

TANNATHIN

TANNATHIN* oxidized lignite is a naturally occurring material used to reduce fluid loss and deflocculate water-base muds.

TANNATHIN lignite is a partially soluble additive which provides thin, low-permeability filter cakes. It is an excellent emulsifier for oil-in-water emulsions as well as a secondary deflocculant and is especially effective in high-temperature applications. It performs exceptionally well in dispersed systems as a synergistic additive with lignosulfonates. It can be used in virtually any water-base fluid.

ADVANTAGES

- Provides improved filtration control
- Reduces viscosity and gel strengths
- Significantly extends the temperature stability of waterbase fluids
- Resists the effects of contamination
- Improves filter-cake quality by reducing its thickness and permeability
- Reduces wall-sticking tendencies
- Stabilizes rheological properties
- Compatible with a wide range of water-base systems
- Especially effective when treating cement contamination

LIMITATIONS

Less effective at pH levels below
9.5

Typical Physical Properties

Physical appearance	Black powder
Specific gravity	1.6-1.8
pH (1% solution)	4-5
Bulk density	52 lb/ft³ (833 kg/m³)
Typical grind	90-95% <20 mesh

APPLICATIONS

TANNATHIN additive can be used for rheology and filtration control in all water-base muds. It is especially effective in stabilizing the properties of muds exposed to high temperatures and contaminants such as CO_2 and calcium. TANNATHIN additive 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.

Normal treatments of TANNATHIN lignite range from 1 to 8 lb/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 an alkaline pH in the range of 9 to 11.

TOXICITY AND HANDLING

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheet (MSDS).

PACKAGING AND STORAGE

TANNATHIN additive is packaged in 50-lb (22.7-kg), multi-wall, paper sacks.

Store in a dry, well-ventilated area. Keep container closed. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

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