5	1920.2
100	1945.5	1922.9	1881.5	1963.7
101	1847.7	1854.4	1759.6	1976.6
102	1889.2	1871.7	1944.9	1935.7
103	1722.9	1671.5	1751.6	1763.2
104	1820.3	1814.7	1831.2	1905.5
105	1947.4	1843.3	1850.4	1913.3
106	1798.3	1708.2	1740.0	1816.3
107	1762.6	1755.7	1767.3	1859.3
108	1782.1	1720.0	1794.7	1846.9
109	1891.7	1843.7	1790.5	1819.1

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TEST ITEM INTAKE
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
MALES

	TREATMENT								
DAYS	1-8	8-15	17-22	22-29	29-36	36-42	44-50	50-57	57-64
WEEKS	1/2	2/3	3/4	4/5	5/6	6	7/8	8/9	9/10
ANIMAL									
GROUP 4 (2000 MG/KG/DAY)									
110	1860.9	2062.4	1867.7	2032.9	1999.2	2002.9	2136.3	1931.0	1868.5
111	1904.3	2097.5	1865.9	2134.7	2065.3	2030.3	2087.9	1972.3	1861.8
112	2013.4	2276.5	2009.4	2205.6	2164.2	2126.5	2091.7	2028.9	1951.0
113	1884.0	2067.3	1874.8	2074.7	2025.8	1995.8	2028.1	1931.8	1929.6
114	2026.9	2276.1	2013.2	2148.6	2174.5	2070.0	2099.7	2029.9	1978.5
115	2261.7	2377.9	2050.6	2263.2	2153.3	2070.4	2180.6	2024.7	2074.1
116	2078.7	2336.3	2036.3	2277.5	2182.8	2133.9	2251.1	2097.1	2058.5
117	1930.2	2262.0	1962.8	2233.9	2197.3	2112.5	2191.9	2024.0	1924.6
118	1842.6	1969.5	1740.8	1910.0	1901.6	1857.7	1937.9	1726.3	1790.5
119	1940.3	2229.4	1883.6	2003.6	2072.2	2013.5	1981.0	1927.1	1960.3
120	2041.8	2336.7	1896.3	2084.9	2104.6	2051.1	2105.5	1887.6	1871.5
121	1956.2	2169.1	1817.3	1977.0	1978.6	2045.8	2066.9	1957.0	1989.0
122	1885.8	2053.6	1637.7	1898.7	1906.9	1953.6	1990.4	1860.5	1847.8
123	2012.8	2186.3	1834.9	2052.9	2134.3	2191.7	2110.0	1919.1	1828.5
124	2053.3	2322.8	1957.1	2148.0	2240.7	2303.0	2444.8	2209.9	2160.1

	TREATMENT			
DAYS	64-71	71-78	78-85	85-92
WEEKS	10/11	11/12	12/13	13/14
ANIMAL				

GROUP 4 (2000 MG/KG/DAY)				
110	1874.9	1757.1	1829.0	1896.3
111	1871.8	1847.0	1768.2	1848.0
112	1809.6	1835.7	1779.5	1866.2
113	1809.7	1732.1	1709.6	1815.2
114	1940.3	1852.5	1830.3	1963.9
115	1846.8	1869.1	1838.8	1854.8
116	1931.1	1880.5	1886.8	1983.7
117	1867.8	1909.2	1772.7	1892.7
118	1728.0	1649.4	1665.5	1779.1
119	1846.3	1876.2	1897.6	1959.3
120	1829.2	1869.1	1798.2	1918.1
121	1874.7	1792.3	1814.9	1980.2
122	1786.6	1709.6	1767.3	1934.9
123	1789.5	1796.0	1761.2	1821.1
124	1847.9	2191.2	2130.6	2166.5

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TEST ITEM INTAKE
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
FEMALES

DAYS WEEKS ANIMAL	TREATMENT								
	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8	50-57 8/9	57-64 9/10
GROUP 1 (0 MG/KG/DAY)									
125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GROUP 2 (500 MG/KG/DAY)									
161	573.4	573.2	482.9	523.5	551.4	518.2	563.9	532.6	515.4
162	547.5	557.7	480.4	538.5	496.7	500.0	520.9	526.7	468.6
163	491.7	514.7	445.6	508.2	476.0	461.2	520.9	502.3	448.5
164	540.3	540.4	469.9	527.1	529.5	498.5	520.8	515.5	492.5
165	550.3	554.4	495.3	541.4	523.7	488.0	521.7	525.5	485.7
166	518.5	537.4	472.1	526.3	486.9	484.6	520.5	492.4	454.3
167	537.4	573.6	474.1	557.8	534.0	502.7	523.6	553.5	512.4
168	522.7	547.1	479.1	536.2	508.4	481.4	518.2	490.9	459.3
169	534.2	546.7	469.9	520.8	527.2	514.8	551.2	511.4	494.3
170	487.7	528.8	468.5	495.8	490.3	481.1	490.5	485.4	467.7
171	553.1	560.1	479.0	550.8	575.0	522.3	556.5	554.5	544.6
172	558.1	585.5	477.8	523.8	516.1	494.9	533.7	505.7	493.2
173	583.2	599.5	484.0	516.9	558.9	569.2	557.6	562.5	546.7
174	541.3	549.0	464.6	529.8	511.0	494.3	499.6	493.6	479.3
175	546.2	599.0	482.0	532.8	560.9	541.3	546.7	564.8	567.0
176	554.2	566.9	510.4	607.2	567.2	536.5	566.2	574.5	520.8
177	468.2	503.9	433.8	449.1	456.9	458.4	458.0	462.1	439.8
178	524.9	522.9	417.7	499.4	501.9	465.9	484.9	480.8	475.4
179	578.6	582.2	494.6	557.1	541.9	541.4	557.1	558.8	519.6
180	536.4	516.9	457.4	502.0	527.7	505.0	520.8	507.1	517.7

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

TEST ITEM INTAKE
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
FEMALES

DAYS WEEKS ANIMAL	TREATMENT			
	64-71 10/11	71-78 11/12	78-85 12/13	85-92 13/14
GROUP 1 (0 MG/KG/DAY)				
125	0.0	0.0	0.0	0.0
126	0.0	0.0	0.0	0.0
127	0.0	0.0	0.0	0.0
128	0.0	0.0	0.0	0.0
129	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0
131	0.0	0.0	0.0	0.0
132	0.0	0.0	0.0	0.0
133	0.0	0.0	0.0	0.0
134	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0
136	0.0	0.0	0.0	0.0
137	0.0	0.0	0.0	0.0
138	0.0	0.0	0.0	0.0
139	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0
141	0.0	0.0	0.0	0.0
142	0.0	0.0	0.0	0.0
143	0.0	0.0	0.0	0.0
144	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0
146	0.0	0.0	0.0	0.0
147	0.0	0.0	0.0	0.0
148	0.0	0.0	0.0	0.0
149	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0
151	0.0	0.0	0.0	0.0
152	0.0	0.0	0.0	0.0
153	0.0	0.0	0.0	0.0
154	0.0	0.0	0.0	0.0
155	0.0	0.0	0.0	0.0
156	0.0	0.0	0.0	0.0
157	0.0	0.0	0.0	0.0
158	0.0	0.0	0.0	0.0
159	0.0	0.0	0.0	0.0
160	0.0	0.0	0.0	0.0
GROUP 2 (500 MG/KG/DAY)				
161	511.2	475.2	470.4	494.7
162	474.2	421.7	453.1	446.5
163	447.8	431.8	449.3	422.8
164	460.0	449.0	470.9	466.4
165	466.4	455.2	454.2	426.9
166	468.7	485.3	474.0	474.5
167	480.9	459.6	483.9	480.8
168	484.1	433.8	465.7	454.0
169	470.4	461.2	475.1	453.8
170	452.5	428.1	421.4	446.6
171	544.7	518.3	584.1	619.3
172	477.1	445.1	423.3	461.4
173	523.0	509.6	482.3	475.8
174	464.6	428.6	446.8	432.7
175	526.6	527.5	520.0	543.4
176	514.0	476.0	514.9	478.3
177	454.0	447.1	457.8	436.5
178	468.1	436.4	463.5	456.8
179	515.7	508.5	515.9	494.4
180	455.9	504.5	385.2	422.4

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REPORT

TEST ITEM INTAKE
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
FEMALES

DAYS WEEKS ANIMAL	TREATMENT								
	1-8 1/2	8-15 2/3	17-22 3/4	22-29 4/5	29-36 5/6	36-42 6	44-50 7/8	50-57 8/9	57-64 9/10
GROUP 2 (500 MG/KG/DAY)									
181	574.7	580.0	459.2	566.9	591.2	582.5	643.7	653.3	618.4
182	491.9	517.2	398.9	461.4	459.0	462.5	490.9	494.3	481.8
183	552.0	558.3	450.9	490.0	528.0	479.2	500.2	500.5	485.9
184	587.5	619.4	536.9	551.8	563.4	548.1	586.6	542.4	529.2
185	581.7	603.2	525.2	556.1	549.9	535.1	552.3	569.9	537.3
186	482.3	517.7	428.9	356.7	478.7	490.0	508.1	512.3	476.5
GROUP 3 (1000 MG/KG/DAY)									
187	1080.8	1116.3	901.8	1045.8	1035.7	1039.3	1138.4	1179.1	1161.6
188	1096.0	1174.7	1007.9	1134.2	1080.9	1058.0	1139.1	1090.6	1051.5
189	1046.4	1043.1	846.6	969.3	935.0	865.3	987.1	966.7	918.3
190	1068.6	1157.3	925.2	1040.9	981.3	967.1	1041.5	964.9	952.8
191	1078.2	1093.8	932.9	1069.0	1040.6	983.9	1022.8	1098.9	942.0
192	1207.2	1204.4	1038.2	1172.5	1106.0	1068.5	1094.2	1101.0	1016.9
193	1126.1	1182.6	965.0	1020.5	1109.0	1064.7	1083.2	1041.0	1004.5
194	1113.3	1192.3	945.7	1072.0	1008.9	1043.3	1102.1	1055.3	1064.2
195	1139.0	1167.6	908.4	1072.5	1005.2	1021.9	1036.5	1037.0	1012.7
196	1055.9	1129.4	1066.0	1227.6	859.6	1177.4	1230.4	1204.5	1163.2
197	1064.2	1124.0	893.1	1050.4	953.5	981.7	1011.5	1020.3	973.7
198	1116.1	1126.0	901.6	1087.1	1023.1	1020.7	1096.0	1069.9	1082.8
199	1075.4	1108.4	881.4	1028.8	970.3	920.7	1028.4	1028.1	990.3
200	1136.4	1176.3	952.4	1202.7	1171.1	1056.7	1159.6	1153.8	1142.2
201	1092.7	1142.5	927.0	1041.1	1085.9	1026.0	1045.4	1043.2	1021.1
202	1172.4	1188.3	949.4	1142.9	1086.3	1039.7	1164.4	1198.8	1118.1
203	1070.2	1090.5	884.1	1115.7	1098.9	984.5	1140.5	1185.0	1189.0
204	1043.2	1093.4	863.5	984.2	973.8	907.3	970.1	949.3	913.8
205	1042.6	1129.2	934.6	1051.1	1042.0	964.9	1009.0	957.3	941.8
206	1122.1	1147.8	1005.7	1118.1	1098.0	1062.4	1087.7	1086.1	1006.7
207	1093.3	1144.1	851.2	1007.9	982.9	929.6	951.1	935.6	933.8
208	1107.2	1198.8	927.4	1060.0	1040.3	1039.0	1011.2	1011.2	1035.3
209	1101.1	1096.7	845.8	973.0	983.6	918.7	958.3	964.5	912.8
210	1104.8	1183.4	934.8	1053.2	1045.7	962.1	1027.5	964.6	1060.3
211	1110.4	1136.1	899.9	1002.9	975.9	951.7	986.6	944.4	948.4
212	1107.9	1194.5	925.1	1057.9	989.5	988.0	1012.1	987.8	992.2
GROUP 4 (2000 MG/KG/DAY)									
213	2071.1	2152.4	1765.6	2064.5	1870.0	1801.8	1942.4	1890.6	1750.4
214	2206.3	2345.1	1762.8	2059.8	1863.2	1874.3	1972.5	1766.9	1822.8
215	2192.6	2319.7	1717.2	2147.1	2045.1	2131.4	2269.7	2330.9	2304.0
216	2378.9	2512.3	1919.3	2402.6	2267.9	2367.1	2387.4	2261.4	2256.0
217	2112.8	2179.4	1781.6	2073.1	1965.9	1915.9	1975.4	1941.0	1809.7
218	2230.8	2448.9	1884.0	2318.5	2074.7	2092.9	2194.1	2131.7	2080.6
219	2413.6	2432.8	1956.3	2183.5	2161.2	1906.6	1677.7	1991.9	1978.2
220	2040.3	2163.7	1529.8	1775.8	1670.0	1826.2	1977.5	1632.6	1730.0
221	2227.9	2297.0	1912.0	2037.3	1983.0	1744.3	2011.0	1959.1	2004.7
222	2306.4	2408.4	1935.0	2330.6	2241.5	2111.1	2279.8	2143.2	2072.8
223	2278.0	2335.6	1887.4	2170.6	2104.0	2029.9	2125.8	2059.3	2042.5
224	2309.1	2364.2	1879.4	2153.9	1986.4	2018.9	2375.9	2036.2	1953.4
225	2252.6	2224.0	1783.2	2014.1	1959.3	1919.6	2001.3	1909.9	1813.2
226	2291.2	2555.9	1955.1	2348.8	2325.3	2357.9	2619.6	2524.2	2497.2
227	2198.8	2338.2	1990.3	2254.5	2049.6	2177.1	2303.0	2150.1	2054.6
228	2361.6	2440.4	2050.2	2335.4	2131.0	2170.6	2267.8	2271.2	2131.3
229	2437.8	2456.4	1948.8	2348.7	2234.1	2155.7	2168.8	2163.7	2156.3
230	2190.7	2319.5	1887.1	2084.0	1944.4	1946.5	1910.0	1944.7	2004.0
231	2420.8	2482.6	1994.4	2149.7	2044.4	2064.0	2158.4	2110.9	1948.6
232	2243.1	2308.0	1979.0	2309.5	2049.4	2100.4	2085.0	2246.4	2484.1
233	2264.3	2326.3	1828.2	2192.4	1949.1	1930.0	2017.5	2016.6	1835.5

