BAROID PAC™-R

Filtration Control Additive

Description

PAC™-R modified natural cellulosic polymer provides filtration control in most water-based drilling fluids. PAC-R additive, when added to a QUIK-GEL® slurry, yields a drilling mud system suitable for drilling in sandy formation. PAC-R additive can be added to vegetable or mineral oil to provide an oil-based fluid suspension, which can be poured into drill string directly. PAC-R additive is also used in air/gel-foam drilling.

Applications/Functions

- Can provide filtration control in fresh or brackish water-based drilling fluids
- Can promote borehole stability in water sensitive formations
- Can minimize rotational torque and circulating pressure
- Can improve hole cleaning and core recovery
- Can stiffen foam to improve cuttings transport in air/foam drilling
- Can reduce air requirements, uphole velocity and borehole annulus pressure in air/foam drilling

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	White, free-flowing powder
pH (1% aqueous solution)	8.0

Recommended Treatment

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

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Recommended Treatment (continued)

Approximate Amounts of PAC™-R Additive Added to Water-based Fluids		
Desired Condition/Result		
Added to fresh or salt water	**lb/100 gal**	**kg/m^3**
• To stabilize water sensitive formation	3 – 5	4 – 7
• To reduce torque and lower circulating pressure	0.5 - 1	0.6 - 1.0
Added to QUIK-GEL slurry (25 lb/100 gallons) or (30 kilograms per m^3)	**lb/100 gal**	**kg/m^3**
• To reduce filtration rate and improve borehole stability	0.5 - 1.5	0.6 - 1.7
Added to BORE-GEL® slurry (35 lb/100 gallons) or (42 kilograms per m^3)	**lb/100 gal**	**kg/m^3**
• To reduce filtration rate and improve borehole stability	0.5 - 1.0	0.6 - 1.2
Added to injection liquid in air/foam drilling	**lb/100 gal**	**kg/m^3**
• To improve foam performance and hole condition	0.5 - 1.5	0.6 - 1.7

Note:
Very salty waters may require twice as much PAC-R additive as fresh water. Preferably, PAC-R additive should be mixed in fresh water before it is added to very salty water.

Packaging

PAC-R filtration control additive is packaged in 50-lb (22.7 kg) bags.