

Description: LIGNOSULFONATE is a high-performance lignosulfonate polymer. It is designed as a raw material for the production of water-reducing and superplasticizer admixtures. The polymer disperses cement particles effectively, improving workability, reducing water demand, and enhancing concrete density and surface quality.

Technical Properties:

Chemical Content	Lignosulfonate Polymer
Appearance	Liquid
Color	Brown
Solid Content	40 ± 1 %
pH	5 - 8
Density (20 °C)	1.17 – 1.23 g/cm ³
Chloride Content (%)	< 0.1
Alkaline Content (%)	< 5
Water Solubility	Completely soluble
Freezing	-10 °C

Advantage:

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Area of Use:

- Ready mixed concrete production..
- Hot weather concretin.
- Long distance concrete transportatio.
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete.
- Mass concrete and roller compacted concrete applications.

Method of Application:

LIGNOSULFONATE is intended to be used as a primary dispersing component in the production of concrete admixtures.

- The product should be incorporated into the admixture formulation under continuous mechanical stirring.
- It can be blended with water, slump retention polymers, set regulators, defoamers, or other functional additives depending on the targeted performance.
- Dilution with deionized or clean industrial water is recommended when necessary.
- Mixing time and sequence should be optimized according to production equipment and formulation design.
- Laboratory trials must be conducted to determine the optimum dosage and combination ratio before industrial production.

Precautions in Application:

- Do not exceed the recommended dosage without prior laboratory verification.
- Always perform trial mixes before full-scale production.
- Do not add directly to dry cement; ensure addition into mixing water or fresh concrete.
- Adjust dosage in case of changes in cement type, aggregate grading, mineral additions, or ambient temperature.
- Protect the product from frost and direct sunlight.
- Ensure proper mixing time to achieve homogeneous distribution.
- Compatibility with other admixtures must be tested before combined use.
- Use appropriate personal protective equipment during handling.

Compatibility:

LIGNOSULFONATE shows broad compatibility with most commonly used admixture components and cement types. However, compatibility testing is strongly recommended prior to large-scale production.

Compatible with:

- Portland cement (CEM I).
- Blended cements (CEM II, CEM III, etc.).
- Fly ash, slag, silica fume.
- Lignosulfonate based admixtures.
- Retarders and accelerators (dosage optimization required).
- Defoamers and viscosity modifying agents.

Precautions in Application:

- Avoid contamination with foreign materials.
- Protect from freezing. If frozen, thaw at room temperature and mix thoroughly before use.
- Avoid prolonged exposure to high temperatures.
- Use corrosion-resistant tanks and transfer lines.
- Do not mix with strong oxidizing agents.
- Ensure proper mixing to prevent phase separation during dilution.
- Improper formulation or incorrect dosage may negatively affect setting time and performance of final concrete admixture.
- The product should be incorporated into the admixture formulation under continuous mechanical stirring.
- It can be blended with water, slump retention polymers, set regulators, defoamers, or other functional additives depending on the targeted performance.
- Dilution with deionized or clean industrial water is recommended when necessary.
- Mixing time and sequence should be optimized according to production equipment and formulation design.
- Laboratory trials must be conducted to determine the optimum dosage and combination ratio before industrial production. admixture can be washed with fresh cold water and should not be allowed enter sewers or open bodies of water.



Cleaning: LIGNOSULFONATE is intended to be used as a primary dispersing component in the production of concrete admixtures.

Packing: 1000 kg container Bulk

Storage and Shelf Life:

Must be stored at temperatures between +5°C and +35°C. Under proper storing conditions, the product's shelf life is 12 months from production date if kept in original packaging unopened and undamaged. Packaged products must be shaken before use.

Security Information: Use protective clothes, gloves, glasses and mask compatible with Health and Safety regulations during the application. It should not contact skin and eyes. In case it contacts to skin and eyes, rinse it with water and if swallowed ask for medical help. Food and beverage should not be allowed in the application area. It should be stored at the reach out of the children. The Material Safety Data Sheet (MSDS) should be read for detailed information.