



LIQUI-TROL™

Modified Cellulosic Polymer Suspension

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

- Applications/Functions**
- Provide filtration control in fresh or brackish water-based drilling fluids
 - Promote borehole stability in water sensitive formations
 - Pour a slug of concentrate into drill string directly to sweep the hole
 - Minimize rotational torque and circulating pressure
 - Improve hole cleaning and core recovery
 - Stiffen the foam to improve cuttings transport in air/gel-foam drilling
 - 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)

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™ Added to Water-Based Fluids		
Desired Condition/Result		
<i>Added to fresh or salt water</i>	qt/100 gal	liters/m³
<ul style="list-style-type: none">• To stabilize water sensitive formation	4-6	10-15
<ul style="list-style-type: none">• To 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
<ul style="list-style-type: none">• To enhance drilling mud fluid properties	1-2	2.5-5
<ul style="list-style-type: none">• To 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
<ul style="list-style-type: none">• To improve foam performance and hole cleaning	1-4	2.5-10

Note:

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

Packaging

LIQUI-TROL is packaged in 5-gal (19-liter) metal pails with an integrated, resealable pour spout.

Availability

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

**Baroid Industrial Drilling Products,
A Product and Service Line of Halliburton Energy Services, Inc.**
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