**VERSATROL HT**

**VERSATROL** HT gilsonite is a naturally occurring asphalt used for high-temperature, high-pressure (HTHP) filtration control in all VERSA* oil-base systems.

VERSATROL HT additive has a higher softening point than the regular VERSATROL product. VERSATROL HT gilsonite is ideally suited for ultra-high-temperature applications. It is 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.

**Typical Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical appearance</td>
<td>Black powder</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.04 – 1.06</td>
</tr>
<tr>
<td>Softening point</td>
<td>450°F (232°C)</td>
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</tbody>
</table>

**Applications**

VERSATROL HT additive is designed to be used in ultra-high temperature applications where the anticipated bottomhole static temperature exceeds the limits of the regular VERSATROL material. VERSATROL HT additive will reduce API and HTHP fluid-loss in all oil-base muds. It improves overall emulsification stability, thermal stability, and suspension characteristics of most oil-base formulations. VERSATROL HT additive also increases viscosity, especially at lower temperatures due to its partial solubility. It is insoluble in water.

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

When used in the initial formulation, it is recommended to add VERSATROL HT additive last. For existing systems, the product may be added at any time, mixed slowly during at least one circulation. Pilot testing is advised to determine the necessary treatment to achieve the desired results and to observe the change in mud properties.

**Advantages**

- For use in ultra-high temperature applications (BHST >400°F/204°C)
- Reduces API and HTHP fluid loss in all VERSA oil mud systems
- Enhances emulsion and thermal stability

**Limitations**

- Environmental restrictions concerning the use of oils and oil-base fluids should be considered since VERSATROL HT additive is used in conjunction with oil.

**Toxicity and Handling**

Bioassay information is available upon request.

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

**VERSATROL HT** additive is packaged in 25-kg (55.1 lb) multi-wall, paper sacks.

Store in dry, well-ventilated area. Keep container closed. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.