



TECHNICAL DATA SHEET

LIGNI- Chrome Free Lignosulfonate

Product Description

LIGNI® Chrome Free Lignosulfonate is a high-performance, environmentally friendly lignin-based dispersant and mud thinner designed for water-based drilling fluid systems. The product effectively controls rheological properties, reduces viscosity, and improves drilling efficiency without containing chromium compounds.

Typical Specifications

Property	Unit	Specification	Typical Value
Appearance	-	Brown/Beige Powder	Brown Powder
Moisture	%	Max. 10.0	6.13
Solid Matter (105°C)	%	Min. 92.0	93.87
Sulphate Content	%	Max. 5.0	3.50
pH (10% Solution)	-	6.5 – 9.5	8.05
Water Solubility	%	Min. 95.0	≥95
Chromium Content	ppm	Nil	Nil
Bulk Density	g/cm ³	0.55 – 0.75	0.65
Particle Size (Passing 80 Mesh)	%	Min. 95	≥95
Color	-	Brown to Dark Brown	Brown

Main Functions

- Mud Thinner
- Dispersant
- Deflocculant
- Rheology Modifier
- High Temperature Stabilizer
- Viscosity Reducer



Applications

- Oil and Gas Drilling
- Water-Based Drilling Fluids (WBM)
- Geothermal Drilling
- Water Well Drilling
- Mining and Exploration Drilling
- Foundation and Construction Drilling

Benefits

- Chromium-Free Formulation
- Environmentally Friendly
- Excellent Dispersion Performance
- Effective Viscosity Control
- High Thermal Stability
- Improves Hole Cleaning
- Reduces Mud Treatment Cost
- Compatible with Most Water-Based Mud Systems

Recommended Dosage

0.5–3.0% by weight of drilling fluid system depending on drilling conditions and mud formulation.

Packaging

- 25 kg PP Bags with PE Liner
- 500 kg Jumbo Bags
- 1000 kg Jumbo Bags

Customized packaging available upon request.

Storage and Shelf Life

Store in a cool, dry, and well-ventilated area away from direct sunlight and moisture.

Shelf Life: 24 Months under proper storage conditions.