

# VERSATHIN HF

VERSATHIN\* HF dispersant is used as a thinner and conditioner in the VERSA\* oil-base drilling-fluid systems.

This particular version has been formulated with a much higher flash point for use in areas that require this added safety feature. It reduces viscosity and gel strengths through the action of macromolecules which disperse solids in the mud without the need for dilution or changing the Oil/Water Ratio (O/W Ratio).

## TYPICAL PHYSICAL PROPERTIES

Physical appearance	Dark amber liquid
Density	0.75 to 0.90 g/mL
Flash point	145 to 200°F (65 to 93°C) (PMCC)
Pour point	15°F (-9.4°C)

## APPLICATIONS

VERSATHIN HF additive is a dispersant and fluid conditioner for oil-base muds with high viscosity and gel strengths caused by a high content of colloidal solids. It reduces viscosity and gel strengths through the action of macromolecules which disperse solids in the mud without the need for dilution or changing the O/W Ratio when volume increases are undesirable.

Typical VERSATHIN HF dispersant treatments range from 0.25 to 2 lb/bbl (0.71 to 5.7 kg/m<sup>3</sup>) or 7 to 28 gal per 100 bbl (1.65 to 6.6 L/m<sup>3</sup>). Incremental additions are recommended at 0.25 lb/bbl (1.43 kg/m<sup>3</sup>).

Pilot testing is recommended prior to treating the system in order to determine the required concentration and effectiveness of VERSATHIN HF additive. CAUTION: Overtreatment can cause drastic reductions in LSRV values (6- and 3-RPM readings) and gel strengths that can be difficult to recover or increase afterwards.

The product should be added slowly to the system over one complete circulation to ensure an even distribution of the treatment.

## TOXICITY AND HANDLING

Bioassay information is available upon request.

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

## PACKAGING AND STORAGE

VERSATHIN HF additive is packaged in 55-gal (208-L) drums and 5-gal (18.9-L) cans.

Store in a dry, well-ventilated area. Keep container closed. Store away from incompatibles.

Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

## ADVANTAGES

- Easy-to-mix, fast-acting liquid thinner.
- Wide application in all oil-base VERSA systems.
- Compatible with all VERSA additives.

## LIMITATIONS

- Avoid overtreatment with VERSATHIN HF dispersant. If barite settling is observed, treatments of VG-69\* or VG-Plus\* organophilic clay should be used to restore barite suspension capacity.
- Environmental restrictions concerning the use of oils and oilbase fluids should be considered since VERSATHIN HF additive is used in conjunction with oil.
- May not provide long-term viscosity reduction. Over a period of time or through the incorporation of additional drill solids, viscosity and gels may return to original levels.