

# VERSAGEL HT

Versagel\* HT pure hectorite clay is the primary viscosifier in all Versa\* oil-base, Nova\* synthetic-base, and Paradril\* paraffin-base drilling fluid systems with high-temperature requirements.

Versagel HT viscosifier is used to increase the carrying capacity and suspension properties, provide support for weight materials, and improve cuttings removal. Versagel HT viscosifier also aids in filtercake formation and filtration control.

## TYPICAL PHYSICAL PROPERTIES

Physical appearance	Fine, creamy-white powder/dust
Odor	Odorless
Specific gravity	1.70
Solubility in water	Insoluble

## APPLICATIONS

Versagel HT clay is an effective viscosifier in oil-base, synthetic-base, or paraffin-base drilling fluid systems and is temperature stable to 400°F (204°C).

Versagel HT viscosifier is unaffected by contaminants normally encountered in drilling.

Versagel HT viscosifier contributes to the HTHP fluid loss of the system.

Good agitation and sufficient shear are required to develop viscosity when using Versagel HT viscosifier to build a fresh mud. Initial system concentration will depend on the specific drilling fluid formulation and drilling conditions, but, for most applications, additions in the range of 2.8 to 9.8 lb/bbl (8 to 28 kg/m<sup>3</sup>) are sufficient.

For system maintenance, Versagel HT viscosifier should be added as needed to maintain downhole rheology, flow properties and gel strengths in the desired ranges.

## TOXICITY AND HANDLING

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions as described in the Material Safety Data Sheet (MSDS).

## PACKAGING AND STORAGE

Versagel HT viscosifier is packaged in 50-lb (22.7-kg) multi-wall, paper sacks.

Store in a dry location away from sources of heat or ignition, and minimize dust.

## ADVANTAGES

- Effective at high temperatures.
- Provides gel structure and viscosity for the suspension of weight material.
- Increases viscosity for improved hole-cleaning capacity.
- Improves filtercake quality and filtration characteristics.

## LIMITATIONS

- Requires sufficient shear and temperature for complete yield, especially when building new muds.
- Full yield may not be realized until circulated downhole; therefore caution should be exercised not to overtreat.