

TACKLE

Low-molecular-weight polymer additive

APPLICATIONS

- Reducing and stabilizing viscosity in a wide range of water-based drilling fluids

ADVANTAGES

- An effective deflocculant in freshwater, KCl, and seawater fluids
- Thermally stable to >400 degF [>204 degC]
- Not subject to bacterial degradation
- Effective in weighted or unweighted fluids and compatible with both nondispersed and dispersed systems
- Compatible with most common fluid additives
- Easily added to the fluid system through the mud hopper or directly into the surface system

LIMITATIONS

- This additive should not be used in calcium systems such as lime, gypsum, or untreated seawater fluids that have high soluble calcium.
- Effectiveness is limited in high-solids fluid.
- Initial treatments with this additive can actually increase viscosity when the concentration is very low, ~0.1 lb/bbl. Dilution to reduce the solids, in conjunction with continued treatments with the additive, reduces viscosity.

TACKLE* low-molecular-weight polymer additive is an anionic thinner designed to deflocculate a wide range of water-based drilling fluids. This concentrated aqueous product has proven itself in applications from the surface to total depth. It is most effective in freshwater fluids that are low in soluble calcium. TACKLE additive is used most often in high-temperature applications and in low-solids, nondispersed, polymer fluids such as the POLY-PLUS* high-molecular-weight liquid clay inhibitor. Normal treatments range from 0.1 to 2 lb/bbl.

While it is frequently used as a shallow-hole thinner to knock the fluff out of spud mud, it also maintains effective performance in more complex systems. This synthetic additive has a high temperature limit and is not subject to bacterial degradation.

This highly anionic additive is precipitated by high concentrations of divalent cations, such as calcium and magnesium. Total hardness must be maintained below 200 mg/L with soda ash. Pilot tests are recommended prior to treating with this product.

Toxicity and handling

Bioassay information is available on request. Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the MSDS.

Packaging and storage

TACKLE low-molecular-weight polymer additive is packaged in 5-galUS [18.9-L] cans. Store in a well-ventilated area away from sources of heat or ignition.



Typical Physical Properties

Physical appearance	Amber to brown liquid
Specific gravity	1.2–1.3
Flash point	>212 degF [>99 degC] (PMCC)