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

TEST ITEM INTAKE
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
FEMALES

	TREATMENT			
DAYS	64-71	71-78	78-85	85-92
WEEKS	10/11	11/12	12/13	13/14
ANIMAL				
GROUP 2 (500 MG/KG/DAY)				
181	627.6	607.4	610.6	601.9
182	475.5	459.9	470.3	470.2
183	443.0	436.9	444.2	411.6
184	534.4	518.7	508.3	476.4
185	510.6	516.8	540.6	481.2
186	456.6	445.3	467.4	453.1
GROUP 3 (1000 MG/KG/DAY)				
187	1100.7	1125.9	1160.8	1151.9
188	977.2	936.3	976.0	960.5
189	875.7	816.3	868.8	921.1
190	940.2	887.9	904.2	878.1
191	847.5	829.0	844.0	797.7
192	952.6	892.0	924.9	897.1
193	1005.8	963.7	1012.6	1049.6
194	882.9	1103.8	1083.0	1082.7
195	949.3	947.2	1013.5	990.8
196	1113.3	1077.2	1102.3	1022.4
197	927.4	892.3	916.8	913.2
198	1060.6	958.1	1011.7	981.2
199	902.4	859.6	922.9	857.8
200	1059.1	1034.4	1064.6	1007.1
201	983.6	940.7	950.4	986.1
202	1054.5	1041.4	1102.1	1067.5
203	1133.1	1094.4	1094.5	1136.1
204	890.0	840.6	887.7	866.7
205	929.4	903.5	932.4	953.1
206	944.0	933.4	965.7	905.3
207	875.1	923.4	892.7	909.5
208	1038.7	960.3	893.0	980.8
209	886.1	830.6	916.0	868.1
210	993.7	927.2	957.6	918.0
211	898.1	899.0	946.8	883.3
212	946.8	900.2	972.0	921.1
GROUP 4 (2000 MG/KG/DAY)				
213	1673.1	1514.0	1502.3	1691.0
214	1822.4	1682.8	1705.7	1766.4
215	2133.1	1980.4	2124.5	2159.6
216	2178.9	1956.2	1963.0	2094.7
217	1772.1	1682.9	1754.2	1810.7
218	1999.4	1902.8	1974.8	1987.8
219	1871.3	1795.7	1726.6	1767.7
220	1695.4	1564.8	1451.4	1577.5
221	1986.9	1877.4	1854.5	2058.4
222	2006.9	1809.1	1844.7	1914.6
223	1944.1	1769.2	1854.4	1882.6
224	1743.7	1738.4	1687.2	1824.0
225	1735.2	1631.4	1705.9	1846.0
226	2445.9	2385.2	2032.3	2322.6
227	2061.1	1953.1	1878.5	1936.5
228	2069.3	2039.1	2029.1	2149.5
229	1950.6	1804.2	1901.0	1999.7
230	1855.9	1693.7	1629.2	1886.4
231	1844.1	1765.2	1856.4	1881.8
232	2503.9	2655.7	2157.4	2325.6
233	1835.9	1712.0	1717.7	1756.9

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ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)

TEST ITEM INTAKE
(MG SUBSTANCE/KG BODY WEIGHT/DAY)
FEMALES

	TREATMENT								
DAYS	1-8	8-15	17-22	22-29	29-36	36-42	44-50	50-57	57-64
WEEKS	1/2	2/3	3/4	4/5	5/6	6	7/8	8/9	9/10
ANIMAL									
GROUP 4 (2000 MG/KG/DAY)									
234	2408.5	2457.4	1938.7	2344.4	2105.5	2150.2	2251.1	2158.0	2132.5
235	2298.1	2261.3	1936.5	2143.9	2093.4	2272.2	2330.0	2075.8	2021.8
236	2173.6	2239.3	1921.0	2224.7	2142.9	1878.6	1998.2	1948.5	1907.9
237	2296.2	2399.8	1921.4	2292.8	2164.8	1966.0	2042.1	2173.5	2066.6
238	2221.8	2480.6	2001.8	2296.9	2083.0	2170.7	2886.1	2164.0	2057.3
239	2199.5	2339.7	2014.2	2270.8	1965.2	2016.8	2256.8	2214.0	2016.6
240	2132.5	2382.7	2143.0	2020.6	1898.3	2083.4	2245.5	2105.7	2001.0
241	2276.6	2424.1	1913.6	2143.5	2043.3	2035.3	2201.2	2069.0	2033.2
242	2143.8	2296.5	1800.7	2078.3	1902.0	1917.9	2035.6	1975.1	1847.4
243	2193.8	2289.3	1785.8	2092.6	1882.7	1963.0	1959.1	1874.1	1822.3
244	2218.3	2404.3	1808.6	2212.6	2059.5	2059.5	2037.2	1971.4	2024.3
245	2371.8	2351.4	1883.1	2181.1	2192.4	2141.8	2221.4	1965.0	2038.9
246	2397.9	2395.0	1891.6	2167.0	2088.9	2110.1	2195.1	2108.4	2244.9
247	2166.9	2211.5	1738.7	1928.8	1870.0	1921.3	1809.8	1686.0	1650.1
248	2280.9	2201.5	1743.2	1995.7	1962.4	1970.6	2124.5	1988.7	1981.7

	TREATMENT			
DAYS	64-71	71-78	78-85	85-92
WEEKS	10/11	11/12	12/13	13/14
ANIMAL				

GROUP 4 (2000 MG/KG/DAY)				
234	2042.9	1911.8	1897.9	2085.8
235	1934.9	1795.5	1858.5	1953.7
236	1753.4	1658.2	1747.7	2043.9
237	1903.8	1749.3	1905.3	2098.1
238	2080.8	1911.9	1980.3	2120.4
239	2079.2	1923.8	1874.1	2112.5
240	1851.9	1831.1	1780.3	1898.8
241	1926.6	1826.4	1877.8	2037.7
242	1840.2	1701.0	1630.0	1743.6
243	1753.7	1772.6	1674.2	1763.7
244	2015.0	1777.0	1895.6	2002.0
245	2120.1	1865.5	1854.9	2080.0
246	2205.2	2091.1	2012.1	2186.5
247	1682.5	1534.3	1531.3	1688.5
248	1922.9	1742.5	1774.8	1887.2

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

Fecal pH		Males	Individual	
Group 1	0 mg/kg bw/day			
Week	2	6	13	17 (rec)
pH diluent	7.25-7.27	7.33-7.45	7.58-7.73	7.44
Animal no.				
1	6.70	6.93	7.14	
2	8.25	6.65	7.08	
3	6.93	8.43*	8.37*	
4	7.11	6.80	6.87	
5	6.65	6.89	6.72	
6	8.38*	7.51	6.61	
7	7.09	6.98	6.78	
8	7.36	6.78	-	
9	6.27*	6.96	7.30	
10	7.29	6.82*	6.87	
11	7.59	6.76	6.92*	
12	8.91*	6.96*	6.91	
13	7.04	7.13	-	
14	7.66	6.85	7.78	
15	6.64	7.04	8.14*	
16	6.65	7.31*	6.76	
17	6.80	7.78*	6.77	
18	6.62	6.57*	6.80	
19	6.85	6.75	6.84	
20	6.78	6.86	6.98	
21	6.71	7.53	8.89*	7.11
22	6.74	7.07	7.01	7.13
23	6.71	7.09	7.50	7.10
24	6.61	7.16	7.56	7.01
25	6.70	6.70	8.45*	7.06
26	6.60	7.47	6.96	7.39
27	6.60	7.12	6.85	7.15
28	6.69	6.95	6.65	6.97
29	6.53	6.87	6.75	7.05
30	6.79	7.28	6.81	7.35

* contaminated by urine. Final volume dilution standardized at 35 ml.

