

CLS

MATERIAL SAFETY DATA SHEET

Product ID: 12108

Trade Name: CHROME LIGNOSULFONATE

Revision Date: 02/17/2003

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: CHROME LIGNOSULFONATE
 Chemical Family: Lignosulfonate.
 Product Use: Oil well drilling fluid additive.
 Emergency Telephone (24 hr.): 281-561-1600

Supplied by: FEDERAL
 Wholesale Drilling Mud
 P.O. Box 42842
 Houston, TX 77242

Telephone Number: 281-561-1511
 Contact Person: Catherine Miller, Occupational Health

Revision Number: 2

HMIS Rating

Health: 2 Flammability: 1 Physical Hazard: 0 PPE: E

HMIS Key: 4=Severe, 3=Serious, 2=Moderate, 1=Slight, 0=Minimal Hazard. *Chronic effects - See Section 11. See Section 8 for Personal Protective Equipment recommendations.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS NO:	Wt. %	Ingredient Comments:
Lignosulfonic acid, chromium salt	9066-50-6	100	No comments.

3. HAZARDS IDENTIFICATION

Emergency Overview: Warning! May cause eye, skin and respiratory tract irritation. May cause skin sensitization, an allergic reaction, on repeated exposure. Long term inhalation of particulates may cause lung damage.

Canadian Regulations:

UN PIN No: Not regulated

WHMIS Class: D2B

Physical State: Powder

Odor: Odorless

Color: Brown

Potential Health Effects:

Acute Effects

Eye Contact: May irritate eyes.
Skin Contact: May be irritating to the skin. May cause skin sensitization, an allergic reaction, on repeated exposure.
Inhalation: May cause respiratory tract irritation.
Ingestion: May cause gastric distress, nausea and vomiting if ingested.

Carcinogenicity & Chronic Effects:

See Section 11 - Toxicological Information.

Routes of Exposure:

Eyes. Dermal (skin) contact. Inhalation.

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Target Organs: Respiratory System. Eyes. Skin.
Medical Conditions Aggravated By Exposure: Skin. Respiratory.

4. FIRST AID MEASURES

Eye Contact: Promptly wash eyes with lots of water while lifting eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Skin Contact: Wash skin thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if any discomfort continues.

Inhalation: Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Dilute with 2 - 3 glasses of water or milk, if conscious. Never give anything by mouth to an unconscious person. If signs of irritation or toxicity occur seek medical attention.

General Notes: Persons seeking medical attention should carry a copy of this MSDS with them.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point: F (C): 309F (154C)
Flammable Limits in Air - Lower (%): Not Determined
Flammable Limits in Air - Upper (%): Not Determined

Autoignition Temperature: F(C) Not Determined
Autoignition Temperature: °C 842F (450C)

Flammability Class: Not applicable
Other Flammable Properties: Dusts at sufficient concentrations can form explosive mixtures with air.
Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Do not enter fire area without proper personal protective equipment, including NIOSH/MSHA approved self-contained breathing apparatus. Evacuate area and fight fire from a safe distance. Water spray may be used to keep fire-exposed containers cool. Keep water run off out of sewers and waterways.

Hazardous Combustion Products: Oxides of: Sulfur. Carbon. Chromium fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment identified in Section 8.

Spill Procedures: Evacuate surrounding area, if necessary. Contain spilled material. Avoid the generation of dust. Sweep, vacuum, or shovel and place into closable container for disposal.

Environmental Precautions: Do not allow to enter sewer or surface and subsurface waters. Waste must be disposed of in accordance with federal, state and local laws.

7. HANDLING AND STORAGE

Handling: Put on appropriate personal protective equipment. Avoid contact with skin and eyes. Avoid generating or breathing dust. Use only with adequate ventilation. Wash thoroughly after handling.

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Storage:

Store in dry, well-ventilated area. Keep container closed. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Ingredient	CAS NO:	Wt. %	ACGIH TLV TWA	OSHA PEL TWA	Other	Notes
Lignosulfonic acid, chromium salt	9066-50-6	100	0.5 mg/m ³ (as Cr III)	0.5 mg/m ³ (as Cr III)		(1)

Notes:

(1) Control as an ACGIH particulate not otherwise specified (PNOS): 10 mg/m³ (Inhalable); 3 mg/m³ (Respirable) and an OSHA particulate not otherwise regulated (PNOR): 15 mg/m³ (Total); 5 mg/m³ (Respirable).

Engineering Controls: Use appropriate engineering controls such as, exhaust ventilation and process enclosure, to ensure air contamination and keep workers exposure below the applicable limits.

Personal Protection Equipment

Eye/Face Protection: Dust resistant safety goggles.

