

MAGMA-GEL SE

Enhance viscosity and suspension in nonaqueous HP/HT drilling fluid systems

Applications

- MAGMA-TEQ HP/HT drilling fluid system
- Other invert emulsion drilling fluids
 - Compatible with diesel, mineral oil, and synthetic base fluids
- Conventional or unconventional wells up to 450°F (232°C)

Features and benefits

- Enhances solids suspension
 - Prevents density differentiation in invert emulsion drilling fluids under HP/HT static condition
- Increases low shear rate viscosity and gel strength of invert emulsion drilling fluids
- Maintains rheological properties at high temperatures

The **MAGMA-GEL™ SE suspension enhancer** from Baker Hughes is a high purity, wet-processed organophilic clay used as suspension enhancer in the **MAGMA-TEQ™ high-pressure/high-temperature (HP/HT) drilling fluid system** and other invert emulsion drilling fluids.

The MAGMA-GEL SE additive increases the suspension properties in an invert emulsion HP/HT system without adversely affecting the general viscosity. MAGMA-GEL SE additive is particularly effective in preventing density differentiation in an invert emulsion fluid system under static conditions.

MAGMA-GEL SE additive imparts viscosity at extremely low shear rates and will, to some degree, affect the gel strength.

Recommended treatment

Concentrations will vary depending on desired fluid properties. Typically, sufficient suspension is achieved with MAGMA-GEL SE clay additions of 1.0 to 5.0 lb/bbl (2.9 to 14.3 kg/m³).

Also, it is recommended to treat the drilling fluid in the open hole with 0.5 to 2.0 lb/bbl (1.4 to 5.7 kg/m³) MAGMA-GEL SE additive prior to leaving the drilling fluid in the hole for prolonged periods. This will maintain the integrity of the system under extreme HP/HT, static conditions.

Environmental information

For information concerning environmental regulations applicable to this product, contact the Health, Safety, and Environmental department of Baker Hughes.

Shipping

Transportation of the MAGMA-GEL suspension enhancer is not restricted by international or USA regulatory agencies.

Safe handling

recommendations

Use normal precautions for employee protection when handling chemical products. See Safety Data Sheet (SDS) prior to use.

Packaging

MAGMA-GEL SE additive is packaged in 50-lb (22.7-kg) multi-walled bags.

Typical properties

Appearance	Light brown powder
Specific gravity	1.6
Hygroscopic	No
Solubility in water	Insoluble