- no sample or less than 1.0 gram

+ animal dead

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

Fecal pH	Males	Individual	
Group 2	500 mg/kg bw/day		
Week	2	6	13
pH diluent	7.25	7.50	7.58-7.73
Animal no.			
37	6.48	6.95	6.85
38	6.96	7.85	7.47
39	6.74	7.71*	6.94
40	6.66	8.46*	7.36
41	6.67	7.21	7.04
42	6.52	6.96	7.04
43	6.60	7.17	6.77
44	7.20	+	+
45	6.76	7.76	7.04
46	6.75	8.25*	7.21
47	6.74	7.77	6.71
48	6.69	6.78	6.78
49	6.79	7.02	7.14
50	6.55	7.34	6.92
51	7.41*	6.92	6.93
52	7.99*	6.94	6.77
53	6.60	7.19	6.89
54	6.99	6.95	7.64
55	6.60	7.95	7.06
56	6.44	7.51*	6.94

* contaminated by urine. Final volume dilution standardized at 35 ml.
- no sample or less than 1.0 gram
+ animal dead

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

Fecal pH		Males	Individual
Group 3	1000 mg/kg bw/day		
Week	2	6	13
pH diluent	7.25	7.41	7.58-7.73
Animal no.			
63	6.61	6.90	6.87
64	6.86	6.94	7.04
65	6.82	-	7.40
66	6.79	6.69	7.08
67	6.75	7.34	6.65
68	6.79	6.98	6.80
69	6.73	8.54*	6.98
70	6.53	7.16	7.26
71	6.66	6.77*	7.74
72	6.67	8.04*	6.93
73	6.70	8.34*	7.05
74	6.73	6.96	6.97
75	6.82	8.04*	6.74
76	6.81	7.56*	7.08
77	6.83	6.92	-
78	7.00	6.92	7.22
79	7.06	7.18	6.92
80	6.86	8.63*	7.01
81	7.15	8.56*	7.45
82	6.73	7.78	7.03

* contaminated by urine. Final volume dilution standardized at 35 ml.
- no sample or less than 1.0 gram
+ animal dead

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

Fecal pH	Males		Individual	
Group 4	2000 mg/kg bw/day			
Week	2	6	13	17 (rec)
pH diluent	7.25-7.26	7.38-7.40	7.58-7.73	7.44
Animal no.				
89	6.91	7.03	6.83	
90	7.26	7.56*	6.75	
91	6.92	6.94	6.96	
92	6.67	7.31	6.97	
93	6.66	7.10	6.99	
94	6.65	8.06	7.76	
95	6.73	6.88	8.2*	
96	6.78	7.06	7.48	
97	7.00	7.46	6.94	
98	6.60	6.7*	7.12	
99	6.58	6.89	6.90	
100	6.78	7.88*	7.15	
101	6.64	6.71	6.92	
102	6.63	7.01	7.04	
103	6.61	7.29	7.72	
104	6.65	7.07	6.79	
105	7.21	7.6*	6.89	
106	7.70	7.20	7.08	
107	6.71	8.01*	6.72	
108	6.88	7.00	8.68*	
109	6.48	6.69	7.36	7.11
110	7.49	7.99*	8.18	7.11
111	6.74	6.90	7.32	8.26
112	6.69	6.70	7.28	7.24
113	6.68	7.79	8.39*	7.84
114	6.82	6.68	7.01	6.83
115	6.84	7.06	7.03	7.29
116	6.66	7.51	7.41	7.00
117	6.84	8.15*	7.23	8.12
118	6.77	8.21*	6.88	7.36

* contaminated by urine. Final volume dilution standardized at 35 ml.

- no sample or less than 1.0 gram

+ animal dead

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

Fecal pH		Females		Individual	
Group 1	0 mg/kg bw/day				
Week	2	6	13	17 (rec)	
pH diluent	7.28-7.29	7.47-7.51	7.51-7.62	7.38	
Animal no.					
125	6.58	8.43*	8.32*		
126	6.59	7.05	7.21		
127	6.51	6.71	-		
128	6.66	6.71	7.04		
129	6.73	7.48	7.05		
130	6.74	6.84	7.94		
131	6.65	6.88	8.40		
132	7.77	6.64	8.70*		
133	6.64	6.90	6.95		
134	6.68	6.91	8.62*		
135	6.55	6.72	6.72		
136	6.66	6.69	7.50		
137	6.40	6.92	6.91		
138	6.82	6.66	6.72		
139	6.61	6.91	6.91		
140	6.99	6.87	-		
141	6.81	6.88	6.83		
142	6.79	7.56	7.14		
143	6.75	6.93	6.78		
144	6.62	6.57	6.96		
145	7.88	6.74	7.01	7.15	
146	7.50	6.85	6.83	6.99	
147	8.29*	6.77	7.03	6.85	
148	6.44	6.91	-	-	
149	7.03	7.19	6.83	7.48	
150	6.66	6.88	6.90	7.33	
151	8.44*	6.86	7.03	7.06	
152	6.73	6.93	8.89*	7.35	
153	8.40*	7.09	6.76	7.34	
154	7.97*	6.94	6.99	7.44	

* contaminated by urine. Final volume dilution standardized at 35 ml.

- no sample or less than 1.0 gram

+ animal dead

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

Fecal pH		Females	Individual
Group 2	500 mg/kg bw/day		
Week	2	6	13
pH diluent	7.36	7.45	7.51-7.62
Animal no.			
161	6.64	6.88	6.94
162	7.59	7.94	6.93
163	7.17	6.83	7.56
164	6.87	7.37*	7.14
165	6.57	6.75	7.97
166	6.72	7.42	-
167	6.60	6.91	6.91
168	6.47	-	-
169	8.53*	7.52	-
170	6.74	7.27	7.98
171	6.94	7.32	-
172	7.86	6.93	8.19
173	7.33	8.58*	6.94
174	7.56	8.50*	6.69
175	6.92	6.91	7.00
176	6.60	6.79	7.04
177	7.70	8.07*	6.85
178	6.68	6.94	7.01
179	6.78	6.99	7.48
180	6.85	7.87	6.62

* contaminated by urine. Final volume dilution standardized at 35 ml.
- no sample or less than 1.0 gram
+ animal dead

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

Fecal pH		Females	Individual
Group 3	1000 mg/kg bw/day		
Week	2	6	13
pH diluent	7.44	7.45	7.51-7.62
Animal no.			
187	6.71	6.78	6.88
188	6.64	6.91	8.10*
189	6.96	8.35*	-
190	6.97	8.73*	7.12
191	6.78	8.77*	7.09
192	6.79	7.24	-
193	6.67	6.97	7.15
194	8.73*	7.02	8.06
195	7.49	8.27*	7.05
196	6.82	6.89	6.76
197	6.85	6.77	6.96
198	6.75	6.91	6.98
199	6.78	6.82	6.71
200	6.68	6.96	6.84
201	7.06	6.83	-
202	6.97	7.29	7.13
203	6.56	6.85	6.95
204	6.72	6.70	6.84
205	6.81	6.88	7.49
206	6.85	7.16	7.12

* contaminated by urine. Final volume dilution standardized at 35 ml.
- no sample or less than 1.0 gram
+ animal dead

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

Fecal pH		Females	Individual	
Group 4	2000 mg/kg bw/day			
Week	2	6	13	17 (rec)
pH diluent	7.45	7.38-7.44	7.51-7.62	7.38
Animal no.				
213	7.10	6.84	6.90	
214	6.66	6.90	7.16	
215	6.91	8.28*	-	
216	6.74	6.65	6.81	
217	6.69	6.84	6.88	
218	7.15	6.92	6.99	
219	6.81	6.76	7.08	
220	6.70	6.75	7.00	
221	6.59	6.61	8.61*	
222	6.78	6.70	6.91	
223	7.35	8.03*	7.01	
224	6.78	6.75	6.84	
225	6.85	6.61	6.87	
226	6.83	6.74	7.33	
227	6.82	8.37*	6.92	
228	7.63	6.93	8.34*	
229	6.71	6.85	7.12	
230	6.77	6.78	7.03	
231	7.07	6.69	8.15	
232	6.89	8.40*	6.91	
233	6.84	6.79	6.84	7.33
234	6.74	6.73	6.79	6.98
235	6.91	6.96	6.94	7.21
236	7.11	6.84	6.93	7.04
237	6.68	6.82	7.07	7.04
238	7.05	6.95	6.60	7.78
239	6.69	6.87	7.02	7.79
240	7.17	7.03	6.95	-
241	6.84	7.07	6.73	7.36
242	7.47	6.95	7.59	7.68

* contaminated by urine. Final volume dilution standardized at 35 ml.

- no sample or less than 1.0 gram

+ animal dead

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

SPERM ANALYSIS
MALES

ANIMAL NUMBER		Testis millions/ g organ	Cauda epididymis millions/ g organ
GROUP 1 (0 MG/KG/DAY)			
1	SPERM HEAD COUNT	152.47	719.00
2	SPERM HEAD COUNT	177.72	791.20
3	SPERM HEAD COUNT	139.93	809.06
4	SPERM HEAD COUNT	128.15	762.57
5	SPERM HEAD COUNT	133.64	570.75
6	SPERM HEAD COUNT	138.45	837.96
7	SPERM HEAD COUNT	153.48	525.70
8	SPERM HEAD COUNT	156.60	708.36
9	SPERM HEAD COUNT	116.31	704.85
10	SPERM HEAD COUNT	147.02	787.97
11	SPERM HEAD COUNT	142.70	913.38
12	SPERM HEAD COUNT	118.47	883.88
13	SPERM HEAD COUNT	124.42	824.42
14	SPERM HEAD COUNT	152.84	611.33
15	SPERM HEAD COUNT	148.60	796.86
16	SPERM HEAD COUNT	148.25	848.48
17	SPERM HEAD COUNT	138.21	544.79
18	SPERM HEAD COUNT	2.21	99.68
19	SPERM HEAD COUNT	144.58	656.60
20	SPERM HEAD COUNT	139.00	672.29
GROUP 2 (500 MG/KG/DAY)			
37	SPERM HEAD COUNT	161.63	751.58
38	SPERM HEAD COUNT	125.03	737.31
39	SPERM HEAD COUNT	---	20.63
40	SPERM HEAD COUNT	133.24	654.20
41	SPERM HEAD COUNT	147.75	729.28
42	SPERM HEAD COUNT	123.12	763.02
43	SPERM HEAD COUNT	124.38	884.17
45	SPERM HEAD COUNT	133.77	929.46
46	SPERM HEAD COUNT	137.36	647.35
47	SPERM HEAD COUNT	119.34	768.65
--- = Animal no. 39 only few sperm heads			

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

SPERM ANALYSIS
MALES

ANIMAL NUMBER	Testis millions/ g organ	Cauda epididymis millions/ g organ
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GROUP 2 (500 MG/KG/DAY)

48	SPERM HEAD COUNT	104.24	686.50
49	SPERM HEAD COUNT	148.25	639.36
50	SPERM HEAD COUNT	123.31	811.14
51	SPERM HEAD COUNT	150.88	713.93
52	SPERM HEAD COUNT	142.55	742.80
53	SPERM HEAD COUNT	124.49	841.73
54	SPERM HEAD COUNT	147.66	688.92
55	SPERM HEAD COUNT	164.10	764.86
56	SPERM HEAD COUNT	110.75	610.77

GROUP 3 (1000 MG/KG/DAY)

63	SPERM HEAD COUNT	153.09	713.65
64	SPERM HEAD COUNT	121.04	622.25
65	SPERM HEAD COUNT	144.93	624.10
66	SPERM HEAD COUNT	139.11	813.91
67	SPERM HEAD COUNT	156.48	560.77
68	SPERM HEAD COUNT	126.97	678.52
69	SPERM HEAD COUNT	151.30	740.38
70	SPERM HEAD COUNT	119.60	589.86
71	SPERM HEAD COUNT	2.21	34.82
72	SPERM HEAD COUNT	139.71	774.74
73	SPERM HEAD COUNT	133.95	831.20
74	SPERM HEAD COUNT	137.19	792.44
75	SPERM HEAD COUNT	135.24	614.75
76	SPERM HEAD COUNT	121.14	699.80
77	SPERM HEAD COUNT	130.22	731.96
78	SPERM HEAD COUNT	124.92	778.95
79	SPERM HEAD COUNT	127.58	797.16
80	SPERM HEAD COUNT	139.66	389.94
81	SPERM HEAD COUNT	130.15	681.16
82	SPERM HEAD COUNT	139.52	892.00

