

## SAFETY DATA SHEET (SDS / MSDS)

# Chrome Free Lignosulfonate

GREEN AGROCHEM Industrial Chemicals - Oilfield Lignosulfonate Product Safety Document

Product Code	GAC-IC-CFLS	Revision Date	2026-05-03
CAS No.	Mixture / not assigned	Version	MSDS-GAC-IC-2026

### SECTION 1: Identification

Item	Information
Product Name	Chrome Free Lignosulfonate
Synonyms	Chrome-Free Lignosulfonate; Chromium-Free Lignosulfonate; CFLS
CAS No.	Mixture / not assigned
Product Code	GAC-IC-CFLS
Recommended Uses	Drilling mud thinner, water-based drilling fluid deflocculant, rheology control additive, fluid loss control support.
Supplier	GREEN AGROCHEM CO., LIMITED
Address	South West Station Road, Fengtai District, Beijing, China
Email	info@greenagrochem.com
Website	www.lignincorp.com
Emergency Contact	Available during normal business hours.

### SECTION 2: Hazard(s) Identification

This product is supplied for industrial/professional use. Final hazard classification may depend on local regulations, product grade, impurity profile and downstream application. Chrome-free product; no chromium intentionally added. Treat as industrial powder and control nuisance dust exposure.

**Potential hazards:**

- Dust may cause mild eye, skin, nose and throat irritation.
- Excessive dust inhalation may irritate the respiratory tract.
- Fine organic powder may form combustible dust clouds under severe dust/ignition conditions.
- Wet or spilled product may create a slip hazard.

Signal Word	Precautionary Statements
None assigned based on available supplier information	Avoid breathing dust. Avoid contact with eyes. Use adequate ventilation. Wash hands after handling. Keep workplace clean and dry.

### SECTION 3: Composition / Information on Ingredients

Component	CAS No.	Typical Content
Modified Chrome-Free Lignosulfonate	Mixture / not assigned	Main component
Commercial inorganic salts, ash and moisture	Not applicable	Typical minor constituents
Chromium	Not applicable	No chromium intentionally added; grade / COA dependent

### SECTION 4: First-Aid Measures

Exposure Route	First-Aid Measure
Inhalation	Move person to fresh air. Obtain medical advice if symptoms persist.
Eye Contact	Flush cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do.
Skin Contact	Wash thoroughly with soap and water. Remove contaminated clothing if necessary.
Ingestion	Rinse mouth and drink water. Seek medical advice if discomfort occurs.
Most Important Symptoms	Possible mild mechanical irritation to eyes, skin, nose or throat. For chromium-containing grades, prolonged or repeated dust exposure should be controlled.

### SECTION 5: Fire-Fighting Measures

Item	Information
Suitable Extinguishing Media	Water spray, foam, dry chemical powder or CO2.
Specific Hazards	Dry organic powder may burn in strong fire conditions. Avoid dust clouds near ignition sources.
Hazardous Combustion Products	CO, CO2, sulfur oxides, metal oxides and irritating fumes.
Firefighter Protection	Use self-contained breathing apparatus for major fire.

### SECTION 6: Accidental Release Measures

- Avoid dust formation and avoid breathing dust.
- Use personal protective equipment recommended in Section 8.
- Sweep, shovel or vacuum material and collect in suitable containers.
- Prevent release to drains, surface water and soil where practical.
- Wash remaining residues carefully after collection because surfaces may be slippery.

### SECTION 7: Handling and Storage

Item	Information
Handling	Avoid unnecessary dust generation. Use normal industrial hygiene practice. Avoid contact with eyes. Use mechanical transfer where practical.
Storage	Store in a cool, dry and ventilated warehouse. Protect from moisture. Keep

<b>Incompatible Materials</b>	packaging tightly sealed. Strong oxidizing agents. Avoid excessive heating above normal processing conditions.
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**SECTION 8: Exposure Controls / Personal Protection**

Control / PPE	Recommendation
<b>Engineering Controls</b>	Local exhaust ventilation recommended where dust may form. Use enclosed transfer or dust collection where practical.
<b>Eye Protection</b>	Safety glasses or goggles, EN166 equivalent.
<b>Hand Protection</b>	Protective gloves suitable for industrial chemical handling.
<b>Respiratory Protection</b>	Dust mask P2 / N95 or equivalent when dusty.
<b>Body Protection</b>	Work clothing and safety shoes.
<b>Hygiene Measures</b>	Wash hands before eating, drinking or smoking. Do not eat, drink or smoke in work areas.

