



Technical Data Sheet

TANNATHIN

Product Description

TANNATHIN lignite is a naturally occurring material that reduces fluid loss and deflocculates water-based drilling fluids. A partially soluble additive, it provides thin, low-permeability filter cakes. It is an excellent emulsifier for oil-in-water emulsions and secondary deflocculant as well as is especially effective in high-temperature applications. It performs exceptionally well in dispersed systems as a synergistic additive with lignosulfonates.

Applications:

TANNATHIN lignite is especially effective at stabilizing the properties of muds exposed to high temperatures and contaminants such as CO₂ and calcium. TANNATHIN lignite is especially effective when treating cement contamination. It reduces the high viscosity and pH of cement-contaminated muds and reacts with calcium to lessen the contaminating effects.

Treatments:

Normal treatments of TANNATHIN lignite range from 1 to 8 lbm/bbl [2.85 to 22.8 kg/m³]. Due to their low pH, TANNATHIN lignite treatments require additional caustic soda or an alternative alkaline material to maintain a consistent pH. A normal ratio is one sack of caustic soda for every four sacks of TANNATHIN lignite. In high-salinity systems, it is preferable to premix the TANNATHIN lignite in medium-pH freshwater to enhance dispersibility, then add the premix to the active system. It is most effective in mud systems with a pH in the range of 9 to 11.

KEY BENEFITS

- Provides improved filtration control.
- Reduces viscosity and gel strengths.
- Resists the effects of contamination.
- Stabilizes rheological properties.

Key Properties

Color	Black
Physical Form	Powder
Specific Gravity	1.6 - 1.8
pH (1% solution)	4 - 5
Bulk density	52 lbm/ft ³ [833 kg/m ³]