

TECHNICAL DATA SHEET

Sodium Lignosulfonate Dust Control Liquid

Liquid Lignin-Based Dust Suppressant and Surface Binder for Roads, Mining and Industrial Yards

Product Code	GAC-NaLS-DC-Liquid	Product Type	Sodium Lignosulfonate / Dust Control Liquid / Surface Binder
CAS No.	8061-51-6	Physical Form	Dark brown water-soluble liquid concentrate
Version	V2.1 May 2026	Primary Markets	Road Dust Control - Mining Haul Roads - Stockpiles - Industrial Yards

Primary Role Liquid dust suppressant	Performance Focus Fast dilution and surface binding	Best Fit Roads, yards, stockpiles, haul roads	Supply Support TDS, SDS, COA and samples
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1. Product Overview

Sodium Lignosulfonate Dust Control Liquid is a water-soluble lignin-based liquid concentrate designed for dust suppression, surface binding and bulk material handling. The liquid form allows fast dilution, easier spraying and more uniform distribution compared with dry powder addition.

After application and drying, the lignosulfonate binder helps capture fine dust particles and forms a cohesive surface film or crust. It is suitable for unpaved roads, mining haul roads, industrial yards, stockpiles and other high-dust environments where a chloride-free, bio-based dust-control option is preferred.

This TDS provides typical guidance only. Application rate, dilution ratio and reapplication frequency should be adjusted by soil type, traffic level, climate, rainfall and target dust-control duration.

2. Key Performance Functions

- **Dust Suppression:** binds loose surface particles and reduces airborne dust from roads, yards and stockpiles.
- **Surface Crusting:** forms a tacky film during drying and supports durable surface cohesion after curing.
- **Liquid Handling:** suitable for dilution, tank mixing and spraying systems without powder dissolution steps.
- **Chloride-Free Alternative:** useful where chloride salts are not preferred due to corrosion, environmental or equipment concerns.
- **Particle Binding:** supports cohesion of dusty bulk solids and fine mineral particles in handling areas.
- **Bio-Based Polymer:** lignin-derived additive for customers seeking renewable carbon-based dust-control solutions.

3. Main Specifications

Parameter	Specification
Appearance	Dark brown liquid
Solid Content	45% - 55%
Lignosulfonate Content	>= 45% on liquid basis
pH Value	7.0 - 10.5
Density	Approx. 1.20 - 1.28 g/cm ³
Water Solubility	Completely miscible with water
Water-Insoluble Matter	<= 1.0%
Reducing Sugar	Typical lignosulfonate liquid range
Viscosity	Product and temperature dependent
Odor	Slight characteristic lignin odor

Note: The above values are typical technical data for reference. Final agreed specification and COA shall prevail.

4. Recommended Application Areas

Application Area	Typical Use	Customer Value
Unpaved Road Dust Control	Diluted spray treatment for rural roads, construction roads and service roads.	Reduces dust generation and improves surface binding.
Mining Haul Roads	Dust-control treatment for mine roads and material transport routes.	Improves visibility, operating environment and dust management.
Industrial Yards	Spray treatment for storage yards, loading areas and plant traffic routes.	Reduces fine dust movement and improves site cleanliness.
Stockpiles & Bulk Solids	Surface binding aid for dusty mineral, coal, coke, fertilizer or aggregate piles.	Helps reduce wind-blown dust and material loss.
Soil Surface Stabilization	Temporary surface stabilization after proper site testing.	Supports cohesion in selected soil and aggregate surfaces.

5. Suggested Usage Guidance

Application	Typical Starting Dosage / Use	Technical Note
Dilution before application	Typically dilute with water before spraying	Common starting dilution can be adjusted from concentrate to site conditions.
Topical road treatment	0.3 - 0.5 gallons prepared solution per square yard	Adjust by traffic volume, surface porosity, weather and desired service period.
Stockpile treatment	Apply evenly until surface is uniformly wetted	Avoid over-application that may cause runoff or material handling issues.
Reapplication	Site-specific interval	Reapply after heavy rain, strong traffic abrasion or loss of surface crust.

Dosage and application method should be verified by laboratory or pilot testing. Performance depends on formulation type, raw materials, process conditions, temperature, moisture, mixing time and target technical results.

6. Packaging, Storage & Handling

<p>Packaging</p> <ul style="list-style-type: none"> IBC tank, flexitank, drum or bulk liquid shipment available according to order volume. Export packaging can be arranged according to destination, storage condition and customer handling equipment. Keep containers sealed and protected from contamination during storage and transport. 	<p>Storage & Handling</p> <ul style="list-style-type: none"> Store in closed containers in a cool, dry and ventilated area. Protect from freezing, overheating, direct sunlight and contamination. Stir or circulate before use if long storage causes slight settling or viscosity change. Recommended shelf life: 6-12 months under original sealed packaging and proper storage conditions.
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Please refer to the corresponding Safety Data Sheet before use. Product suitability for regulated applications must be confirmed separately according to local laws and customer requirements.

7. Documents & Technical Support

- TDS, SDS/MSDS, COA and agreed specification support.
- Sample arrangement and product grade recommendation.
- Packing photos, loading information and export document support.
- Application discussion and grade selection support for industrial buyers.

8. Inquiry Information

For quotation, sample request or technical document support

Please provide application, required quantity, destination port, packaging preference and target technical requirement.

Website: www.lignincorp.com | **Email:** info@greenagrochem.com

Disclaimer

The information in this Technical Data Sheet is provided for reference and general guidance only. It does not constitute a legally binding specification or warranty. Customers should conduct their own tests to determine product suitability for their intended application. Final commercial specification shall be subject to agreed contract, product grade and COA.