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

SPERM ANALYSIS
MALES

ANIMAL NUMBER		Testis millions/ g organ	Cauda epididymis millions/ g organ
GROUP 4 (2000 MG/KG/DAY)			
89	SPERM HEAD COUNT	110.07	737.50
90	SPERM HEAD COUNT	120.79	636.03
91	SPERM HEAD COUNT	131.52	703.88
92	SPERM HEAD COUNT	158.21	618.94
93	SPERM HEAD COUNT	154.50	947.44
94	SPERM HEAD COUNT	140.63	655.28
95	SPERM HEAD COUNT	123.78	897.85
96	SPERM HEAD COUNT	135.93	750.00
97	SPERM HEAD COUNT	168.34	603.61
98	SPERM HEAD COUNT	121.54	414.50
99	SPERM HEAD COUNT	130.65	817.60
100	SPERM HEAD COUNT	123.98	764.83
101	SPERM HEAD COUNT	133.19	648.02
102	SPERM HEAD COUNT	138.57	785.77
103	SPERM HEAD COUNT	138.10	621.36
104	SPERM HEAD COUNT	135.92	802.97
105	SPERM HEAD COUNT	128.16	409.84
106	SPERM HEAD COUNT	122.75	700.11
107	SPERM HEAD COUNT	171.83	803.60
108	SPERM HEAD COUNT	125.04	714.16

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

SPERM ANALYSIS (RECOVERY)
MALES

ANIMAL NUMBER		Testis millions/ g organ	Cauda epididymis millions/ g organ
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GROUP 1 (0 MG/KG/DAY)

21	SPERM HEAD COUNT	113.19	566.83
22	SPERM HEAD COUNT	107.68	608.84
23	SPERM HEAD COUNT	89.62	603.12
24	SPERM HEAD COUNT	117.65	664.76
25	SPERM HEAD COUNT	111.85	685.17
26	SPERM HEAD COUNT	105.80	573.66
27	SPERM HEAD COUNT	135.49	581.77
28	SPERM HEAD COUNT	134.08	550.12
29	SPERM HEAD COUNT	106.60	724.76
30	SPERM HEAD COUNT	131.10	763.69

GROUP 4 (2000 MG/KG/DAY)

109	SPERM HEAD COUNT	98.99	596.76
110	SPERM HEAD COUNT	102.31	679.43
111	SPERM HEAD COUNT	113.26	640.43
112	SPERM HEAD COUNT	128.62	517.96
113	SPERM HEAD COUNT	122.63	523.13
114	SPERM HEAD COUNT	119.93	633.56
115	SPERM HEAD COUNT	112.05	674.90
116	SPERM HEAD COUNT	104.48	460.74
117	SPERM HEAD COUNT	120.83	609.96
118	SPERM HEAD COUNT	109.97	669.29

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

SPERM ANALYSIS
MALES

ANIMAL NUMBER	Prog.mot. %	Stat.mot. %	Not motile %
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GROUP 1 (0 MG/KG/DAY)

1	MOTILITY	---	---	---
2	MOTILITY	58.0	32.0	10.0
3	MOTILITY	48.0	41.0	11.0
4	MOTILITY	40.0	40.5	19.5
5	MOTILITY	60.5	33.0	6.5
6	MOTILITY	43.5	44.5	12.0
7	MOTILITY	48.5	38.0	13.5
8	MOTILITY	47.5	41.5	11.0
9	MOTILITY	51.0	33.5	15.5
10	MOTILITY	41.0	44.5	14.5
11	MOTILITY	53.0	35.5	11.5
12	MOTILITY	52.0	30.5	17.5
13	MOTILITY	53.5	29.0	17.5
14	MOTILITY	67.5	18.0	14.5
15	MOTILITY	32.0	33.5	34.5
16	MOTILITY	53.5	32.5	14.0
17	MOTILITY	61.0	27.0	12.0
18	MOTILITY	0.0	0.0	100.0
19	MOTILITY	43.5	41.5	15.0
20	MOTILITY	55.0	29.5	15.5

GROUP 2 (500 MG/KG/DAY)

37	MOTILITY	41.0	43.0	16.0
38	MOTILITY	52.0	34.5	13.5
39	MOTILITY	---	---	---
40	MOTILITY	51.0	36.0	13.0
41	MOTILITY	38.0	43.0	19.0
42	MOTILITY	48.0	43.0	8.5
43	MOTILITY	46.0	36.5	17.5
45	MOTILITY	57.0	31.0	12.0
46	MOTILITY	53.5	33.5	13.0
47	MOTILITY	55.0	31.0	14.0
48	MOTILITY	56.0	26.0	18.0

--- = animal no. 1: no value due to technical reasons
animal no. 39: too few sperm

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

SPERM ANALYSIS
MALES

ANIMAL NUMBER		Prog.mot. %	Stat.mot. %	Not motile %
GROUP 2 (500 MG/KG/DAY)				
49	MOTILITY	55.5	28.0	16.5
50	MOTILITY	34.5	20.0	45.5
51	MOTILITY	72.5	20.5	7.0
52	MOTILITY	65.5	23.0	11.5
53	MOTILITY	60.5	30.5	9.0
54	MOTILITY	35.0	48.0	17.0
55	MOTILITY	54.0	30.0	16.0
56	MOTILITY	53.0	30.0	17.0
GROUP 3 (1000 MG/KG/DAY)				
63	MOTILITY	49.0	31.0	20.0
64	MOTILITY	48.0	28.0	24.0
65	MOTILITY	52.0	27.5	20.5
66	MOTILITY	54.0	33.0	13.0
67	MOTILITY	56.0	33.0	11.0
68	MOTILITY	73.0	8.0	19.0
69	MOTILITY	62.0	30.0	8.0
70	MOTILITY	48.0	34.0	18.0
71	MOTILITY	---	---	---
72	MOTILITY	59.0	25.0	15.5
73	MOTILITY	62.0	26.0	12.0
74	MOTILITY	68.0	22.5	9.5
75	MOTILITY	66.5	17.0	16.5
76	MOTILITY	63.5	25.5	11.0
77	MOTILITY	74.0	15.5	10.5
78	MOTILITY	57.5	28.5	14.0
79	MOTILITY	49.0	38.5	12.5
80	MOTILITY	31.5	55.5	13.0
81	MOTILITY	63.5	26.5	10.0
82	MOTILITY	63.5	21.5	15.0

--- =Animal no. 71 only few, misshapen sperm

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

SPERM ANALYSIS
MALES

ANIMAL NUMBER		Prog.mot. %	Stat.mot. %	Not motile %
GROUP 4 (2000 MG/KG/DAY)				
89	MOTILITY	51.5	33.0	15.5
90	MOTILITY	49.0	32.0	19.0
91	MOTILITY	56.0	33.5	10.5
92	MOTILITY	53.5	36.5	10.0
93	MOTILITY	43.5	41.0	15.5
94	MOTILITY	44.5	45.0	10.5
95	MOTILITY	44.0	39.0	17.0
96	MOTILITY	76.0	14.0	10.0
97	MOTILITY	61.0	20.5	18.5
98	MOTILITY	68.5	26.0	5.5
99	MOTILITY	58.5	29.5	12.0
100	MOTILITY	50.5	35.5	14.0
101	MOTILITY	68.0	21.0	11.0
102	MOTILITY	63.0	25.5	11.5
103	MOTILITY	50.5	31.5	18.0
104	MOTILITY	61.0	29.0	10.0
105	MOTILITY	43.0	36.0	21.0
106	MOTILITY	56.5	32.0	11.5
107	MOTILITY	50.0	33.0	17.0
108	MOTILITY	44.0	36.0	20.0

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

SPERM ANALYSIS (RECOVERY)
MALES

ANIMAL NUMBER	-----		
	Prog.mot. %	Stat.mot. %	Not motile %
GROUP 1 (0 MG/KG/DAY)			
21 MOTILITY	54.0	31.0	15.0
22 MOTILITY	56.0	29.0	15.0
23 MOTILITY	35.0	45.0	20.0
24 MOTILITY	68.0	23.5	8.5
25 MOTILITY	56.5	24.0	19.5
26 MOTILITY	62.5	23.5	14.0
27 MOTILITY	59.0	20.0	21.0
28 MOTILITY	59.0	27.5	13.5
29 MOTILITY	63.0	21.5	15.5
30 MOTILITY	57.0	27.0	16.0
GROUP 4 (2000 MG/KG/DAY)			
109 MOTILITY	59.5	31.0	9.5
110 MOTILITY	50.0	36.0	14.0
111 MOTILITY	49.5	37.0	13.5
112 MOTILITY	54.5	30.5	15.0
113 MOTILITY	67.0	25.0	8.0
114 MOTILITY	55.0	33.5	11.5
115 MOTILITY	62.0	26.5	11.5
116 MOTILITY	62.0	25.0	13.0
117 MOTILITY	41.0	20.0	39.0
118 MOTILITY	47.5	31.0	21.5

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

SPERM ANALYSIS
MALES

ANIMAL NUMBER		A %	B %	C %	D %	E %	F %
GROUP 1 (0 MG/KG/DAY)							
1	MORPHOLOGY	92.3	2.7	1.0	3.3	0.0	0.7
2	MORPHOLOGY	94.7	2.0	0.0	3.3	0.0	0.0
3	MORPHOLOGY	91.3	0.7	0.7	6.7	0.0	0.7
4	MORPHOLOGY	93.3	3.3	1.0	2.3	0.0	0.0
5	MORPHOLOGY	92.0	5.3	1.0	1.3	0.0	0.3
6	MORPHOLOGY	95.0	3.3	0.3	1.0	0.0	0.3
7	MORPHOLOGY	95.0	1.3	1.7	1.3	0.7	0.0
8	MORPHOLOGY	94.3	0.3	1.0	4.3	0.0	0.0
9	MORPHOLOGY	90.7	4.3	2.3	2.0	0.3	0.3
10	MORPHOLOGY	94.7	2.7	0.7	1.3	0.0	0.7
11	MORPHOLOGY	95.3	0.7	1.0	3.0	0.0	0.0
12	MORPHOLOGY	90.0	3.0	1.7	5.3	0.0	0.0
13	MORPHOLOGY	94.3	1.3	0.7	3.7	0.0	0.0
14	MORPHOLOGY	88.0	6.0	3.3	2.7	0.0	0.0
15	MORPHOLOGY	76.7	6.0	9.3	6.0	0.7	1.3
16	MORPHOLOGY	92.0	0.7	0.3	7.0	0.0	0.0
17	MORPHOLOGY	89.0	4.0	1.0	5.3	0.0	0.7
18	MORPHOLOGY	99.0	0.0	0.0	0.0	1.0	0.0
19	MORPHOLOGY	82.3	3.7	6.3	6.7	0.0	1.0
20	MORPHOLOGY	89.3	0.7	0.3	9.0	0.0	0.7
GROUP 2 (500 MG/KG/DAY)							
37	MORPHOLOGY	93.7	1.7	0.7	3.3	0.3	0.3
38	MORPHOLOGY	93.3	2.7	1.3	2.0	0.0	0.7
39	MORPHOLOGY	---	---	---	---	---	---
40	MORPHOLOGY	92.0	1.0	1.7	5.0	0.0	0.3
41	MORPHOLOGY	95.0	1.3	0.0	3.0	0.3	0.3
42	MORPHOLOGY	89.7	1.7	1.7	6.0	0.3	0.7
43	MORPHOLOGY	85.3	7.3	1.3	5.7	0.0	0.3
45	MORPHOLOGY	92.0	2.3	0.7	4.3	0.3	0.3
46	MORPHOLOGY	93.7	2.3	0.0	3.7	0.0	0.3

