

## INFORMATION

# POLYSPERSE-XHT

SULFONATED POLYACRYLATE HIGH TEMPERATURE THINNER

### DESCRIPTION

POLYSPERSE-XHT is a specially formulated, sulfonated polymeric compound, polyacrylate, which functions as a high-performance viscosity control agent in a variety of water-base drilling fluid systems. POLYSPERSE-XHT is available in two physical forms: a free-flowing powder and a slightly viscous liquid. The product is non-toxic, and environmentally safe.

### APPLICATION

POLYSPERSE-XHT is used in fresh and seawater muds, including inhibitive muds containing lime, gypsum, potassium chloride, and other compounds. POLYSPERSE-XHT controls and reduces viscosity, acting as a thinner, deflocculant, and/or degellant.

POLYSPERSE-XHT is resistant to contaminants such as salt, calcium, magnesium, sulfate, and carbonate/bicarbonate. Therefore, it functions well in lime mud systems.

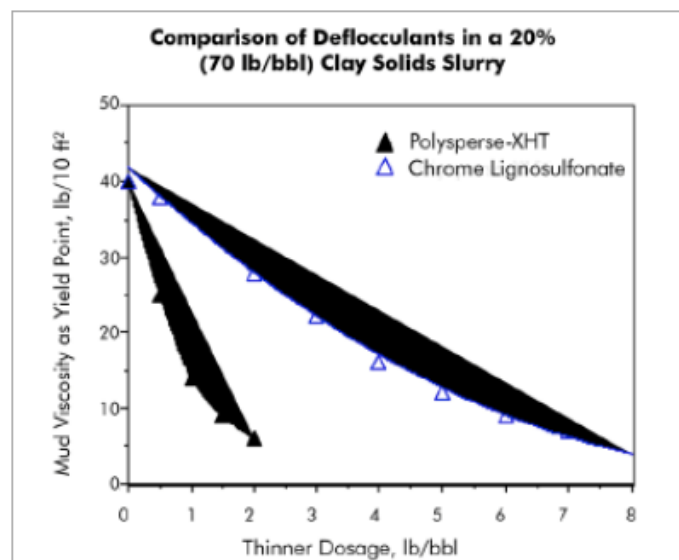
POLYSPERSE-XHT exhibits excellent thermal stability, allowing good control of viscosity and gel strength at temperatures to at least 450° F.

In dispersed muds, POLYSPERSE-XHT effectively replaces conventional thinners such as chrome lignosulfonates and modified lignites. POLYSPERSE-XHT has numerous advantages over these products, including superior thermal stability, absence of harmful degradation by-products, low environmental toxicity (no chromium or heavy metals), and a broader pH activity range. POLYSPERSE-XHT is functional over the entire range of fluid pH encountered in drilling operations, whereas lignosulfonates and lignites require minimum pH of 9 and 11 respectively for activation. These pH levels require high dosages of caustic soda. POLYSPERSE-XHT requires no caustic soda for activation. POLYSPERSE-XHT is also up to 8 times as efficient as chrome lignosulfonate, requiring very low initial dosage and sharply reduced daily maintenance treatments.

POLYSERSE-XHT finds special application in Messina REDI-DRIL fluid systems as a non-dispersive deflocculant and protective colloid. POLYSERSE-XHT allows these polymer fluids to be run at high densities while maintaining desirable flow properties and allowing adequate reserve concentration of REDICOAT encapsulating polymer to be carried in the fluid.

## FEATURES/ADVANTAGES

- Effective at low concentrations.
- Resistant to contaminants.
- Thermally stable at 500° F and above.
- Low environmental toxicity. Reduced disposal cost.
- Reduces filtration.



## RECOMMENDED TREATMENT

Typical dosages range from 0.2 ppb ( $0.57 \text{ kg/m}^3$ ) in unweighted freshwater muds to 2.0 ppb ( $5.7 \text{ kg/m}^3$ ) in high-density seawater muds.

## PACKAGING

POLYSERSE-XHT (dry) is packaged in 50 lb or 25 kg export-quality bags. Liquid product is packaged in 5 gal, 25 litre, and 55 gal cans/drums.

POLYSERSE-XHT is a Messina trademark