**SECTION 9: Physical and Chemical Properties**

Property	Value
<b>Appearance</b>	Brown powder
<b>Physical State</b>	Solid powder
<b>Odor</b>	Light characteristic odor
<b>pH</b>	Typical 7.0 - 10.0
<b>Solubility</b>	Soluble / dispersible in water
<b>Density / Bulk Density</b>	Approx. 0.4 - 0.7 g/cm3 bulk density
<b>Moisture</b>	<= 8.5% typical
<b>Thermal Decomposition</b>	Approx. 200 - 230°C for dry organic solids

**SECTION 10: Stability and Reactivity**

Item	Information
<b>Reactivity</b>	No dangerous reaction expected under normal use.
<b>Chemical Stability</b>	Stable under normal ambient and recommended storage conditions.
<b>Conditions to Avoid</b>	Excessive heating, moisture exposure, dust accumulation and incompatible materials.
<b>Incompatible Materials</b>	Strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	CO, CO2, SOx, NOx, metal oxides and irritating fumes under fire conditions.

**SECTION 11: Toxicological Information**

- No complete product-specific toxicological dataset is available for every grade.
- Dust may irritate eyes and respiratory tract.
- Repeated or prolonged skin contact may cause dryness or mild irritation in sensitive users.
- No unusual chronic effects are expected under normal industrial handling when exposure is controlled.

**SECTION 12: Ecological Information**

- Avoid uncontrolled discharge to drains, rivers, lakes and soil.
- Large releases may increase biological oxygen demand and affect dissolved oxygen in surface water.
- Product residues should be managed according to local environmental regulations.

**SECTION 13: Disposal Considerations**

Dispose of product residues, contaminated absorbents and packaging in accordance with local, regional and national regulations. Recycle uncontaminated product or packaging where practical.

**SECTION 14: Transport Information**

Transport Item	Information
<b>UN Number</b>	Not regulated based on available information
<b>Proper Shipping Name</b>	Not classified as dangerous goods
<b>Transport Hazard Class</b>	Not regulated
<b>Packing Group</b>	Not regulated
<b>Marine Pollutant</b>	No based on available information
<b>Transport Note</b>	Confirm transport classification with local regulations, final product grade and destination requirements.

**SECTION 15: Regulatory Information**

Product is supplied for industrial/professional use unless otherwise confirmed in writing. Users are responsible for compliance with applicable local regulations, workplace exposure rules, drilling fluid requirements, disposal rules and downstream registration obligations.

**SECTION 16: Other Information**

Item	Information
<b>Issue Date</b>	2026-05-03
<b>Prepared By</b>	GREEN AGROCHEM CO., LIMITED
<b>Document Type</b>	Safety Data Sheet / Material Safety Data Sheet
<b>Disclaimer</b>	Information is provided for safe handling guidance and believed accurate at issue date. It does not constitute a warranty or final regulatory classification for every jurisdiction or application.

**ANNEX A: Exposure Scenario**

Exposure Scenario Item	Control Description
<b>1. Identified Uses</b>	Drilling fluid thinner; water-based mud deflocculant; rheology control additive; fluid loss support.

<b>2. User Sectors</b>	Industrial and professional users; oilfield drilling service companies; mud formulators.
<b>3. Product Form</b>	Powder handled in bags, big bags, hoppers or closed transfer systems.
<b>4. Operational Conditions</b>	Indoor, warehouse, field mud-mixing or covered outdoor use under normal operating conditions.
<b>5. Duration and Frequency</b>	Typical work shift up to 8 hours; batch or continuous industrial handling.
<b>6. Amount Used / Dilution</b>	Use according to drilling fluid formulation, process requirement and customer technical instruction.
<b>7. Exposure Routes</b>	Inhalation of dust, eye contact, skin contact and incidental ingestion.
<b>8. Engineering Controls</b>	Use local exhaust ventilation, enclosed transfer, dust collection or wet mixing where dust may form.
<b>9. Respiratory Protection</b>	Dust mask P2 / N95 or equivalent when dusty.
<b>10. Eye and Skin Protection</b>	Use safety glasses/goggles, gloves, work clothing and safety shoes.
<b>11. Hygiene Measures</b>	Wash hands after handling; do not eat, drink or smoke in work areas.
<b>12. Housekeeping</b>	Clean spills promptly. Avoid accumulation of powder, residues or slippery wet deposits.
<b>13. Environmental Controls</b>	Prevent discharge to drains, rivers, lakes and soil.
<b>14. Waste Controls</b>	Collect residues and contaminated absorbents for disposal according to regulations.
<b>15. Storage Controls</b>	Keep packaging sealed; protect from moisture, contamination and strong oxidizers.
<b>16. Downstream User Obligations</b>	Evaluate suitability under actual process conditions and conduct workplace risk assessment where required.

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