

TECHNICAL DATA SHEET

Sodium Lignosulfonate Construction Grade

Industrial Lignin-Based Water Reducer and Concrete Admixture for Construction Chemicals

Product Code	GAC-NaLS-Construction	Product Type	Lignosulfonate / Water Reducer / Concrete Admixture
CAS No.	8061-51-6	Physical Form	Yellow-brown water-soluble powder
Version	V2.1 May 2026	Primary Markets	Concrete - Mortar - Ready Mix - Construction Chemicals

Primary Role Water reducer and dispersant	Performance Focus Slump, workability, cement optimization	Industrial Fit Concrete admixtures and dry-mix mortar	Supply Support TDS, SDS, COA and samples
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1. Product Overview

Sodium Lignosulfonate Construction Grade is a water-soluble lignin-based anionic polymer used as a conventional water-reducing admixture and dispersing component in cementitious systems.

This grade supports concrete workability, water reduction, controlled setting and compatibility in liquid admixture formulations for ready-mix concrete, pumped concrete, mortar and mass concrete applications.

2. Key Performance Functions

- **Water Reduction:** supports lower water demand while maintaining practical workability.
- **Concrete Workability:** improves flow, pumpability and dispersion of cement particles.
- **Set Control:** provides mild retardation, useful for hot weather, long transit and mass concrete pours.
- **Durability Support:** helps improve internal dispersion and reduce non-uniform mixing defects.
- **Formulation Base:** suitable for compounding with early strength agents, set retarders, antifreeze admixtures and pumping aids.

3. Main Specifications

Parameter	Specification
Appearance	Yellow-brown powder
pH Value	8.0 - 10.5
Dry Matter	>= 95%
Water-Insoluble Matter	<= 1.0%
Water Reducing Capacity	>= 8.0%
Sulphate Content	2.0% - 5.0%
Calcium & Magnesium	<= 0.5%
Lignosulfonate Content	>= 65%
Reducing Sugar	<= 7.0%
Moisture	<= 7.0%
Ash Content	Around 14.0%

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
Ready-Mix Concrete	Water-reducing and workability-support additive for commercial concrete.	Improves flow, placement and practical slump control.
Pumped Concrete	Dispersing component for concrete requiring stable pumpability.	Supports flowability and reduces uneven cement particle dispersion.
Mass Concrete	Mild retarding aid for large-volume pours and warm-weather construction.	Extends working time and supports hydration heat control.
Dry-Mix Mortar	Auxiliary dispersant for mortar and cement-based materials.	Improves mixing uniformity and application consistency.
Admixture Compounding	Base lignosulfonate component for blended admixture systems.	Compatible with selected retarders, accelerators and plasticizers after testing.

5. Suggested Usage Guidance

Application	Typical Starting Dosage / Use	Technical Note
Concrete admixture	0.25% - 0.50% of cementitious material	Standard starting dosage around 0.25%; confirm by trial mix.
Dry addition	Add to dry materials before water	Extend mixing time after water addition to ensure uniform dispersion.
Liquid addition	Pre-dissolve before batching	Deduct solution water from total batch water.
Site validation	Trial mix required	Dosage depends on cement type, aggregate, temperature and target slump.

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.