



**Dialogue / Newsletters**

Home Page	What is Lignin?	Dialogue / Newsletters	Leadership & Staff
Members	FAQ	Feedback	Search

# Dialogue

September 1999, Volume 8,      An information service from the Lignin  
Number 1      Institute

## **Rationalized Lignin Nomenclature**

When reporting started in 1978 for the Chemical Substance Inventory of the Toxic Substances Control Act (TSCA) the process was structured so that companies were encouraged to report as many products and corresponding CAS numbers that qualified under the rules. To comply, manufacturers had to report production or importation of chemicals in excess of 10,000 pounds per year. Although the regulations clearly identified amounts that had to be reported, little was said about product definition and identity. Accurate product definition is important in reporting of products derived from lignins as many are polymers and fall into a category exempt from the reporting requirements.

To complicate the situation, in the previous 50 years or so, a real hodge podge of names and CAS numbers had been developed which fit various concepts of commercial lignin products. A major cause for this diversification was that commercial lignin products are complex mixtures (some components unknown) of organic polymers, dimers and monomers. In fact the exact chemical structure of lignin is still unknown. The result was 77 entries in the 1985 Edition of The Chemical Substances Inventory for commercial lignin products. Many lignin products could be legitimately designated by two or more names and corresponding CAS numbers resulting in miscommunication and confusion.

In 1995, the Lignin Institute (LI) adopted a nomenclature convention designed to end the confusion. LI Proposed:

- Terms such as spent sulfite liquor, spent pulping liquor, spent liquor will be used only for dilute raw material as it leaves the pulp mill.
- Specific lignin products are to be called (cation) lignosulfonates, lignin sulfonates or lignosulfonic acid (cation) salt. These terms are defined as being synonymous with the preferred term being (cation) lignosulfonate.

<b>Specific names of Lignosulfonate Salts and CAS numbers are:</b>
--

Calcium	CAS No. 8061-52-7
Sodium	CAS No. 8061-51-6
Ammonium	CAS No. 8061-53-8
Magnesium	CAS No. 8061-54-9
Chromium	CAS No. 9066-50-6
Aluminum	CAS No. 9066-49-3
Chromium, Iron	CAS No. 8075-74-9
Potassium	CAS No. 37314-65-1
Barium	CAS No. 38278-27-8
Iron	CAS No. 39331-38-9
Zinc	CAS No. 57866-49-6
Copper	CAS No. 61827-83-6
Iron, Titanium	CAS No. 68186-82-3
Manganese	CAS No. 68186-83-4
Iron, Potassium	CAS No. 68186-84-5
Aluminum, Chromium	CAS No. 69029-15-8
A cation is to be included in the name only if it exceeds 20% of the total cation on a mole basis. The 1998 production reports to the EPA by LI members have now incorporated the new nomenclature convention.	

[Go Back](#)



[Home Page](#) | [What is Lignin?](#) | [Dialogue/Newsletters](#) | [Leadership & Staff](#) | [Members](#) | [FAQ](#) | [Feed](#)

Copyright © 2007 Lignin Institute. All rights reserved.