

## CLS- Chrome Lignosulfonate

### SECTION 1. IDENTIFICATION

**Product Identifier** CLS- Chrome Lignosulfonate  
**Recommended Use** Drilling Fluid Additive.  
**Manufacturer** AES Drilling Fluids, LLC, 11767 Katy Freeway, Suite 230, Houston, TX, 77079, Sales & Information, 281-556-5628  
**Emergency Phone No.** AES Drilling Fluids, LLC, 1-888-556-4533  
**Date of Preparation** August 13, 2015

### SECTION 2. HAZARD IDENTIFICATION

#### Classification

Eye irritation - Category 2A

#### Label Elements



#### Hazard Statement(s):

Warning

H320 Causes eye irritation.

#### Precautionary Statement(s):

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### Other Hazards

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Lignosulfonic acid, chromium salt	9066-50-6	N/A	Chrome Lignosulfonate

#### Notes

The specific chemical identity and/or exact percentage of composition (concentration) has been withheld as a trade secret.

### SECTION 4. FIRST-AID MEASURES

#### First-aid Measures

##### Inhalation

Remove source of exposure or move to fresh air. Get medical advice/attention if irritation develops.

### **Skin Contact**

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. If irritation persists, get medical advice/attention.

### **Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Seek medical advice/attention.

### **Ingestion**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical advice or attention if you feel unwell or are concerned.

### **First-aid Comments**

Get medical advice or attention if you feel unwell or are concerned.

## **SECTION 5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

### **Specific Hazards Arising from the Product**

Combustible dust. May form combustible dust concentration in air.

### **Special Protective Equipment and Precautions for Fire-fighters**

No special precautions are necessary. Dust explosion hazard. Use water spray or fog to prevent dust formation and minimize risk of explosion. Firefighters should wear appropriate breathing apparatus and protective clothing.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Eliminate all ignition sources. Use grounded, explosion-proof equipment. Do not breathe vapours, mists, fumes or dust.

### **Environmental Precautions**

Minimize dust during clean up. Eliminate sources of ignition in dusty conditions. Prevent product from entering drains, soil, ditches, sewers, waterways and/or groundwater.

### **Methods and Materials for Containment and Cleaning Up**

Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Store recovered product or absorbent material in suitable containers for disposal according to local regulations.

### **Other Information**

Contact EH&S regarding spill as spills of certain products and certain quantities may require reporting to various authorities.

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Only use where there is adequate ventilation. Avoid creating excessive dust while handling the product. Avoid inhaling chemical or vapours. Avoid contact with eyes, skin and clothing. Wash hands thoroughly after handling this material. Keep away from heat and open flames. Wear personal protective equipment to avoid direct contact with this chemical.

### **Conditions for Safe Storage**

STORAGE: Keep in closed containers in cool, dry, well ventilated area.

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL		AIHA® WEEL®	
	TWA	STEL [C]	TWA	Ceiling	8-hr TWA	Short-term TWA [C]
Lignosulfonic acid, chromium salt	Not established		Not established		Not established	

### Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. A suitable eyewash station should be within acceptable distance to the work area.

### Individual Protection Measures

#### Eye/Face Protection

Safety glasses or goggles.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

#### Respiratory Protection

Wear a NIOSH approved particulate respiratory equipped with an N95, R95, or P95 filter.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

Appearance	Brown fine powder.
Odour Threshold	Not available
pH	3.5
Melting Point/Freezing Point	Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	Not available
Solubility	Soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
<b>Other Information</b>	
Physical State	Solid
Bulk Density	Not available
Critical Temperature	Not available

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions of use.

### Chemical Stability

Stable under normal conditions.

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**Possibility of Hazardous Reactions**

Product will not undergo hazardous polymerization.

**Conditions to Avoid**

None known.

**Incompatible Materials**

Oxidizing agents.

**Hazardous Decomposition Products**

Carbon oxides. Oxides of sulphur.

**SECTION 11. TOXICOLOGICAL INFORMATION****Likely Routes of Exposure**

Dust may result in irritation of skin, eye or respiratory system.

**Acute Toxicity**

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Lignosulfonic acid, chromium salt	Not available	Not available	Not available

**Skin Corrosion/Irritation**

May cause skin irritation.

**Serious Eye Damage/Irritation**

May cause mechanical irritation to eyes.

**STOT (Specific Target Organ Toxicity) - Single Exposure****Inhalation**

High dust levels may cause irritation of the respiratory tract, including sneezing and coughing.

**Skin Absorption**

No information was located.

**Ingestion**

May cause discomfort if swallowed.

**Aspiration Hazard**

No information was located.

**STOT (Specific Target Organ Toxicity) - Repeated Exposure**

No information was located.

**Respiratory and/or Skin Sensitization**

No information was located.

**Carcinogenicity**

Chemical Name	IARC	ACGIH®	NTP	OSHA
Lignosulfonic acid, chromium salt	Not Listed	Not Listed	Not Listed	Not Listed

No information was located.

**Reproductive Toxicity****Development of Offspring**

No information was located.

**Sexual Function and Fertility**

No information was located.

**SECTION 12. ECOLOGICAL INFORMATION**

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## Ecotoxicity

No information was located.

### Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Lignosulfonic acid, chromium salt	Not available	Not available	Not available	Not available

### Persistence and Degradability

No information was located.

### Bioaccumulative Potential

No information was located.

### Mobility in Soil

No information was located.

### Other Adverse Effects

There is no information available.

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

Bury in a licensed landfill or burn in an approved incinerator according to federal, provincial/state, and local regulations. Dispose of unused product in accordance with local environmental and public health regulations.

## SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

**Special Precautions** Not applicable

### Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### Canada

#### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL or are not required to be listed.

#### USA

#### Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are on the TSCA Inventory or exempt from the TSCA.

#### Additional USA Regulatory Lists

Product does not contain any chemicals subject to the reporting requirement of CERCLA.

SARA Title III - Section 302: No listed components.

SARA Title III - Section 311/312: Acute Hazards

SARA Title III - Section 313: No listed components.

## SECTION 16. OTHER INFORMATION

**SDS Prepared By** HSE Department

**Phone No.** 403-269-2800

**Date of Preparation** August 13, 2015

**Disclaimer** Do not handle or use until precautions on MSDS are read and understood. The information on this form is furnished solely for the purpose of enabling those who transport, handle or use our

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products to ensure the safety and health of their employees and to comply with various laws and regulations (federal, state and local). We believe the statements, technical information and recommendations contained herein are reliable but, they are given without warranty or guarantee of any kind, express or implied and we assume no responsibility for any loss, damage, direct or consequential, arising out of their use.