



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1 – IDENTIFICATION

Product Name: Chrome Free Lignosulfonate

Product Synonyms

- Chrome-Free Lignosulfonate Powder
- Chromium-Free Lignosulfonate
- Chrome-Free Mud Thinner
- Chrome-Free Drilling Fluid Additive

Product Type

Organic Polymer / Oilfield Drilling Fluid Additive

Recommended Use

- Water-based drilling fluids
- Oilfield drilling mud thinner
- Rheology modifier
- Deflocculant
- Filtration control additive
- High-temperature drilling fluid systems

Supplier

BASEKIM



SECTION 2 – HAZARD IDENTIFICATION

GHS Classification

This product is **not classified as hazardous** according to GHS under normal conditions of use.

Signal Word

None

Hazard Pictograms

None

Hazard Statements

Not classified as hazardous.

Precautionary Statements

- Avoid breathing dust.
- Avoid prolonged eye contact.
- Wash hands thoroughly after handling.
- Use adequate ventilation during handling.
- Wear suitable eye protection where dust may be generated.

Other Hazards

Dust generated during handling may cause temporary irritation to:

- Eyes
- Nose
- Throat
- Respiratory tract

Wet material may create slippery surfaces.



SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Substance Type

Mixture

Component	Typical Content
Modified Chrome-Free Lignosulfonate	≥90%
Moisture	≤8.5%
Water Insoluble Matter	≤2.5%
Minor Organic & Mineral Components	Balance

Typical Product Characteristics

Appearance:
Brown powder

pH (2% Solution):
2.8–3.8

Chromium:
Not intentionally added

The product contains no intentionally added chromium compounds and is formulated as a chrome-free drilling fluid additive.

SECTION 4 – FIRST AID MEASURES

Eye Contact

Immediately flush eyes with plenty of clean water for at least 15 minutes.

Remove contact lenses if present.

Seek medical attention if irritation persists.



Skin Contact

Wash thoroughly with soap and water.

Remove contaminated clothing.

Seek medical advice if irritation develops.

Inhalation

Move affected person to fresh air.

Keep warm and at rest.

Seek medical attention if respiratory irritation continues.

Ingestion

Rinse mouth thoroughly with water.

Drink plenty of water.

Do not induce vomiting unless instructed by medical personnel.

Consult a physician if discomfort occurs.

Most Important Symptoms

Temporary:

- Eye irritation
- Dust irritation
- Coughing
- Dry throat



SECTION 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Media

- Water spray
- Foam
- Carbon dioxide
- Dry chemical

Specific Hazards

Product is not highly flammable.

Organic material may decompose under intense fire.

Hazardous Combustion Products

- Carbon monoxide
- Carbon dioxide
- Sulfur oxides
- Organic smoke

Fire Fighting Equipment

Use self-contained breathing apparatus (SCBA) and protective clothing.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions

Avoid generating airborne dust.

Wear suitable PPE.

Environmental Precautions

Prevent large quantities from entering waterways.



Methods for Cleanup

Sweep or vacuum carefully.

Avoid dust formation.

Collect material into suitable containers for reuse or disposal.

Wash contaminated area with water after cleanup.

SECTION 7 – HANDLING AND STORAGE

Handling

Avoid dust formation.

Use with adequate ventilation.

Avoid eye contact.

Wash hands after handling.

Storage

Store in:

- Cool location
- Dry warehouse
- Well-ventilated area

Protect from:

- Moisture
- Rain
- Direct sunlight

Keep packaging tightly closed.



SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

No specific occupational exposure limits established.

Maintain airborne dust below applicable nuisance dust exposure limits.

Engineering Controls

General mechanical ventilation.

Local exhaust where dust generation occurs.

Personal Protective Equipment

Eye Protection

Safety glasses with side shields.

Hand Protection

Chemical-resistant work gloves.

Respiratory Protection

N95 or equivalent dust respirator where dust concentrations exceed recommended limits.

Body Protection

Normal industrial protective clothing.



SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:
Brown powder

Odor:
Slight organic odor

Physical State:
Solid

pH (2% Solution):
2.8–3.8

Moisture:
≤8.5%

Water Insoluble:
≤2.5%

Bulk Density:
Approximately 500–700 kg/m³

Specific Gravity:
Approximately 1.3–1.5

Flash Point:
Not applicable

Boiling Point:
Not applicable

Melting Point:
Not determined

Auto-Ignition Temperature:
Not available

Explosive Properties:
None



Oxidizing Properties:
None

Solubility:
Dispersible in water

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability

Stable under normal storage conditions.

Reactivity

No dangerous reactions expected.

Conditions to Avoid

- Moisture
- Excessive heat
- Open flames

Incompatible Materials

Strong oxidizing agents.

Strong mineral acids.

Hazardous Decomposition Products

- Carbon monoxide
- Carbon dioxide
- Sulfur oxides



SECTION 11 – TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

- Eye contact
- Skin contact
- Dust inhalation
- Accidental ingestion

Acute Toxicity

Not expected to present acute toxicity.

Skin Irritation

May cause mild temporary irritation.

Eye Irritation

Dust may cause mechanical irritation.

Respiratory Effects

Dust may cause coughing or throat irritation.

Sensitization

Not expected.

Carcinogenicity

No known carcinogenic components.

Mutagenicity

No known effects.

Reproductive Toxicity

No known effects.



Aspiration Hazard

Not applicable.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity

Not expected to be harmful under normal conditions.

Persistence

Naturally biodegradable organic polymer.

Bioaccumulation

Not expected.

Mobility

Water dispersible.

Environmental Effects

Avoid excessive discharge into natural waterways.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose according to applicable local regulations.

Reuse where practical.

Recycle packaging where facilities exist.

Dispose of contaminated packaging through approved waste contractors.



SECTION 14 – TRANSPORT INFORMATION

UN Number

Not regulated.

UN Proper Shipping Name

Not applicable.

Hazard Class

Not regulated.

Packing Group

Not applicable.

Marine Pollutant

No.

ADR/RID

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.



SECTION 15 – REGULATORY INFORMATION

Prepared according to:

- OSHA Hazard Communication Standard (29 CFR 1910.1200)
- GHS (Globally Harmonized System)
- REACH (EC) No. 1907/2006
- CLP Regulation (EC) No. 1272/2008

This product is generally not classified as hazardous under GHS when supplied and used as intended. Users should comply with applicable occupational exposure limits for airborne dust.

SECTION 16 – OTHER INFORMATION

Revision Number: 1.0

Prepared For: BASEKIM

Prepared By: Technical Department