



BAROID QUIK MUD® D-50

Viscosifier/Borehole Stabilizer

Description

QUIK MUD® D-50 liquid polymer dispersion is a high solids, partially hydrolyzed polyacrylamide/polyacrylate (PHPA) copolymer used primarily as a viscosifier and borehole stabilizer to prevent reactive shale and clay from swelling and sloughing. QUIK MUD D-50 liquid polymer dispersion can be used to provide friction reduction, inhibition and lubricity in freshwater, KCl and saltwater based drilling fluids.

Applications/Functions

The use of QUIK MUD D-50 polymer assists or promotes the following:

- Viscosity development in fresh water drilling fluids
- Clay and shale stabilization to prevent swelling and/or dispersion
- Reduce rotational torque and circulating pressure
- Promotes enhancement of air-foam system capabilities
- Enhances core recovery in continuous wireline coring operations

Advantages

- Can be mixed easily with minimum shear in fresh water
- Efficient and cost effective - small amounts produce desired results
- Can be broken down chemically with bleach (sodium hypochlorite)
- Compatible with other Baroid drilling fluid additives, added in proper sequence
- Non-fermenting
- NSF/ANSI Standard 60 certified

Typical Properties

| | |
|---|--------------------|
| • Appearance | Milky white liquid |
| • Specific Gravity @ 20°C (Water=1) | 1.08 – 1.12 |
| • Percent Activity | 50% |
| • Bulk density @ 20°C, lb/ft ³ | 68.6 |
| • pH of a 0.5% solution | 6-8 |

Recommended Treatment

- Using a Venturi Mixer, or into vortex of a high-speed stirrer, add slowly and uniformly to the entire circulating system.

| Approximate Amounts of QUIK MUD® D-50 Liquid Polymer Added to Water Based Fluids | | | |
|--|---------------|----------|----------------------|
| Drilling Application/Desired Property | Quart/100 gal | Pint/bbl | Liter/m ³ |
| To Formulate a Clay-Free Drilling Fluid | 0.3 – 2.5 | 0.25 – 2 | 2.5 – 6.5 |
| Added to QUIK-GEL® or BORE-GEL® drilling fluids | 0.3 - 1 | 0.25 – 1 | 1.25 – 2.5 |
| To improve foam performance and hole conditions | 0.3 – 1 | 0.25 – 1 | 1.25 – 2.5 |

Additional Information

- For optimum performance in freshwater applications, the make-up water used to mix QUIK MUD® D-50 liquid polymer dispersion should meet the following:
 - Total chloride less than 1500 ppm (mg/L)
 - Total hardness less than 100 ppm as calcium
 - Total chlorine less than 50 ppm
 - Water pH between 8.5-9.5
- Reduce total hardness of make-up water by adding Soda Ash at 0.5 to 1 pound per 100 gallons (0.6 - 1.2 kg/m³) of make-up water.
- QUIK MUD D-50 liquid polymer dispersion can be chemically broken down with regular household liquid bleach (5% sodium hypochlorite). Use one gallon of liquid bleach per 100 gallons (10 liters/m³) of formulated fluid.

Do not use perfumed liquid bleach or solid calcium hypochlorite.

Packaging

QUIK MUD D-50 liquid polymer dispersion is packaged in 5-gal (19-liter) plastic containers.
