
VERSAMOD

DESCRIPTION Versamod organic gelling agent is a liquid rheology modifier used Versadril and Versaclean oil-base mud systems. It increases Low-Shear-Rate Viscosities (LSRV) and gel strengths for improved hole cleaning. The primary application for Versamod is in large diameter, high angle, horizontal and extended-reach wells to increase cuttings-carrying capacity. This permits higher rates of penetration while maintaining wellbore stability. Versamod, when used at proper concentrations, produces the highly shear-thinning rheological profile found in Versaport oil mud systems.

APPLICATION Versamod is used to improve cuttings transport in large-diameter or directional wells, especially wells with diameters greater than 8 1/2 in. or deviations greater than 25°. It modifies the rheological profile of oil-base muds, increasing their shear-trimming and thixotropic characteristics without using additional clay-base additives. Versamod can be used in existing Versadril and Versaclean systems, as well as in freshly prepared mud, to increase LSRV and get strengths. Sufficient shear is required to develop this increase in rheology, especially in freshly prepared muds. Normal concentrations range from 1 to 4 lb/bbl (2.85 to 11.4 kg/m³), depending on the brine content. Less Versamod is needed in muds with higher brine contents. Typical initial treatments are 1 to 2 lb/bbl (2.85 to 5.7 kg/m³) for muds with oil: water ratios in the 75:25 to 85:15 range; above 85:15 the effectiveness is diminished. Pilot testing is recommended to determine the actual treatment required to obtain the desired result. Versamod is activated by calcium, shear and temperature. Generally, 1 lb/bbl (2.85 kg/m³) lime should be added and maintained for every 1 lb/bbl (2.85 kg/m³) Versamod used in a system. Versamod will not be fully activated by the shear and temperature exposure in a mixing plant or mud pit, care should be taken not to overtreat with Versamod until the fluid is actually circulated through the well.

LIMITATIONS Becomes less effective as the oil:water ratio rises above 85:15. Above this level, increased concentrations of Versamod will be needed for the desired rheological properties.

NOTE: See disclaimer for supplier responsibility.

Low-brine-content muds, which use high concentrations of Versamod, will become extremely viscous if the water content is increased, as with a saltwater flow. Versamod is activated by shear and temperature. It does not generate significant viscosity at the mixing plant or mud pits until the fluid is actually circulated through the well.

HANDLING

Handle as an industrial chemical, wearing protective equipment and observing the precautions as described on the MSDS. Environmental restrictions concerning the use of oils and oil-base fluids should be considered, since Versamod is used in conjunction with oil.

CAUTION! Avoid exposure. Versamod contains mineral oil which is an irritant to eyes, skin and respiratory system.

WHMIS

B3, D-2-B

TDG

Not Regulated

PACKAGING

55-gal drums and 5-gal cans.