Animal no. 44 died before test day
 --- = Animal no. 39 mostly misshapen sperm without tail
 A = Sperm with normal hook and tail
 B = Normal hook without tail
 C = Misshapen sperm hook with tail
 D = Sperm with abnormally curved hook with tail
 E = Sperm with reversed hook with tail
 F = Abnormal hook without tail

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

SPERM ANALYSIS
MALES

ANIMAL NUMBER		A %	B %	C %	D %	E %	F %
GROUP 2 (500 MG/KG/DAY)							
47	MORPHOLOGY	92.0	2.3	1.0	4.7	0.0	0.0
48	MORPHOLOGY	93.0	2.0	0.3	4.7	0.0	0.0
49	MORPHOLOGY	18.0	5.0	26.3	47.0	0.0	3.7
50	MORPHOLOGY	91.3	2.7	1.3	4.0	0.0	0.7
51	MORPHOLOGY	95.0	1.7	0.3	3.0	0.0	0.0
52	MORPHOLOGY	80.3	5.7	6.0	6.7	0.0	1.3
53	MORPHOLOGY	90.3	3.3	0.3	5.3	0.0	0.7
54	MORPHOLOGY	90.3	3.0	1.7	4.7	0.0	0.3
55	MORPHOLOGY	89.0	5.0	1.7	3.7	0.0	0.7
56	MORPHOLOGY	79.7	7.3	3.0	9.0	0.0	1.0
GROUP 3 (1000 MG/KG/DAY)							
63	MORPHOLOGY	87.0	2.7	1.7	8.0	0.0	0.7
64	MORPHOLOGY	90.0	5.7	1.0	3.0	0.0	0.3
65	MORPHOLOGY	91.0	4.0	0.7	4.0	0.0	0.3
66	MORPHOLOGY	94.3	1.7	0.3	3.7	0.0	0.0
67	MORPHOLOGY	94.0	3.0	0.0	2.3	0.0	0.7
68	MORPHOLOGY	90.0	1.0	3.7	3.7	0.0	1.7
69	MORPHOLOGY	90.3	4.0	0.7	4.0	0.0	1.0
70	MORPHOLOGY	94.3	0.0	1.0	4.7	0.0	0.0
71	MORPHOLOGY	---	---	---	---	---	---
72	MORPHOLOGY	95.7	1.3	0.0	3.0	0.0	0.0
73	MORPHOLOGY	89.3	2.3	2.0	6.0	0.0	0.3
74	MORPHOLOGY	87.3	3.7	1.3	7.3	0.0	0.3
75	MORPHOLOGY	42.0	3.3	21.3	31.7	0.0	1.7
76	MORPHOLOGY	89.0	1.3	2.3	7.3	0.0	0.0
77	MORPHOLOGY	91.7	3.0	1.0	4.0	0.0	0.3
78	MORPHOLOGY	89.0	3.7	1.7	5.3	0.0	0.3
79	MORPHOLOGY	91.3	1.7	1.0	5.7	0.0	0.3
80	MORPHOLOGY	87.3	7.3	0.3	5.0	0.0	0.0
81	MORPHOLOGY	94.3	0.3	0.7	4.7	0.0	0.0
82	MORPHOLOGY	93.0	3.0	0.0	4.0	0.0	0.0

--- =Animal no. 71 only few, misshapen sperm

A = Sperm with normal hook and tail
B = Normal hook without tail
C = Misshapen sperm hook with tail

D = Sperm with abnormally curved hook with tail
E = Sperm with reversed hook with tail
F = Abnormal hook without tail

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

SPERM ANALYSIS
MALES

ANIMAL NUMBER		A %	B %	C %	D %	E %	F %
GROUP 4 (2000 MG/KG/DAY)							
89	MORPHOLOGY	90.0	2.7	1.7	5.3	0.0	0.3
90	MORPHOLOGY	92.3	1.7	0.7	5.3	0.0	0.0
91	MORPHOLOGY	83.3	2.7	2.3	11.7	0.0	0.0
92	MORPHOLOGY	93.3	1.7	0.0	5.0	0.0	0.0
93	MORPHOLOGY	91.7	2.7	1.3	4.3	0.0	0.0
94	MORPHOLOGY	92.3	2.3	1.3	3.7	0.0	0.3
95	MORPHOLOGY	92.7	2.7	1.3	3.0	0.0	0.3
96	MORPHOLOGY	92.7	2.3	1.7	2.7	0.0	0.7
97	MORPHOLOGY	84.7	7.7	1.3	5.0	0.0	1.3
98	MORPHOLOGY	87.3	4.3	1.0	7.3	0.0	0.0
99	MORPHOLOGY	89.7	2.0	0.7	7.3	0.0	0.3
100	MORPHOLOGY	93.3	0.3	0.3	6.0	0.0	0.0
101	MORPHOLOGY	94.0	0.0	0.0	5.3	0.0	0.7
102	MORPHOLOGY	87.3	3.0	2.3	7.0	0.0	0.3
103	MORPHOLOGY	83.3	4.7	1.0	7.7	0.0	3.3
104	MORPHOLOGY	89.7	1.0	1.0	7.3	0.3	0.7
105	MORPHOLOGY	68.3	19.3	2.7	8.0	0.0	1.7
106	MORPHOLOGY	87.3	1.3	1.3	10.0	0.0	0.0
107	MORPHOLOGY	82.0	4.3	1.3	12.3	0.0	0.0
108	MORPHOLOGY	86.7	1.3	2.0	9.7	0.0	0.3

A = Sperm with normal hook and tail
B = Normal hook without tail
C = Misshapen sperm hook with tail

D = Sperm with abnormally curved hook with tail
E = Sperm with reversed hook with tail
F = Abnormal hook without tail

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

SPERM ANALYSIS (RECOVERY)
MALES

ANIMAL NUMBER		A %	B %	C %	D %	E %	F %
GROUP 1 (0 MG/KG/DAY)							
21	MORPHOLOGY	88.7	6.0	1.7	3.3	0.0	0.3
22	MORPHOLOGY	93.7	2.7	0.3	3.3	0.0	0.0
23	MORPHOLOGY	90.3	2.0	3.3	4.0	0.0	0.3
24	MORPHOLOGY	91.7	4.3	1.0	2.7	0.0	0.3
25	MORPHOLOGY	93.7	2.3	1.3	2.7	0.0	0.0
26	MORPHOLOGY	91.3	4.7	1.3	1.7	0.3	0.7
27	MORPHOLOGY	85.7	6.0	2.7	2.7	0.0	3.0
28	MORPHOLOGY	17.0	2.7	31.7	42.7	0.0	6.0
29	MORPHOLOGY	93.7	3.0	1.0	1.7	0.0	0.7
30	MORPHOLOGY	92.0	3.0	1.0	4.0	0.0	0.0
GROUP 4 (2000 MG/KG/DAY)							
109	MORPHOLOGY	91.7	1.3	2.3	4.3	0.0	0.3
110	MORPHOLOGY	87.0	4.0	1.3	7.0	0.0	0.7
111	MORPHOLOGY	87.7	2.0	3.7	6.0	0.3	0.3
112	MORPHOLOGY	92.0	4.3	0.7	3.0	0.0	0.0
113	MORPHOLOGY	89.0	3.0	1.0	6.7	0.0	0.3
114	MORPHOLOGY	92.7	2.7	0.3	4.3	0.0	0.0
115	MORPHOLOGY	87.0	5.0	3.7	3.0	0.0	1.3
116	MORPHOLOGY	89.0	3.3	2.3	4.0	0.0	1.3
117	MORPHOLOGY	92.0	2.0	2.0	4.0	0.0	0.0
118	MORPHOLOGY	91.3	1.3	1.0	6.0	0.0	0.3

A = Sperm with normal hook and tail
B = Normal hook without tail
C = Misshapen sperm hook with tail

D = Sperm with abnormally curved hook with tail
E = Sperm with reversed hook with tail
F = Abnormal hook without tail

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**ESTROUS CYCLES - INDIVIDUAL DATA
MAIN STUDY FEMALES**ESTROUS CYCLES
GROUP 1 (0 MG/KG)

FEMALE#	DAY OF EVALUATION														NUMBER OF DAYS IN STAGE					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	D	P	E	M	NC	MDE
125	/E	M	D	D	/E	M	D	D	/E	M	D	D	/E	M	6	0	4	4	3	4.0
126	/E	M	D	D	/E	D	D	P	/E	M	D	D	/E	M	6	1	4	3	3	4.0
127	M	D	D	/E	M	D	D	/E	D	D	D	/E	D	D	9	0	3	2	2	4.0
128	D	D	P	/E	M	D	D	P	/E	M	D	D	P	/E	6	3	3	2	2	5.0
129	D	D	/E	M	D	P	/E	M	D	P	/E	D	D	P	6	3	3	2	2	4.0
130	D	/E	D	D	P	/E	M	D	D	/E	M	D	D	/E	7	1	4	2	3	4.0
131	P	/E	M	D	P	/E	M	D	D	/E	M	D	D	/E	5	2	4	3	3	4.0
132	D	D	P	/E	M	D	D	/E	M	D	D	/E	M	D	7	1	3	3	2	4.0
133	M	D	D	/E	D	D	D	/E	M	D	P	/E	M	D	7	1	3	3	2	4.0
134	P	/E	M	D	P	/E	M	D	D	/E	M	D	D	/E	5	2	4	3	3	4.0
135	/E	M	D	P	P	/E	M	D	D	P	/E	M	D	D	5	3	3	3	2	5.0
136	M	D	D	/E	M	D	P	/E	M	D	D	/E	M	D	6	1	3	4	2	4.0
137	P	/E	D	D	P	/E	M	D	P	/E	M	D	D	/E	5	3	4	2	3	4.0
138	/E	D	D	D	/E	D	D	P	/E	M	D	D	P	/E	7	2	4	1	3	4.3
139	/E	D	D	P	/E	M	D	D	/E	M	D	D	D	/E	6	1	4	3	3	4.0
140	D	/E	D	D	P	/E	M	D	P	/E	D	D	D	/E	7	2	4	1	3	4.0
141	D	P	/E	D	D	P	/E	M	D	D	/E	M	D	D	7	2	3	2	2	4.0
142	P	/E	D	D	P	/E	M	D	D	/E	M	D	D	P	5	3	4	2	3	4.0
143	D	D	P	/E	M	D	D	/E	M	D	D	/E	D	D	8	1	3	2	2	4.0
144	P	/E	D	D	P	/E	M	D	D	/E	D	D	P	/E	6	3	4	1	3	4.0

STAGE P = PROESTRUS, STAGE E = ESTRUS, STAGE M = METESTRUS, STAGE D = DIESTRUS N=NO SAMPLE
NC=NUMBER OF CYCLES MDE=MEAN# OF DAYS OF CYCLE /=START OF CYCLE

GROUP 2 (500 MG/KG)

