



LIQUI-TROL™

Modified Cellulosic Polymer Suspension

Description LIQUI-TROL™ viscosifier is a free-flowing, liquid suspension of a modified natural cellulosic polymer, in an ultra-clean oil. LIQUI-TROL viscosifier of polymer when added to a QUIK-GEL® or BORE-GEL® slurry, yields a drilling mud system suitable for drilling in water sensitive formations.

Applications/Functions

- Can provide filtration control in fresh or brackish water-based drilling fluids
- Can promote borehole stability in water sensitive formations
- Can pour a slug of concentrate into drill string directly to sweep the hole
- Can minimize rotational torque and circulating pressure
- Can improve hole cleaning and core recovery
- Can stiffen the foam to improve cuttings transport in air/gel-foam drilling
- Can reduce air requirements, uphole velocity and borehole annulus pressure

Advantages

- Effective in fresh water, salt water and brackish water-based drilling fluids
- Effective in small quantities for filtration control
- Non-fermenting
- Compatible with other Baroid drilling fluid additives
- Resistant to harsh environments and contaminants

Typical Properties

- | | |
|-----------------------------|--|
| • Appearance | Off-white, free-flowing, viscous fluid |
| • Specific gravity | 0.98 |
| • pH (0.3% solution) | 9.0 |
| • Flash point, PMCC °F (°C) | 185, (85) |
| • Pour point, °F (°C) | 35, (1.7) |
| • Freeze point, °F (°C) | -40, (-40) |

© Copyright 2008 Halliburton

BORE-GEL and QUIK-GEL are registered trademarks of Halliburton
LIQUI-TROL is a trademark of Halliburton

Rev. 10/2006 · IDP 022

Because the conditions of use of this product are beyond the seller's control, the product is sold without warranty either express or implied and upon condition that purchaser make its own test to determine the suitability for purchaser's application. Purchaser assumes all risk of use and handling of this product. This product will be replaced if defective in manufacture or packaging or if damaged. Except for such replacement, seller is not liable for any damages caused by this product or its use. The statements and recommendations made herein are believed to be accurate. No guarantee of their accuracy is made, however.

Recommended Treatment

- Using Venturi Mixer, or into vortex of a high-speed stirrer, add slowly and uniformly to entire circulating system.
- Used to slug down the rods to produce a high viscosity hole-cleaning sweep.

Approximate Amounts of LIQUI-TROL viscosifier or polymer Added to Water-Based Fluids		
Desired Condition/Result		
<i>Added to fresh or salt water</i>	qt/100 gal	liters/m³
• To help stabilize water sensitive formation	4-6	10-15
• To help reduce torque and lower circulating pressure	2-4	5-10
<i>Added to QUIK-GEL® slurry (25 pounds per 100 gallons) (30 kilograms per m³)</i>	qt/100 gal	liters/m³
• To help enhance drilling mud fluid properties	1-2	2.5-5
• To help improve drilling mud suspension and stabilization capabilities	2-4	5-10
<i>Added to injection liquid in air/foam drilling</i>	qt/100 gal	liters/m³
• To help improve foam performance and hole cleaning	1-4	2.5-10

Note:

Salt water may require twice as much LIQUI-TROL viscosifier or polymer as fresh water. Preferably, LIQUI-TROL should be mixed in freshwater before it is added to salty water.

Packaging

LIQUI-TROL viscosifier or polymer is packaged in 5-gal (19-liter) plastic pails.

Availability

LIQUI-TROL viscosifier or polymer can be purchased through any Baroid Industrial Drilling Products Retailer. To locate the Baroid IDP retailer nearest you contact the Customer Service Department in Houston or your area IDP Sales Representative.

Baroid Industrial Drilling Products

Product Service Line, Halliburton

3000 N. Sam Houston Pkwy. E.
Houston, TX 77032

Customer Service	(800) 735-6075 Toll Free	(281) 871-4612
Technical Service	(877) 379-7412 Toll Free	(281) 871-4613