

SAFETY DATA SHEET (SDS / MSDS)

Ferrochrome Lignosulfonate

GREEN AGROCHEM Industrial Chemicals - Oilfield Lignosulfonate Product Safety Document

Product Code	GAC-IC-FCLS	Revision Date	2026-05-03
CAS No.	8075-74-9	Version	MSDS-GAC-IC-2026

SECTION 1: Identification

Item	Information
Product Name	Ferrochrome Lignosulfonate
Synonyms	Ferrochrome Lignosulphonate; Iron Chromium Lignosulfonate; FCLS
CAS No.	8075-74-9
Product Code	GAC-IC-FCLS
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. Contains iron-chromium lignosulfonate complexes. Control dust exposure and follow local workplace rules for chromium-containing industrial chemicals.

Potential hazards:

- Dust may cause mild eye, skin, nose and throat irritation.
- Chromium-containing complexed material: minimize inhalation and follow applicable occupational exposure rules for chromium-containing dusts.
- 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. For chromium-containing grades, control dust exposure and dispose according to local requirements.

SECTION 3: Composition / Information on Ingredients

Component	CAS No.	Typical Content
Ferrochrome Lignosulfonate	8075-74-9	Main component
Total Iron / Total Chromium in complexed form	Not applicable	Typical Fe <= 4%; Cr <= 4%; grade dependent
Sulfates, moisture and inorganic salts	Not applicable	Typical minor constituents

SECTION 4: First-Aid Measures

Exposure Route	First-Aid Measure
Inhalation	Move person to fresh air. Obtain medical advice if symptoms persist. Flush cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do.
Eye Contact	
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. Store in a cool, dry and ventilated warehouse. Protect from moisture. Keep packaging tightly sealed. Strong oxidizing agents. Avoid excessive heating above normal processing conditions.
Storage	
Incompatible Materials	

SECTION 8: Exposure Controls / Personal Protection	
Control / PPE	Recommendation
Engineering Controls	Local exhaust ventilation recommended where dust may form. Use enclosed transfer or dust collection where practical. Safety glasses or goggles, EN166 equivalent. Protective gloves suitable for industrial chemical handling. Dust mask P2 / N95 or equivalent when dusty. For chromium-containing grades or high dust exposure, use a higher-efficiency respirator according to workplace risk assessment. Work clothing and safety shoes. Wash hands before eating, drinking or smoking. Do not eat, drink or smoke in work areas.
Eye Protection	
Hand Protection	
Respiratory Protection	
Body Protection	
Hygiene Measures	

SECTION 9: Physical and Chemical Properties	
Property	Value
Appearance	Yellow-brown to brown powder
Physical State	Solid powder
Odor	Light characteristic odor
pH	Grade dependent
Solubility	Soluble / dispersible in water
Density / Bulk Density	Approx. 0.532 g/cm ³
Typical Lignosulfonate Content	55 - 60% typical
Thermal Decomposition	Approx. 200 - 230°C for dry organic solids

SECTION 10: Stability and Reactivity	
Item	Information
Reactivity	No dangerous reaction expected under normal use.
Chemical Stability	Stable under normal ambient and recommended storage conditions.
Conditions to Avoid	Excessive heating, moisture exposure, dust accumulation and incompatible materials.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	CO, CO ₂ , SO _x , NO _x , 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.
 - For chromium-containing grades, avoid repeated inhalation of dust and comply with applicable occupational exposure rules for chromium compounds in the user jurisdiction.
 - 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.
 - Chromium-containing product residues should be evaluated and disposed of according to local metal-containing waste requirements.

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. Chromium-containing residues may require specific waste evaluation before disposal.

SECTION 14: Transport Information	
Transport Item	Information
UN Number	Not regulated based on available information
Proper Shipping Name	Not classified as dangerous goods
Transport Hazard Class	Not regulated
Packing Group	Not regulated
Marine Pollutant	No based on available information
Transport Note	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. Chromium-containing grades may be subject to additional workplace, environmental or customer restrictions in certain jurisdictions.

SECTION 16: Other Information	
Item	Information
Issue Date	2026-05-03
Prepared By	GREEN AGROCHEM CO., LIMITED
Document Type	Safety Data Sheet / Material Safety Data Sheet
Disclaimer	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
1. Identified Uses	Drilling fluid thinner; water-based mud deflocculant; rheology control additive; fluid loss support.
2. User Sectors	Industrial and professional users; oilfield drilling service companies; mud formulators.
3. Product Form	Powder handled in bags, big bags, hoppers or closed transfer systems.
4. Operational Conditions	Indoor, warehouse, field mud-mixing or covered outdoor use under normal operating conditions.
5. Duration and Frequency	Typical work shift up to 8 hours; batch or continuous industrial handling.
6. Amount Used / Dilution	Use according to drilling fluid formulation, process requirement and customer technical instruction.
7. Exposure Routes	Inhalation of dust, eye contact, skin contact and incidental ingestion.
8. Engineering Controls	Use local exhaust ventilation, enclosed transfer, dust collection or wet mixing where dust may form.
9. Respiratory Protection	Dust mask P2 / N95 or equivalent when dusty. For chromium-containing grades or high dust exposure, use a higher-efficiency respirator according to workplace risk assessment.
10. Eye and Skin Protection	Use safety glasses/goggles, gloves, work clothing and safety shoes.
11. Hygiene Measures	Wash hands after handling; do not eat, drink or smoke in work areas.
12. Housekeeping	Clean spills promptly. Avoid accumulation of powder, residues or slippery wet deposits.
13. Environmental Controls	Prevent discharge to drains, rivers, lakes and soil.
14. Waste Controls	Collect residues and contaminated absorbents for disposal according to regulations.
15. Storage Controls	Keep packaging sealed; protect from moisture, contamination and strong oxidizers.
16. Downstream User Obligations	Evaluate suitability under actual process conditions and conduct workplace risk assessment where required.

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