

GEOCHEMM

Technical Data Sheet

GEO THIN 425

Thinner

Scope of Application

: **GEO THIN 425** is an anionic synthetic polyacrylate copolymer used as a finer release agent for water-based drilling fluids with a chloride level not exceeding 10,000 mg / l or hardness levels not exceeding 500 ppm. **GEO THIN 425** is used to control the rheological properties of water-based drilling fluids. **GEO THIN 425** also helps prevent mud gelling at high temperatures. Easily soluble in water, **GEO THIN 425** can be added directly to the agitated sludge bit. Fresh water is very cost effective in controlling the viscosity and gel forces in drilling fluids. It does not contain chromium or heavy metals. **GEO THIN 425** is effective over a wide pH range. **GEO THIN 425** does not require CAUSTIC SODA for activation and is readily water soluble. **GEO THIN 425** controls the rheology with two mechanisms. First, the short-chain copolymer is attracted to the charged solid and fulfills its load. This reduces their interaction. Second, the excess polymer stays together in water-repellent solids. Due to its relatively large size (more than 50,000 u of molecular weight), the molecules remain outside the clay matrix. This prevents the distillation of the clays as it is in dispersing thinners such as lignite and lignosulfonate. **GEO THIN 425** is normally used at concentrations of 0.1 to 0.5 ppb, but can be used at 2 ppb or more for high temperature stabilization. The treatment level is determined by the total solid content of the drilling fluid, particle size, chlorine levels, hardness level, previous **GEO THIN 425** additions and bottom hole temperature.

Apperance

: Liquid

Color

: Clear

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pH	: >4.0 (aqueous solution)
Specific gravity	: ~1.1 g/cm ³
Package	: 25 lt/ 200 lt drums or 1000 lt IBC .
Storage	: Freezing GEO THIN 425 or storing it in cold storage for a long time may cause some separation of components. Product performance will not deteriorate as long as the entire container is heated and well mixed, it is recommended that the GEO THIN 425 be prevented from freezing.