Duramod

DURAMOD* additive is a high-performance rheological additive for all invert emulsion and synthetic base drilling fluids.

It provides excellent anti-sag features and exhibits very good ultra-low-shear performance. DURAMOD additive is ideal for minimizing barite sag in high temperature environments and extended-reach wells.

Typical Physical Properties

Physical Appearance: Light grey powder

Specific Gravity: 2.2 - 2.4 pH of 2% Solution: 9.4

Applications

DURAMOD additive is a specially formulated supplemental viscosifier, capable of developing outstanding ultralow-shear-rate viscosity and suspension properties. DURAMOD additive can be used in virtually any base oil or synthetic fluid, as well as RHADIANT*, RHELIANT*, RHELIANT-PLUS* fluids systems.

DURAMOD additive is an effective supplemental gelling agent in applications where additional suspension is essential to prevent static or dynamic settling. DURAMOD additive will develop the maximum rheological properties after being mixed with sufficient shear to separate the rod-like particles in order to build viscosity.

When used for preventing barite-sag and improving hole cleaning, DURAMOD additive treatments should range between 1.0 – 3.0 lb/bbl (2.8 – 8.5 kg/m 3); a concentration of 1.0 – 5.0 lb/bbl (2.8 – 14 kg/m 3) DURAMOD additive can be used at the liquid mud plant for initial mixing, to supplement standard organoclays additions of 1.0 – 5.0 lb/bbl concentration.

DURAMOD additive is an ideal additive for premixes used to reduce the mud weight or to decrease the lowgravity solids concentration. For normal maintenance, concentrations of 1.0 – 3.0 lb/bbl can be used when maintaining rheology or 3.0 - 9.0 lb/bbl (8.5 - 25 kg/m 3) when increasing the rheology by premix additions. Pilot testing prior to making additions is recommended.

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Advantages

- Highly efficient in developing low-shear-rate viscosity
- Excellent anti-sag capabilities
- Enhances hole-cleaning capacity
- Thermally stable in excess of 500°F (260°C)

Limitations

- Requires sufficient shear to separate the rod-like particles in order to build viscosity
- Excessive treatment with DURAMOD additive tends to increase mud rheology at cold temperatures. In deep water applications, the rheology should be measured at two or three temperatures, including the flow line temperature.

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

DURAMOD additive is packed 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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