FEMALE#	DAY OF EVALUATION														NUMBER OF DAYS IN STAGE					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	D	P	E	M	NC	MDE
161	D	D	P	/E	M	D	P	/E	M	D	D	/E	D	D	7	2	3	2	2	4.0
162	D	/E	M	D	D	/E	D	D	D	/E	D	D	D	/E	9	0	4	1	3	4.0
163	D	/E	D	D	P	/E	D	D	D	/E	M	D	D	/E	7	2	4	1	3	4.0
164	D	D	P	/E	M	D	D	/E	D	D	P	/E	M	D	7	2	3	2	2	4.0
165	P	/E	M	D	D	/E	M	D	D	/E	M	D	D	/E	6	1	4	3	3	4.0
166	D	P	/E	M	D	D	/E	M	D	D	/E	D	D	P	7	2	3	2	2	4.0
167	/E	M	D	D	P	/E	D	D	D	/E	M	D	D	/E	7	1	4	2	3	4.3
168	/E	D	D	D	/E	D	D	P	/E	M	D	D	/E	D	8	1	4	1	3	4.0
169	/E	D	D	D	P	/E	D	D	P	/E	M	D	D	P	6	3	4	1	3	4.3
170	D	D	P	/E	D	D	P	/E	D	D	P	/E	D	D	8	3	3	0	2	4.0
171	D	D	P	/E	D	D	D	/E	D	D	D	P	/E	M	8	2	3	1	2	4.5
172	D	P	/E	D	D	P	/E	D	D	P	/E	D	D	P	7	4	3	0	2	4.0
173	D	D	/E	D	D	P	/E	D	D	P	/E	M	D	D	8	2	3	1	2	4.0
174	P	/E	D	D	P	/E	M	D	P	/E	M	D	D	P	4	4	4	2	3	4.0
175	/E	D	D	P	/E	M	D	D	P	/E	M	D	D	P	5	3	4	2	3	4.3
176	/E	D	D	P	/E	D	D	P	/E	M	D	D	/E	D	7	2	4	1	3	4.0
177	D	P	/E	D	D	P	/E	M	D	D	/E	D	D	D	8	2	3	1	2	4.0
178	/E	M	D	D	/E	M	D	P	/E	D	D	D	P	/E	6	2	4	2	3	4.0
179	P	/E	D	D	P	/E	D	D	P	/E	D	D	D	P	6	4	4	0	3	4.0
180	P	/E	D	D	P	/E	D	D	D	D	D	D	P	/E	8	3	3	0	2	6.0

STAGE P = PROESTRUS, STAGE E = ESTRUS, STAGE M = METESTRUS, STAGE D = DIESTRUS N=NO SAMPLE
NC=NUMBER OF CYCLES MDE=MEAN# OF DAYS OF CYCLE /=START OF CYCLE

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**ESTROUS CYCLES - INDIVIDUAL DATA
MAIN STUDY FEMALES**ESTROUS CYCLES
GROUP 3 (1000 MG/KG)

FEMALE#	DAY OF EVALUATION														NUMBER OF DAYS IN STAGE					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	D	P	E	M	NC	MDE
187	P	/E	M	D	D	/E	M	D	D	/E	D	D	P	/E	6	2	4	2	3	4.0
188	D	D	P	/E	D	D	P	/E	D	D	P	/E	M	D	7	3	3	1	2	4.0
189	D	D	P	/E	D	D	P	/E	D	D	P	/E	D	D	8	3	3	0	2	4.0
190	P	/E	E	M	D	P	/E	M	D	P	/E	D	D	P	4	4	4	2	2	4.5
191	/E	D	D	P	/E	M	D	D	/E	D	D	P	/E	D	7	2	4	1	3	4.0
192	/E	D	D	P	/E	M	D	D	/E	M	D	D	/E	D	7	1	4	2	3	4.0
193	D	D	D	/E	M	D	D	/E	D	D	P	/E	D	D	9	1	3	1	2	4.0
194	D	P	/E	D	D	P	/E	D	D	P	/E	M	D	D	7	3	3	1	2	4.0
195	/E	D	D	P	/E	D	D	D	P	/E	D	D	D	/E	8	2	4	0	3	4.3
196	P	/E	D	D	P	/E	D	D	P	/E	D	D	P	/E	6	4	4	0	3	4.0
197	M	D	D	/E	D	D	P	/E	M	D	D	/E	M	D	7	1	3	3	2	4.0
198	M	D	D	/E	D	D	P	/E	M	D	D	/E	D	D	8	1	3	2	2	4.0
199	/E	D	D	P	/E	D	D	P	/E	D	D	P	/E	M	6	3	4	1	3	4.0
200	/E	D	D	P	/E	D	D	D	/E	M	D	D	P	/E	7	2	4	1	3	4.3
201	D	D	P	/E	M	D	D	/E	M	D	D	/E	D	D	8	1	3	2	2	4.0
202	/E	D	D	P	/E	M	D	D	/E	M	D	D	/E	D	7	1	4	2	3	4.0
203	/E	D	D	P	/E	D	D	P	/E	M	D	D	/E	M	6	2	4	2	3	4.0
204	D	D	P	/E	D	D	P	/E	D	D	P	/E	D	D	8	3	3	0	2	4.0
205	D	P	/E	D	D	P	/E	M	D	D	/E	D	D	D	8	2	3	1	2	4.0
206	P	/E	M	D	D	/E	M	D	D	/E	M	D	D	/E	6	1	4	3	3	4.0

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NC=NUMBER OF CYCLES MDE=MEAN# OF DAYS OF CYCLE /=START OF CYCLE

GROUP 4 (2000 MG/KG)

FEMALE#	DAY OF EVALUATION														NUMBER OF DAYS IN STAGE					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	D	P	E	M	NC	MDE
213	P	/E	D	D	P	/E	D	D	P	/E	M	D	D	/E	6	3	4	1	3	4.0
214	D	D	/E	M	D	D	/E	M	D	D	/E	M	D	D	8	0	3	3	2	4.0
215	P	P	P	/E	M	D	D	/E	M	D	D	/E	D	D	6	3	3	2	2	4.0
216	D	D	P	/E	M	D	D	/E	M	D	D	/E	M	D	7	1	3	3	2	4.0
217	/E	D	D	P	/E	D	D	P	/E	D	D	P	/E	M	6	3	4	1	3	4.0
218	D	P	/E	D	D	P	/E	D	D	P	/E	D	D	P	7	4	3	0	2	4.0
219	P	/E	D	D	P	/E	D	D	P	/E	M	D	D	/E	6	3	4	1	3	4.0
220	D	D	/E	D	D	P	/E	M	D	D	/E	M	D	D	8	1	3	2	2	4.0
221	M	D	P	/E	M	D	P	/E	M	D	P	/E	M	D	4	3	3	4	2	4.0
222	M	D	D	/E	M	D	D	/E	M	D	D	/E	M	D	7	0	3	4	2	4.0
223	M	D	D	/E	M	D	D	/E	M	D	P	/E	E	M	5	1	4	4	2	4.0
224	D	/E	M	D	D	/E	M	D	D	/E	M	D	D	/E	7	0	4	3	3	4.0
225	/E	M	D	D	/E	M	D	D	/E	D	D	P	/E	M	6	1	4	3	3	4.0
226	D	D	D	/E	D	D	P	/E	D	D	D	/E	D	D	11	0	3	0	2	4.0
227	D	P	/E	M	D	P	/E	M	D	P	/E	M	D	P	4	4	3	3	2	4.0
228	P	/E	M	D	P	/E	M	D	D	/E	M	D	D	/E	5	2	4	3	3	4.0
229	/E	D	D	P	/E	D	D	P	/E	D	D	P	/E	D	7	3	4	0	3	4.0
230	D	D	P	/E	M	D	D	/E	M	D	D	/E	M	D	7	1	3	3	2	4.0
231	D	/E	D	D	P	/E	M	D	D	/E	D	D	P	/E	7	2	4	1	3	4.0
232	P	/E	M	D	D	D	D	D	D	D	D	D	D	D	11	1	1	1		

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RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**ESTROUS CYCLES - INDIVIDUAL DATA
RECOVERY FEMALES
TREATMENT PERIOD**ESTROUS CYCLES
GROUP 1 (0 MG/KG)

FEMALE#	DAY OF EVALUATION														NUMBER OF DAYS IN STAGE					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	D	P	E	M	NC	MDE
145	P	/E	D	D	D	/E	M	D	P	/E	M	D	P	/E	5	3	4	2	3	4.0
146	D	D	/E	M	D	P	/E	D	D	D	/E	M	D	D	8	1	3	2	2	4.0
147	D	P	/E	D	D	P	/E	D	D	P	/E	M	D	D	7	3	3	1	2	4.0
148	/E	D	D	D	/E	D	D	D	/E	D	D	D	P	/E	9	1	4	0	3	4.3
149	D	D	/E	D	D	P	/E	M	D	D	/E	M	D	D	8	1	3	2	2	4.0
150	P	/E	M	D	D	/E	M	D	P	/E	M	D	D	/E	5	2	4	3	3	4.0
151	D	/E	D	D	P	/E	M	D	D	/E	M	D	D	/E	7	1	4	2	3	4.0
152	M	D	D	/E	D	D	D	/E	D	D	D	/E	M	D	9	0	3	2	2	4.0
153	D	P	/E	M	D	D	/E	M	D	D	/E	M	D	D	7	1	3	3	2	4.0
154	D	/E	D	D	P	/E	M	D	D	/E	D	D	D	/E	8	1	4	1	3	4.0

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NC=NUMBER OF CYCLES MDE=MEAN# OF DAYS OF CYCLE /=START OF CYCLE

GROUP 4 (2000 MG/KG)

FEMALE#	DAY OF EVALUATION														NUMBER OF DAYS IN STAGE					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	D	P	E	M	NC	MDE
233	D	/E	D	D	P	/E	M	D	D	/E	M	D	D	/E	7	1	4	2	3	4.0
234	D	D	P	/E	M	D	D	/E	M	D	D	P	/E	M	6	2	3	3	2	4.5
235	M	D	P	/E	M	D	P	/E	M	D	D	/E	M	D	5	2	3	4	2	4.0
236	D	D	P	/E	M	D	P	/E	D	D	P	/E	M	D	6	3	3	2	2	4.0
237	/E	M	D	D	/E	M	D	D	/E	M	D	D	/E	M	6	0	4	4	3	4.0
238	D	D	/E	M	D	D	/E	M	D	P	/E	M	D	D	7	1	3	3	2	4.0
239	P	/E	D	D	P	/E	M	D	D	/E	M	D	D	/E	6	2	4	2	3	4.0
240	M	D	D	/E	D	D	P	/E	D	D	D	/E	M	D	8	1	3	2	2	4.0
241	P	/E	E	M	D	D	/E	D	D	P	/E	D	D	D	7	2	4	1	2	4.5
242	D	D	P	/E	D	D	/E	D	D	P	/E	M	D	D	8	2	3	1	2	3.5

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400

RCC STUDY NUMBER A29553 REPORT
ULTRAZINE FG-R (FOOD GRADE LIGNOSULPHONATE)**ESTROUS CYCLES - INDIVIDUAL DATA
RECOVERY FEMALES
RECOVERY PERIOD**ESTROUS CYCLES
GROUP 1 (0 MG/KG)

