

TECHNICAL DATA SHEET

Calcium Lignosulfonate Emulsifier Grade

Lignin-Based Emulsifier, Spray Adjuvant and Rheology Modifier for Aqueous Formulations

Product Code	GAC-CaLS-Emulsifier	Product Type	Calcium Lignosulfonate / Emulsifier / Adjuvant
CAS No.	8061-52-7 / 8050-26-8	Physical Form	Fine brown to black water-soluble powder
Version	V2.1 May 2026	Primary Markets	Agriculture - Spray Adjuvants - Emulsions - Suspension Systems

Primary Role Emulsifier and adjuvant	Performance Focus Stability, wetting, adhesion	Best Fit Sprays, emulsions, suspensions	Supply Support TDS, SDS, COA and samples
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1. Product Overview

Calcium Lignosulfonate Emulsifier Grade is a lignin-derived calcium salt with natural surfactant structure. It can coat and suspend small droplets or particles in aqueous systems, helping form stable emulsions and suspensions.

This grade is positioned for industrial and agricultural formulation systems requiring emulsion stabilization, dispersion, adhesion, rheology control and compatibility with diverse active ingredients.

2. Key Performance Functions

- Emulsification: supports uniform dispersion of oils, waxes or insoluble components in water-based systems.
- Spray Adhesion: helps active ingredients adhere more effectively to plant or material surfaces.
- Penetration Support: improves infiltration and distribution in foliar or soil-applied systems at low rates.
- Rheology Modification: supports viscosity and suspension stability in aqueous formulations.
- Compatibility: calcium salt form offers broad compatibility after laboratory testing.

3. Main Specifications

Parameter	Specification
Chemical / Common Name	Calcium Lignosulfonate
CAS Number	8061-52-7 or 8050-26-8
Form	Fine brown or black powder
Odor	Slight wood odor
Solubility	Soluble in water
Total Solids	>= 90%
pH (1% solution)	4 - 9
Color	Light brown to black

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
Agricultural Spray Adjuvants	Emulsifier and rheology modifier for spray mixtures and foliar feeds.	Improves adhesion, wetting and uniform application of active ingredients.
Suspension Concentrates	Stabilizer for fine solid particles in aqueous systems.	Reduces settling and improves storage stability.
Fertilizer & Nutrient Sprays	Adjuvant for fertilizer, micronutrient and nutrient suspensions.	Supports distribution and surface retention.
Industrial Emulsions	Bio-based emulsifier for selected oil-water or wax-water systems.	Supports emulsion formation and droplet stability.
Formulation Development	Component for trial-based formulation systems.	Allows adjustment of viscosity, wetting and stability targets.

5. Suggested Usage Guidance

Application	Typical Starting Dosage / Use	Technical Note
Spray / adjuvant systems	Trial dosage recommended	Optimize by active ingredient, water quality, pH and spray equipment.
Suspension concentrates	0.1% - 2.0% starting range	Adjust according to particle size, viscosity and settling behavior.
Emulsions	Bench testing required	Check compatibility with oil phase, salts, pH and temperature.
Formulation validation	Pilot trial required	Confirm stability, separation, viscosity and application performance.

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

Packaging <ul style="list-style-type: none"> • 25 kg woven bags / kraft bags with inner PE liner. • 500 kg, 600 kg or 1,000 kg jumbo bags available on request. • Palletized, neutral or customized packing can be discussed. 	Storage & Handling <ul style="list-style-type: none"> • Store in a cool, dry and ventilated warehouse. • Keep away from moisture, rain, direct sunlight and strong oxidizing materials. • Recommended shelf life: 12 months under original sealed packaging.
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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.