

VERSATROL

Asphaltic resin

APPLICATIONS

- HPHT filtration control in oil-based mud

ADVANTAGES

- Reduces HPHT fluid loss in all VERSA* oil-based drilling fluid systems
- Enhances emulsion and thermal stability of oil-based muds
- Effective at temperatures up to 350F [177 degC]
- Increases viscosity

LIMITATIONS

- Environmental restrictions concerning the use of oils and oil-based fluids should be considered since VERSATROL* asphaltic resin is used in conjunction with oil
- Not for use in Gulf of Mexico

VERSATROL resin is a naturally occurring asphalt used for HPHT filtration control in oil-based muds and often used to seal low-pressure and depleted formations. It is compatible with all VERSA systems and can be used in the initial formulation or added later.

VERSATROL resin helps improve the overall emulsion stability, thermal stability, and suspension characteristics of most oil-based formulations. VERSATROL resin also increases viscosity, especially at lower temperatures due to its partial solubility.

Typical concentrations range from 2 to 8 lbm/bbl [5.7 to 23 kg/m³], with occasional daily additions in the range of 0.25 to 0.5 lbm/bbl [0.71 to 1.43 kg/m³]. High-temperature situations and special applications require higher concentrations, as much as 10 lbm/bbl [29 kg/m³].

When used in the initial formulation, it is recommended to add VERSATROL resin last. For existing systems, the product can be added at any time, mixed slowly during at least one complete circulation. Monitor solids control equipment for several circulations to ensure product is not discarded. Pilot testing is advised to determine the necessary treatment to achieve the desired results and to observe the change in mud properties.

Toxicity and handling

Bioassay information is available upon request.

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

Packaging and storage

VERSATROL resin is packaged in 50-lbm [22.7-kg] and 55-lbm [25-kg], multiwall paper sacks. Store in a dry, well-ventilated area. Keep container closed. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping, and stacking.

Typical Physical Properties

Physical appearance	Black powder
Specific gravity	1.04–1.06
Bulk density	~34 lbm/ft ³ [540 kg/m ³]
Temperature range	250 degF to 350 degF [121 degC to 177 degC]
Ash content	Less than 3%