FEMALE#	DAY OF EVALUATION														NUMBER OF DAYS IN STAGE					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	D	P	E	M	NC	MDE
145	D	D	/E	M	D	D	P	/E	M	D	D	P	/E	M	6	2	3	3	2	5.0
146	/E	E	D	D	P	/E	E	M	D	D	/E	M	D	D	6	1	5	2	2	5.0
147	D	P	/E	M	D	D	/E	M	D	D	/E	D	D	D	8	1	3	2	2	4.0
148	/E	M	D	D	/E	M	D	D	/E	M	D	D	/E	D	7	0	4	3	3	4.0
149	D	D	P	/E	M	D	D	/E	M	D	D	/E	D	D	8	1	3	2	2	4.0
150	D	D	P	/E	P	P	P	/E	P	P	P	/E	P	P	2	9	3	0	2	4.0
151	D	D	/E	M	D	D	/E	D	D	P	/E	D	D	D	9	1	3	1	2	4.0
152	/E	D	D	P	/E	D	D	D	/E	D	D	P	/E	M	7	2	4	1	3	4.0
153	/E	M	D	D	/E	D	D	P	/E	M	D	D	/E	D	7	1	4	2	3	4.0
154	D	P	/E	D	D	D	/E	M	D	P	/E	D	D	D	8	2	3	1	2	4.0

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NC=NUMBER OF CYCLES MDE=MEAN# OF DAYS OF CYCLE /=START OF CYCLE

GROUP 4 (2000 MG/KG)

FEMALE#	DAY OF EVALUATION														NUMBER OF DAYS IN STAGE					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	D	P	E	M	NC	MDE
233	D	/E	D	D	P	/E	M	D	D	/E	M	D	D	/E	7	1	4	2	3	4.0
234	/E	E	E	E	E	E	E	E	E	E	E	E	E	E	0	0	14	0		
235	D	D	/E	E	D	D	D	/E	D	D	D	/E	M	D	9	0	4	1	2	4.5
236	P	/E	D	D	D	/E	M	D	P	/E	D	D	D	/E	7	2	4	1	3	4.0
237	P	/E	D	D	P	/E	D	D	D	/E	D	D	P	/E	7	3	4	0	3	4.0
238	M	D	D	/E	M	D	D	/E	E	E	E	E	D	D	6	0	6	2	1	4.0
239	/E	M	D	D	/E	M	D	P	/E	D	D	D	/E	M	6	1	4	3	3	4.0
240	M	D	P	/E	M	D	P	/E	M	D	P	/E	M	D	4	3	3	4	2	4.0
241	/E	D	D	P	/E	D	D	P	/E	D	D	P	/E	D	7	3	4	0	3	4.0
242	M	D	P	/E	M	D	D	/E	D	D	P	/E	M	D	6	2	3	3	2	4.0

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401

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 1 (0 MG/KG/DAY)								
1	AFTER 2 WEEKS	7.36	9.3	0.42	57.2	0.119	1.26	22.02
	AFTER 6 WEEKS	7.74	9.3	0.41	53.5	0.116	1.21	22.55
	AFTER 13 WEEKS	9.09	10.0	0.46	50.7	0.133	1.10	21.74
2	AFTER 2 WEEKS	7.33	8.8	0.40	54.9	0.128	1.20	21.88
	AFTER 6 WEEKS	8.23	9.5	0.42	51.1	0.134	1.16	22.71
	AFTER 13 WEEKS	9.05	9.6	0.44	48.3	0.146	1.06	22.03
3	AFTER 2 WEEKS	7.79	9.6	0.43	55.5	0.121	1.23	22.19
	AFTER 6 WEEKS	9.08	10.7	0.47	52.2	0.117	1.17	22.49
	AFTER 13 WEEKS	9.91	10.7	0.50	50.0	0.126	1.08	21.57
4	AFTER 2 WEEKS	7.39	9.1	0.42	56.2	0.125	1.24	21.98
	AFTER 6 WEEKS	8.47	10.1	0.45	52.9	0.116	1.20	22.65
	AFTER 13 WEEKS	9.04	10.1	0.46	51.1	0.129	1.12	21.92
5	AFTER 2 WEEKS	7.29	9.6	0.42	57.4	0.141	1.32	23.02
	AFTER 6 WEEKS	8.11	10.6	0.45	55.2	0.226	1.31	23.72
	AFTER 13 WEEKS	8.50	10.3	0.45	53.0	0.257	1.21	22.82
6	AFTER 2 WEEKS	7.13	9.1	0.41	58.1	0.117	1.28	22.05
	AFTER 6 WEEKS	8.13	10.2	0.45	55.1	0.113	1.25	22.69
	AFTER 13 WEEKS	8.63	9.6	0.46	53.3	0.121	1.12	20.95
7	AFTER 2 WEEKS	7.85	9.5	0.43	54.3	0.118	1.21	22.32
	AFTER 6 WEEKS	8.84	10.5	0.46	52.0	0.114	1.18	22.78
	AFTER 13 WEEKS	9.29	10.3	0.47	50.2	0.120	1.11	22.05
8	AFTER 2 WEEKS	7.83	9.7	0.44	56.3	0.124	1.24	22.09
	AFTER 6 WEEKS	8.80	10.5	0.47	53.3	0.119	1.19	22.39
	AFTER 13 WEEKS	9.55	10.5	0.48	50.2	0.129	1.10	21.83
9	AFTER 2 WEEKS	7.21	9.3	0.41	56.4	0.132	1.29	22.96
	AFTER 6 WEEKS	8.47	10.8	0.46	54.1	0.159	1.27	23.48
	AFTER 13 WEEKS	8.84	10.5	0.46	51.8	0.248	1.19	22.89
10	AFTER 2 WEEKS	8.00	9.5	0.43	54.3	0.123	1.19	21.87
	AFTER 6 WEEKS	8.67	10.0	0.44	51.0	0.120	1.15	22.66
	AFTER 13 WEEKS	9.43	10.3	0.46	49.2	0.122	1.09	22.20
11	AFTER 2 WEEKS	7.60	9.3	0.42	54.7	0.121	1.23	22.41
	AFTER 6 WEEKS	8.57	10.2	0.44	50.9	0.143	1.19	23.41
	AFTER 13 WEEKS	9.01	9.8	0.44	48.8	0.138	1.09	22.33
12	AFTER 2 WEEKS	7.74	9.6	0.44	57.2	0.124	1.23	21.59
	AFTER 6 WEEKS	8.73	10.2	0.46	52.3	0.118	1.17	22.41
	AFTER 13 WEEKS	9.45	10.1	0.47	49.4	0.130	1.07	21.64
13	AFTER 2 WEEKS	7.69	9.1	0.42	54.3	0.121	1.19	21.82
	AFTER 6 WEEKS	9.13	10.5	0.47	51.6	0.115	1.15	22.32
	AFTER 13 WEEKS	9.41	10.1	0.47	49.4	0.123	1.07	21.61
14	AFTER 2 WEEKS	7.27	9.3	0.41	56.6	0.126	1.28	22.54
	AFTER 6 WEEKS	8.44	10.5	0.44	52.7	0.134	1.24	23.55
	AFTER 13 WEEKS	8.99	10.2	0.45	50.3	0.141	1.14	22.60
15	AFTER 2 WEEKS	7.97	9.7	0.44	54.7	0.131	1.22	22.24
	AFTER 6 WEEKS	8.83	10.1	0.45	51.2	0.123	1.15	22.42
	AFTER 13 WEEKS	9.83	10.7	0.48	49.0	0.136	1.08	22.10
16	AFTER 2 WEEKS	7.21	9.2	0.41	56.7	0.121	1.27	22.45
	AFTER 6 WEEKS	8.10	9.8	0.43	52.6	0.123	1.22	23.14
	AFTER 13 WEEKS	9.02	9.9	0.45	49.5	0.136	1.10	22.15
17	AFTER 2 WEEKS	7.55	9.8	0.42	55.6	0.149	1.29	23.29
	AFTER 6 WEEKS	8.32	10.8	0.46	54.8	0.223	1.30	23.80

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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 1 (0 MG/KG/DAY)								
17	AFTER 13 WEEKS	9.04	10.8	0.47	52.5	0.263	1.19	22.74
18	AFTER 2 WEEKS	7.32	9.3	0.40	55.4	0.121	1.28	23.08
	AFTER 6 WEEKS	8.59	10.4	0.44	51.7	0.120	1.21	23.37
	AFTER 13 WEEKS	9.52	10.7	0.48	50.3	0.127	1.12	22.34
19	AFTER 2 WEEKS	7.09	9.4	0.41	57.8	0.130	1.33	22.95
	AFTER 6 WEEKS	7.75	10.1	0.42	54.2	0.168	1.30	23.94
	AFTER 13 WEEKS	8.67	10.4	0.45	51.6	0.186	1.20	23.32
20	AFTER 2 WEEKS	7.85	10.1	0.43	55.0	0.148	1.29	23.44
	AFTER 6 WEEKS	8.27	10.5	0.44	53.5	0.217	1.27	23.78
	AFTER 13 WEEKS	9.18	10.8	0.47	50.9	0.230	1.17	23.05
21	AFTER 2 WEEKS	7.24	9.7	0.42	57.8	0.137	1.33	23.11
	AFTER 6 WEEKS	7.75	10.1	0.43	55.4	0.185	1.31	23.63
	AFTER 13 WEEKS	8.18	9.9	0.44	53.3	0.224	1.21	22.69
	AFTER 17 WEEKS	8.39	10.0	0.47	56.5	0.281	1.19	21.04
22	AFTER 2 WEEKS	7.44	9.4	0.42	56.2	0.125	1.26	22.42
	AFTER 6 WEEKS	8.83	10.4	0.46	52.3	0.121	1.18	22.51
	AFTER 13 WEEKS	9.80	10.7	0.49	50.1	0.130	1.09	21.85
	AFTER 17 WEEKS	9.41	10.1	0.49	51.8	0.144	1.08	20.78
23	AFTER 2 WEEKS	7.63	9.6	0.42	54.4	0.122	1.25	23.04
	AFTER 6 WEEKS	8.92	10.5	0.46	51.3	0.121	1.18	23.05
	AFTER 13 WEEKS	9.59	10.8	0.48	49.9	0.142	1.12	22.49
	AFTER 17 WEEKS	9.43	10.6	0.49	52.5	0.195	1.13	21.49
24	AFTER 2 WEEKS	7.61	9.5	0.42	55.1	0.123	1.25	22.71
	AFTER 6 WEEKS	8.45	9.9	0.43	50.4	0.126	1.18	23.30
	AFTER 13 WEEKS	9.74	10.0	0.46	47.3	0.133	1.02	21.65
	AFTER 17 WEEKS	9.37	9.9	0.47	49.7	0.179	1.06	21.30
25	AFTER 2 WEEKS	7.55	9.7	0.42	55.9	0.117	1.28	22.94
	AFTER 6 WEEKS	8.53	10.6	0.45	53.2	0.130	1.24	23.32
	AFTER 13 WEEKS	9.12	10.3	0.46	50.9	0.140	1.12	22.08
	AFTER 17 WEEKS	8.84	10.2	0.48	53.9	0.229	1.16	21.51
26	AFTER 2 WEEKS	7.58	9.2	0.41	53.7	0.116	1.22	22.66
	AFTER 6 WEEKS	8.73	10.0	0.44	50.4	0.115	1.14	22.70
	AFTER 13 WEEKS	9.49	10.1	0.45	47.9	0.130	1.06	22.12
	AFTER 17 WEEKS	9.85	10.4	0.49	50.1	0.141	1.06	21.07
27	AFTER 2 WEEKS	8.11	9.9	0.44	54.1	0.123	1.22	22.52
	AFTER 6 WEEKS	8.99	10.9	0.46	51.5	0.124	1.22	23.59
	AFTER 13 WEEKS	9.52	10.8	0.48	50.0	0.128	1.13	22.65
	AFTER 17 WEEKS	9.65	10.9	0.52	53.6	0.178	1.13	21.10
28	AFTER 2 WEEKS	7.44	9.6	0.42	56.9	0.125	1.28	22.58
	AFTER 6 WEEKS	8.49	10.5	0.46	54.1	0.121	1.24	22.84
	AFTER 13 WEEKS	9.15	10.3	0.46	50.6	0.131	1.13	22.30
	AFTER 17 WEEKS	9.42	10.7	0.51	53.8	0.141	1.13	21.07
29	AFTER 2 WEEKS	7.68	9.4	0.42	55.0	0.121	1.23	22.27
	AFTER 6 WEEKS	8.63	10.0	0.44	51.5	0.117	1.16	22.56
	AFTER 13 WEEKS	9.34	10.3	0.47	49.9	0.128	1.10	22.05
	AFTER 17 WEEKS	9.33	10.1	0.50	52.7	0.137	1.09	20.63
30	AFTER 2 WEEKS	7.34	9.3	0.41	56.1	0.121	1.27	22.64
	AFTER 6 WEEKS	8.60	10.6	0.45	52.4	0.126	1.23	23.50
	AFTER 13 WEEKS	9.09	10.4	0.46	50.1	0.131	1.15	22.90
	AFTER 17 WEEKS	9.17	10.4	0.49	53.4	0.189	1.14	21.34