Skin Protection: Wear appropriate clothing to prevent repeated or prolonged skin contact. Chemical resistant gloves recommended for prolonged or repeated contact. Use protective gloves made of: Neoprene. Nitrile.

Respiratory Protection: If exposed to particulates/aerosols:
Use at least a NIOSH-approved N95 half-mask disposable particulate respirator. In work environments containing oil mist/aerosol use at least a NIOSH-approved P95 half-mask disposable or reusable particulate respirator.
If exposed to organic vapors:
Use a NIOSH/MSHA-approved organic vapor respirator. CCROV: CCR with organic vapor cartridge.

General Hygiene**Considerations:**

Work clothes should be washed separately at the end of each work day.

Disposable clothing should be discarded, if contaminated with product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	Brown
Odor:	Odorless
Physical State:	Powder
pH:	2.8 - 4.0 (1% solution)
Vapor Pressure:	Not applicable
Vapor Density (Air=1):	Not applicable
Boiling Point:	Not determined
Melting/Freezing Point:	Not determined
Solubility (Water):	Soluble
Specific Gravity (H₂O = 1):	1.2 - 1.4
Evaporation Rate:	Not applicable
Odor Threshold(s):	Not determined

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions to Avoid:	Not determined.
Materials to Avoid:	Contact with oxidizing agents.
Hazardous Decomposition Products:	For combustion products, see Section 5.

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Hazardous Polymerization:

Will not occur

11. TOXICOLOGICAL INFORMATION

Component Toxicological Data

Product Toxicological Information:

Long term inhalation of particulate can cause irritation, inflammation and/or permanent injury to the lungs. Illnesses such as pneumoconiosis ("dusty lung"), pulmonary fibrosis, chronic bronchitis, emphysema and bronchial asthma may develop.

12. ECOLOGICAL INFORMATION

Product Ecotoxicity Data: Contact M-I Environmental Affairs Department for available product ecotoxicity data.

Biodegradation: Not determined

Bioaccumulation: Not determined

Octanol/Water Partition Coefficient: Not determined

13. DISPOSAL CONSIDERATIONS

Waste Classification: Not determined.

Waste Management: Under U.S. Environmental Protection Agency (EPA) Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine at the time of disposal, whether the product meets RCRA criteria for the hazardous waste. This is because product uses, transformations, mixtures, processes, etc., may render the resulting materials hazardous. Empty containers retain residues. All labeled precautions must be observed.

Disposal Method: Recover and reclaim or recycle, if practical. Should this product become a waste, dispose of in a permitted industrial landfill. Ensure that the containers are empty by the RCRA criteria prior to disposal in a permitted industrial landfill.

14. TRANSPORT INFORMATION

U.S. DOT

Shipping Description: Not regulated

TDG (Canada):

Shipping Description: Not regulated

UN PIN No: Not regulated

IMDG:

Shipping Description: Not regulated

ICAO/IATA:

Shipping Description: Not regulated

15. REGULATORY INFORMATION

U.S.Federal and State Regulations

SARA 311/312:

SARA 311/312 Hazard Categories: Immediate (acute) health hazard.

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Ingredient	SARA 313	CERCLA RQ	SARA 302 / TPQs	CA 65 Cancer	CA 65 Dev. Tox.	CA 65 Repro. F	CA 65 Repro. M
Lignosulfonic acid, chromium salt	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

State Comments: Proposition 65: This product is not known to contain chemicals considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer and/or reproductive toxicity.

Ingredient	U.S. Federal Regulation Comments:
Lignosulfonic acid, chromium salt	SARA Section 313 Form R reporting required for 1.0% de minimus chromium concentration. CERCLA RQ for chromium is 5000 lb.

International Inventories

Ingredient	CAS NO:	TSCA	DSL	NDSL	EINECS	AICS
Lignosulfonic acid, chromium salt	9066-50-6	Listed	Listed	Not Listed	Listed	Listed

Inventory Comment: "Listed" indicates the component is listed or exempt from listing on the chemical inventory.

Canadian Regulations:

Controlled Products Regulations Statement: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Class: D2B

16. OTHER INFORMATION

The following sections have been revised: 15,

Disclaimer:

MSDS furnished independent of product sale. While every effort has been made to accurately describe this product, some of the data are obtained from sources beyond our direct supervision. We can not make any assertions as to its reliability or completeness; therefore, user may rely on it only at user's risk. We have made no effort to censor or conceal deleterious aspects of this product. Since we cannot anticipate or control the conditions under which this information and product may be used, we make no guarantee that the precautions we have suggested will be adequate for all individuals and/or situations. It is the obligation of each user of this product to comply with the requirements of all applicable laws regarding use and disposal of this product. Additional information will be furnished upon request to assist the user; however, no warranty, either expressed or implied, nor liability of any nature with respect to this product or to the data herein is made or incurred hereunder.