



EZ-MUD[®] DP

Borehole Stabilizing Dry Polymer

Description EZ-MUD[®] DP free-flowing dry granular synthetic polymer contains partially hydrolyzed polyacrylamide/polyacrylate (PHPA) copolymer. EZ-MUD DP water-soluble polymer disperses and dissolves in fresh water rapidly. When mixed with fresh water, EZ-MUD DP dry polymer hydrates quickly and forms a clear, viscous fluid. With its high molecular weight and optimum charge density, EZ-MUD DP dry polymer provides excellent borehole stability through a coating mechanism (encapsulation).

Applications/Functions

- Can stabilize reactive clay and shale formations
- Can keep trench excavation open during the construction
- Can produce high viscosity solids-free slurry
- Can enhance rheological properties of a low-solids drilling mud
- Can enhance core recovery in continuous wireline coring operations
- Can flocculate non-reactive solids in reserve pit at low concentrations
- Can reduce torque and drag

Advantages

- Can disperse easily with minimal shear
- Efficient shale/clay stabilizer and viscosifier
- Helps impart high degree of lubricity
- Compatible with other drilling fluid additives when added in proper sequence
- Non-fermenting
- No petroleum distillates involved
- Breaks down chemically with bleach (sodium hypochlorite)
- NSF/ANSI Standard 60 Certified

Typical Properties

Appearance	White, free-flowing granular
pH (0.15% solution)	7.5
Density	1.45 (as packaged)

Recommended Treatment

Approximate Amounts of EZ-MUD DP Polymer Added to Drilling Fluid System			
Drilling Application/Desired Property	lbs/100 gal	lbs/bbl	kg/m³
<i>Added to fresh water (To formulate a clay-free drilling fluid)</i>			
• To help stabilize water-sensitive formations	0.5 - 1.0	0.2 - 0.4	0.6 - 1.2
• To help stop rod vibration, reduce torque and pumping pressure	0.5 - 1.5	0.2 - 0.6	0.6 - 1.8
<i>Added to QUIK-GEL[®] or BORE-GEL[®] Drilling Fluids</i>			
• To help retard reactive shale and clay and enhance lubricity	0.25 - 0.75	0.1 - 0.3	0.3 - 1.0
<i>Added to injection liquid in air/foam drilling applications</i>			
• To help improve foam performance and hole conditions	0.5 - 1.0	0.2 - 0.4	0.6 - 1.2

Notes:

- Make-up water used to mix EZ-MUD DP polymer should meet the following quality:
total chloride less than 1500 ppm (mg/L)
total hardness less than 150 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/m³) of make-up water.
- EZ MUD DP polymer 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 fluid formulated with EZ MUD DP polymer. Do not use perfumed liquid bleach or solid calcium hypochlorite.

Packaging

EZ-MUD DP polymer is packaged in 14-lb (6.35-kg) resealable plastic containers.

Availability

EZ-MUD DP 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