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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 2 (500 MG/KG/DAY)								
37	AFTER 2 WEEKS	7.24	9.0	0.41	56.3	0.120	1.24	22.02
	AFTER 6 WEEKS	8.91	10.7	0.47	52.6	0.119	1.21	22.91
	AFTER 13 WEEKS	9.36	10.4	0.47	50.3	0.124	1.11	22.05
38	AFTER 2 WEEKS	7.74	9.7	0.43	55.3	0.115	1.25	22.71
	AFTER 6 WEEKS	8.92	10.6	0.46	52.0	0.113	1.19	22.89
	AFTER 13 WEEKS	9.62	10.4	0.47	49.0	0.118	1.08	22.02
39	AFTER 2 WEEKS	7.85	9.7	0.44	55.9	0.125	1.23	22.04
	AFTER 6 WEEKS	8.90	10.4	0.46	51.7	0.125	1.17	22.64
	AFTER 13 WEEKS	9.22	10.1	0.46	50.2	0.131	1.09	21.71
40	AFTER 2 WEEKS	7.24	8.8	0.40	54.6	0.120	1.21	22.19
	AFTER 6 WEEKS	8.45	9.9	0.43	51.4	0.124	1.17	22.76
	AFTER 13 WEEKS	9.25	9.7	0.45	48.5	0.125	1.04	21.52
41	AFTER 2 WEEKS	7.40	9.0	0.41	55.0	0.121	1.22	22.21
	AFTER 6 WEEKS	8.53	10.1	0.44	51.9	0.127	1.19	22.86
	AFTER 13 WEEKS	9.31	10.3	0.46	49.2	0.133	1.10	22.43
42	AFTER 2 WEEKS	7.24	8.9	0.40	55.5	0.127	1.23	22.20
	AFTER 6 WEEKS	8.47	10.1	0.44	52.4	0.123	1.20	22.87
	AFTER 13 WEEKS	9.12	9.9	0.46	50.4	0.132	1.09	21.55
43	AFTER 2 WEEKS	7.13	8.8	0.39	55.3	0.157	1.24	22.40
	AFTER 6 WEEKS	8.20	10.3	0.43	52.4	0.240	1.25	23.93
	AFTER 13 WEEKS	9.14	10.2	0.46	50.3	0.261	1.11	22.14
44	AFTER 2 WEEKS	7.17	8.4	0.37	52.3	0.120	1.18	22.48
	AFTER 6 WEEKS	---	---	---	---	---	---	---
	AFTER 13 WEEKS	---	---	---	---	---	---	---
45	AFTER 2 WEEKS	7.70	9.7	0.43	56.2	0.124	1.26	22.50
	AFTER 6 WEEKS	9.04	10.7	0.48	52.7	0.121	1.19	22.53
	AFTER 13 WEEKS	9.86	10.3	0.49	49.8	0.134	1.04	20.92
46	AFTER 2 WEEKS	7.69	9.6	0.44	56.7	0.125	1.25	22.11
	AFTER 6 WEEKS	8.47	10.6	0.45	53.2	0.131	1.25	23.59
	AFTER 13 WEEKS	9.22	10.3	0.47	50.7	0.132	1.11	21.98
47	AFTER 2 WEEKS	6.99	9.3	0.41	58.1	0.122	1.33	22.99
	AFTER 6 WEEKS	7.95	10.3	0.43	54.6	0.133	1.30	23.83
	AFTER 13 WEEKS	9.06	10.5	0.46	51.1	0.137	1.15	22.55
48	AFTER 2 WEEKS	7.82	9.4	0.42	54.0	0.122	1.21	22.34
	AFTER 6 WEEKS	8.60	10.2	0.44	51.2	0.114	1.19	23.18
	AFTER 13 WEEKS	9.26	10.1	0.46	49.2	0.129	1.09	22.21
49	AFTER 2 WEEKS	8.18	10.1	0.45	54.5	0.127	1.23	22.55
	AFTER 6 WEEKS	9.16	11.0	0.48	52.1	0.114	1.20	22.98
	AFTER 13 WEEKS	9.91	10.9	0.49	49.9	0.124	1.10	22.11
50	AFTER 2 WEEKS	7.93	9.5	0.43	54.0	0.122	1.20	22.21
	AFTER 6 WEEKS	8.65	10.4	0.44	51.4	0.122	1.20	23.41
	AFTER 13 WEEKS	9.16	10.2	0.45	49.4	0.128	1.11	22.54
51	AFTER 2 WEEKS	7.63	9.1	0.41	54.2	0.123	1.20	22.10
	AFTER 6 WEEKS	8.66	10.4	0.44	51.0	0.125	1.20	23.52
	AFTER 13 WEEKS	9.78	10.5	0.47	48.2	0.133	1.07	22.21
52	AFTER 2 WEEKS	7.46	9.0	0.41	54.5	0.122	1.21	22.15
	AFTER 6 WEEKS	8.41	9.9	0.44	52.1	0.120	1.18	22.67
	AFTER 13 WEEKS	9.08	9.7	0.44	48.9	0.129	1.07	21.79
53	AFTER 2 WEEKS	7.23	9.1	0.39	54.4	0.173	1.25	23.05
	AFTER 6 WEEKS	7.84	9.9	0.41	52.8	0.271	1.26	23.86

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

HEMATOLOGY
MALES

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)								
53	AFTER 13 WEEKS	8.59	10.0	0.43	50.3	0.271	1.16	23.06
54	AFTER 2 WEEKS	7.56	9.5	0.42	56.1	0.126	1.25	22.34
	AFTER 6 WEEKS	8.61	10.7	0.46	53.7	0.117	1.24	23.15
	AFTER 13 WEEKS	9.24	10.4	0.48	51.8	0.123	1.12	21.69
55	AFTER 2 WEEKS	7.39	9.2	0.41	56.0	0.119	1.25	22.26
	AFTER 6 WEEKS	8.73	10.4	0.45	52.0	0.117	1.20	22.98
	AFTER 13 WEEKS	9.46	10.6	0.48	50.3	0.130	1.12	22.15
56	AFTER 2 WEEKS	7.24	9.1	0.40	54.9	0.123	1.26	22.96
	AFTER 6 WEEKS	8.38	10.7	0.45	53.1	0.152	1.27	24.00
	AFTER 13 WEEKS	8.73	10.3	0.45	51.2	0.143	1.18	23.05
GROUP 3 (1000 MG/KG/DAY)								
63	AFTER 2 WEEKS	7.52	9.4	0.41	55.0	0.128	1.25	22.80
	AFTER 6 WEEKS	8.32	10.5	0.44	52.9	0.156	1.26	23.91
	AFTER 13 WEEKS	8.58	10.0	0.45	51.9	0.192	1.17	22.57
64	AFTER 2 WEEKS	7.69	9.4	0.42	54.9	0.128	1.23	22.38
	AFTER 6 WEEKS	8.64	10.5	0.45	51.7	0.122	1.21	23.42
	AFTER 13 WEEKS	9.63	10.5	0.48	49.8	0.132	1.09	21.91
65	AFTER 2 WEEKS	7.47	9.5	0.41	55.0	0.157	1.28	23.20
	AFTER 6 WEEKS	8.08	10.3	0.43	53.3	0.225	1.28	24.03
	AFTER 13 WEEKS	8.79	10.1	0.46	51.9	0.243	1.15	22.14
66	AFTER 2 WEEKS	7.22	8.9	0.40	55.3	0.130	1.23	22.25
	AFTER 6 WEEKS	8.56	10.2	0.45	52.2	0.119	1.19	22.77
	AFTER 13 WEEKS	9.43	10.2	0.47	50.2	0.126	1.08	21.58
67	AFTER 2 WEEKS	7.76	9.2	0.42	53.5	0.118	1.19	22.18
	AFTER 6 WEEKS	8.61	10.0	0.44	51.0	0.118	1.16	22.76
	AFTER 13 WEEKS	9.44	10.1	0.46	48.3	0.124	1.07	22.26
68	AFTER 2 WEEKS	7.50	9.0	0.41	54.8	0.126	1.20	21.91
	AFTER 6 WEEKS	8.19	10.0	0.43	52.3	0.124	1.22	23.41
	AFTER 13 WEEKS	8.98	10.1	0.46	50.8	0.129	1.12	22.06
69	AFTER 2 WEEKS	7.66	8.8	0.41	52.9	0.118	1.15	21.78
	AFTER 6 WEEKS	8.87	10.0	0.44	49.9	0.120	1.13	22.62
	AFTER 13 WEEKS	9.22	9.6	0.45	48.4	0.128	1.04	21.51
70	AFTER 2 WEEKS	6.95	9.3	0.40	57.5	0.183	1.34	23.32
	AFTER 6 WEEKS	7.56	10.5	0.42	56.2	0.259	1.39	24.76
	AFTER 13 WEEKS	8.25	10.4	0.46	55.4	0.270	1.26	22.78
71	AFTER 2 WEEKS	7.38	9.5	0.43	57.7	0.120	1.29	22.32
	AFTER 6 WEEKS	7.92	10.0	0.43	54.5	0.116	1.26	23.08
	AFTER 13 WEEKS	8.67	10.3	0.46	53.5	0.125	1.19	22.20
72	AFTER 2 WEEKS	7.27	9.0	0.41	56.4	0.120	1.24	22.03
	AFTER 6 WEEKS	8.53	10.4	0.45	53.0	0.117	1.22	22.99
	AFTER 13 WEEKS	9.41	10.5	0.48	50.8	0.125	1.11	21.93
73	AFTER 2 WEEKS	7.56	9.4	0.42	55.1	0.122	1.24	22.49
	AFTER 6 WEEKS	8.31	9.9	0.43	51.8	0.124	1.19	23.01
	AFTER 13 WEEKS	9.43	10.3	0.46	48.5	0.128	1.10	22.64
74	AFTER 2 WEEKS	7.20	9.1	0.41	56.8	0.122	1.27	23.30
	AFTER 6 WEEKS	8.34	10.3	0.44	53.2	0.119	1.23	23.11
	AFTER 13 WEEKS	9.32	10.2	0.47	50.2	0.134	1.09	21.74

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