

AQUA-COL shale inhibitor

Inhibit shale and clay swelling in water-based drilling fluid systems

Applications

- All water-based drilling fluids
- Freshwater and low-salinity systems

Features and benefits

- Reduces swelling of reactive clays
 - Improves wellbore stability
 - Improves rheological stability of the drilling fluid

The Baker Hughes AQUA-COL™ shale inhibitor is a water-soluble glycol ether used to prevent shales with medium to high smectite clay content from dispersing into water-based mud systems.

AQUA-COL shale inhibitor reduces swelling of reactive, interlayered clays by chemical interaction at the clay surface (below the cloud point) and by inhibiting filtrate invasion into the clay particles (above the cloud point).

The cloud point of a mud system containing AQUA-COL shale inhibitor can be varied by altering the salinity, as required. Due to its relatively low cloud point, the AQUA-COL additive is normally selected for use in low-salinity systems (up to 50,000 mg/L chloride).

Recommended treatment

The typical dosage range for AQUA-COL additive is 3-5% by volume of drilling fluid.

Environmental information

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

Shipping

Transportation of AQUA-COL shale inhibitor is not restricted by either international or United States regulatory agencies.

Safe handling

recommendations

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

Packaging

AQUA-COL shale inhibitor is packaged in 200-L (52.8-gal) drums.

Typical properties

Appearance	Clear, colorless liquid
Specific gravity at 68°F (20°C)	1.013
pH (10% solution)	5.5 to 7.5
Flash point (Closed cup)	285.8°F (141°C)
Pour point	-50.8°F (-46°C)