**RHETHIK** RHELIANT system rheological modifying viscosifier

Increases overall viscosity and improves sag control

**Applications**
RHETHIK* RHELIANT system rheological modifying viscosifier provides suspension in freshly prepared synthetic drilling fluids under conditions where insufficient shear and temperature at the mixing plant do not enable the other viscosifiers in the formulation to yield. It provides elevated yield point and gel structure to support weight material with a minimal concentration of organophilic clay. This prevents excessive amounts of organophilic clay from being used, which could lead to undesirable high viscosities once the mud flows into the well. This polymer can generate high viscosity when added to a system containing a moderate amount of low-gravity solids; therefore, pilot testing is highly recommended before use.

RHETHIK viscosifier works with organophilic clay to develop viscosity. This viscosity will diminish with high shear and time, so treatments will be needed on a regular basis.

While drilling, RHETHIK viscosifier is used in low-ECD systems to optimize rheology across a wide temperature range, as required in deepwater environments. A combination of RHEFLAT* rheological modifier, organophilic clay, and RHETHIK viscosifier provides a flat rheology profile. RHETHIK viscosifier can have a strong effect on low-temperature rheology. Care should be used to ensure overtreatment does not occur.

**How it improves wells**
RHETHIK viscosifier is a versatile additive that works in conjunction with organophilic clay. It increases low-shear-rate viscosity (LSRV) to improve shear thinning and thixotropic characteristics of the RHELIANT* thermally stable, flat-rheology drilling fluid system.

**Advantages**
- Develops increased gel structures, providing a thixotropic fluid
- Works as a versatile gelling agent, the effects of which can be reversed (thinned) with chemical treatments or with shear and time
- Does not viscosify the liquid phase but performs by maximizing the thixotropy of fluids containing organophilic clay

**Limitations**
- Should not be added unless the system contains organophilic clay or oil-wet active drill solids
- Should not be used in combination with any other polymeric rheological additives without first pilot testing

**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 datasheet.

**Packaging and Storage**

Store in dry, well-ventilated area. Keep container closed. Keep away from heat, sparks, and flames. Store away from incompatible materials.

<table>
<thead>
<tr>
<th>Typical Physical Properties</th>
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<tbody>
<tr>
<td><strong>Physical appearance</strong></td>
<td>Light yellow liquid</td>
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<tr>
<td><strong>Specific gravity</strong></td>
<td>0.9–1.1</td>
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All specifications are subject to change without notice.

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