

Flat rheology system modifier

Divalent brine viscosifier delivers outstanding consistent fluid density and exceptional ultralow-shear performance

Applications

- Minimizes barite sag in high-temperature environments and extended-reach wells
- Provides additional suspension to prevent static or dynamic settling
- Improves wellbore cleaning

Benefits

- Highly efficient in developing low-shear rate viscosity
- Excellent antisag capabilities
- Enhanced hole-cleaning capacity
- Thermal stability in excess of 500 degF [260 degC]

Features

- Inorganic proprietary viscosifier
- Capable of developing outstanding ultralow-shear-rate viscosity and suspension properties
- Can be used in any base oil or synthetic fluid, and aqueous drilling and completion fluids

How it improves performance

DuraMod™ flat rheology system modifier is a high-performance rheological additive for aqueous and nonaqueous drilling fluids, and completion fluids. It offers exceptional antisag properties and demonstrates excellent performance at ultralow-shear rates. This modifier is particularly effective at reducing barite sag in high-temperature conditions and extended-reach wells. As a specially formulated supplemental viscosifier, DuraMod modifier enhances viscosity and suspension characteristics at ultralow-shear rates. It is compatible with various base oils, synthetic fluids, and aqueous drilling and completion fluids.

How it works

DuraMod modifier is highly effective for providing additional suspension to prevent both static and dynamic settling in drilling and completions fluids. A light grey powder, it achieves optimal rheological properties when mixed with adequate shear. To prevent barite sag and enhance hole cleaning, DuraMod modifier treatments typically range from 4.0 to 8.0 lbm/bbl [11.4 to 22.8 kg/m³]. For routine maintenance of rheological properties, a concentration of 1.0 to 3.0 lbm/bbl [2.85 to 8.5 kg/m³] can be used when maintaining rheology or 3.0 to 9.0 lbm/bbl [8.5 to 25 kg/m³] when increasing the rheology by premixed additions. DuraMod modifier requires sufficient shear to separate the rod-like particles to build viscosity. Excessive treatment with this modifier tends to increase mud rheology at cold temperatures.

Typical Physical Properties

Physical appearance	Light grey powder
Specific gravity	2.2–2.4