BAROID EZ-MUD® GOLD

Clay/Shale Stabilizer

Description

EZ-MUD® GOLD clay and shale stabilizer provides inhibition of clay and shale formations in water-based drilling fluids without substantially increasing viscosity. EZ-MUD GOLD stabilizer, when added to a QUIK-GEL® or BORE-GEL® slurry, yields an inhibitive drilling fluid system while maintaining manageable and effective fluid properties. EZ-MUD GOLD stabilizer can be mixed easily at minimal shear thereby eliminating the need for liquid emulsions.

Applications/Functions

The use of EZ-MUD GOLD stabilizer aids or promotes the following:

- Enhanced rheological properties of a low-solids drilling mud
- Clay and shale stabilization to prevent swelling and/or dispersion
- Borehole stability in water sensitive formations
- Minimized rotational torque and circulating pressure
- Enhancement of air-foam system capabilities
- Enhanced core recovery in continuous wireline coring operations

Advantages

- NSF/ANSI Standard 60 certified
- Easy dispersion and mixing with minimal shear
- Can be used at increased concentrations to gain inhibition without producing excess viscosity
- No petroleum distillates present
- Breaks down chemically with bleach (sodium hypochlorite)
- Compatible with other Baroid drilling fluid additives when added in proper sequence
- Non-fermenting

Typical Properties

Appearance	White, free-flowing beads
Bulk density, lb/ft^3	52
pH (1% aqueous solution)	7.75

Recommended Treatment

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

Recommended Treatment (continued)

Approximate Amounts of EZ-MUD® GOLD stabilizer Added to Water Based Fluids			
Drilling Application/Desired Property	**lb/bbl**	**lbs/100 gal**	**kg/m^3**
Added to fresh water (to formulate a clay-free drilling fluid)			
• To help stabilize water sensitive formation • To help reduce torque and lower circulating pressure	0.25 - 1.0	0.6 – 2.4	0.7 – 2.9
Added to QUIK-GEL® or BORE-GEL® drilling fluids			
• To help retard reactive shale and clay and enhance lubricity	0.1 - 0.3	0.25 – 0.75	0.3 – 0.9
Added to injection liquid in air/foam drilling applications			
• To help improve foam performance and hole conditions	0.25 - 1.0	0.6 – 2.4	0.7 – 2.9

- *Note:*
  Make-up water used to mix EZ-MUD GOLD stabilizer should meet the following quality:
  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 (sodium carbonate) at 0.5 to 1 pound per 100 gallons (0.6 - 1.2 kg/m^3) of make-up water.

EZ-MUD GOLD stabilizer can be chemically broken down with regular household liquid bleach (5% sodium hypochlorite). Use one gallon of liquid bleach per 100 gallons (10 liters/m^3) of fluid formulated with EZ-MUD GOLD stabilizer.

Do not use perfumed liquid bleach or solid calcium hypochlorite.

Packaging

EZ-MUD GOLD stabilizer is packaged in 10-lb (4.54-kg) and 40-lb (18.1-kg) plastic containers with re-sealable flip top lids.