

VERSATROL M

Ashphaltic resin

APPLICATIONS

- API and HPHT filtration control in oil-based mud

ADVANTAGES

- Works in a wide range of applications with bottomhole static temperature (BHST) up to 350 degF [177 degC]
- Enhances emulsion and thermal stability of oil-based muds

LIMITATIONS

- Environmental restrictions concerning the use of oils and oil-based fluids should be considered since VERSATROL M* asphaltic resin is used in conjunction with oil
- Pilot testing should be conducted to confirm performance between 350 degF to 400 degF [177 degC to 204 degC]
- Exceeding softening point temperature may increase rheological properties
- Not for use in Gulf of Mexico

VERSATROL M resin reduces both API and HPHT fluid loss in all oil-based muds.

It helps improve the overall emulsion stability, thermal stability, and suspension characteristics of most oil-based formulations. VERSATROL M 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 0.25 to 0.5 lbm/bbl [0.71 to 1.43 kg/m³] range. 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 M 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 after initial addition to ensure the product is not being discarded. Pilot testing is advised to determine the necessary treatment to achieve the desired results and to observe the change in mud properties.

The softening point of VERSATROL M resin makes it suitable for use over a wide range of temperatures. It is often used to seal low-pressure and depleted formations.

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).

Typical Physical Properties

Physical appearance	Black powder
Specific gravity	1.04–1.06
Bulk density	~34 lbm/ft ³ [540 kg/m ³]
Flash point	600 degF [316 degC] (COC)
Softening point	350 degF to 400 degF [177 degC to 204 degC]
Ash content	Less than 3%