VERSAWET

Organic surfactant is a concentrated and powerful oil-wetting agent for oil-base muds.

ADVANTAGES

- Concentrated, powerful oil-wetting agent, used in low-lime / low-alkalinity fluids; prevents water-wet solids
- Can reduce initial mixing costs and maintenance costs by reducing the amounts of othersurfactants needed
- An excellent wetting agent for the difficult-to-wet FER-Ox hematite additive
- Improves emulsion stability and helps prevent water in HTHP filtrate
- Effective at counteracting the adverse effects of water contamination such as high viscosity, low emulsion stability and water-wet solids
- Improves thermal stability, rheological stability, filtration control and contamination- resistance of oil-base muds

It is used primarily in relaxed-fluid-loss, lower-lime VERSA* oil mud systems which use VERSACOAT* as the emulsifier. VERSAWET surfactant is an excellent wetting agent which is especially effective in systems using difficult-to-wet FER-Ox* hematite. It is also effective at oil-wetting barite and drill solids and at reducing the adverse effects of water contamination.

APPLICATIONS

VERSAWET surfactant functions as a wetting agent when used in relaxed-fluid-loss, lower-lime systems, usually in combination with VERSACOAT. It oil-wets weight material and drill solids to prevent water-wet solids, improves thermal stability, rheological stability, filtration control and emulsion stability while it improves the fluid's resistance to contamination.

Concentrations for initial formulations range from 1 to 4 lb/bbl (2.85 to 11.4 kg/m3) with occasional daily treatments of -0.063 lb/bbl (0.18 kg/ m3). Consult the Federal Drilling Fluids Engineering Manual or individual system information for specific formulations. The recommended treatment levels depend on the oil-water ratio, anticipated temperatures, desired properties and the other products used in the formulation.

The VERSA family of systems includes VERSADRIL* (diesel), VERSACLEAN* (mineral oil), VERSAPORT* (elevated low-shear-rate viscosity) and VERSACORE* (minimal-water systems. is subject to bacterial degradation, and treatments with a biocide is recommended to prevent fermentation.

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

VERSAWET surfactant 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. Keep away from heat, sparks and flames. Store away from incompatibles.

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LIMITATIONS

- VERSAWET surfactant is not recommended for high-lime systems such as conventional systems which use VERSAMUL* additive as the primary emulsifier, in wells with lower temperatures- 200°F (-93.3°C). Under certain conditions in high-lime fluids, VERSAWET surfactant can cause undesirable viscosity increases.
- VERSACOAT additive is the recommended wetting agent for most high-lime, medium-temperature applications
- Environmental restrictions concerning the use of oils and oil-base fluids should be considered since VERSAWET surfactant is used in conjunction with oil

TYPICAL PHYSICAL PROPERTIES

Physical appearance	Dark brown/green, viscous liquid
Specific gravity	0.93-0.98
Flash point	>200°F (93.3°C) (PMCC)
Pour point	-44°F (6.7°C)

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