

Calcium Lignosulfonate — Grade Three

Economy-grade calcium lignosulfonate for construction, ceramics, oilfield and industrial binder applications

GAC-CaLS-3

Construction

Ceramics

Oilfield

Binder

PRODUCT DESCRIPTION

Calcium Lignosulfonate (calcium lignosulphonate) is an amorphous yellow-brown powder extracted from the sulfite pulping of wood. Its framework is built from three aromatic alcohols — coniferyl alcohol, p-coumaryl alcohol and sinapyl alcohol. It is completely water-soluble and practically insoluble in organic solvents, and is rich in sulfonic and carboxylic functional groups, giving it strong surface activity and dispersion capacity.

TYPICAL PHYSICAL & CHEMICAL PROPERTIES

PARAMETER	TYPICAL VALUE
Appearance	Yellow-brown powder
pH	6 around
Dry Matter	95% min
Water-insoluble Matter	0.5% max
Sulphate	2 – 5%
Total Calcium & Magnesium (Sulfate)	5 – 6%
Lignosulphonate Content	50% min (dry basis)
Sugar	10 – 12%
Reducing Matter	18 – 20%
Moisture	5% max

Values represent typical production results and are provided for reference only; they do not constitute a binding product specification. Please refer to the Certificate of Analysis (COA) accompanying each shipment for batch-specific results.

APPLICATIONS

- Plasticizer in concrete production — improves flow and workability while reducing water demand; used in cement grinding as a mill aid and raw-mix slurry deflocculant
- Active material in lead-acid battery negative plates, improving crystallization of lead sulphate for extended battery life
- Filler and binder in ceramic tiles, fiberboard resins, and foundry casting sand, and in fodder pellets
- Dust-suppression agent for unpaved roads and dusty industrial processes; dispersant for fodder, pesticides, dyes, and carbon black
- Viscosity reducer for mineral slurries and oil-well drilling mud, replacing tannic acids derived from quebracho
- Water-reducing additive in plasterboard (gypsum board) manufacturing, allowing lower kiln drying temperatures
- Binder for powdered and granular materials — iron ore fines, lead and zinc powder, coal, coke, and pelletized feed

PACKAGING, HANDLING & STORAGE

Packaging	20 kg or 25 kg woven bags with polyethylene liner; 500 kg or 600 kg jumbo bag (FIBC)
Custom Packaging	Available according to customer requirement
Storage	Store in a cool, dry, well-ventilated area
Shelf Life	24 months from production date in original unopened packaging
Handling	Avoid prolonged exposure to moisture; reseal opened bags