

Sulfonated Tannin SMT

SMT is made from gallnut tannic acid through sulfonation and other chemical modifications. The product is a freely flowing brown powder with strong water absorption and easy solubility in water. It is an excellent diluent or viscosity reducer in various types of water-based mud systems. It can effectively reduce the viscosity and shear force of the mud.

1. Features and Advantages:

- 1) The effect of viscosity reduction is obvious, which is beneficial to improving the penetration rate;
- 2) High temperature resistance, suitable for various well sections;
- 3) Good compatibility, can be used in non dispersed drilling fluids and dispersed drilling fluids;
- 4) The on-site application method is simple and can be directly added or prepared into an aqueous solution, which is easily soluble in water;
- 5) Non toxic and pollution-free, meeting environmental requirements.

2. Technical Parameters

Drilling fluid performance indicators		Specifications	
		24±3℃	180℃/16h
Base slurry	Viscosity Φ100 , mPa • s	45~65	90~120
	Apparent viscosity, mPa • s	14~20	25~34
	Dynamic shear force, Pa	7~12	16~22
	1min Static shear force, Pa	7~12	8~12
Sampling slurry	Viscosity Φ100 , mPa • s	≤10	≤12
	Apparent viscosity, mPa • s	≤8	≤10
	Dynamic shear force, Pa	≤2	≤2
	1min Static shear force, Pa	≤1	≤1

3. Applications

- 1) It can also maintain a certain viscosity reducing ability in saline mud and saturated saline mud, and can resist Ca²⁺ pollution up to 1000 mg/L.
- 2) Under high temperature conditions of 180-200 ℃, it can improve the high-temperature stability of the mud and control the rheological properties of the mud at high temperatures.
- 3) It has good compatibility with other commonly used mud additives.

4. Packaging, Storage and Transportation

- 1) The packaging adopts a three-in-one woven bag, the inner layer is a plastic bag, and the inner and outer bag mouths should be sewn firmly.
- 2) The net mass of each bag (25±0.25) kg, severe collision should be prevented during transportation, and rainproof and moisture-proof measures should be done, and moisture-proof measures should be paid attention to;
- 3) Should be stored in a cool and dry place, fireproof, sun protection, product shelf life of two years, if the shelf life, should be re-inspected and qualified before use.