BAROID BAROID

QUIK-FOAM®

High Performance Foaming Agent

Description

QUIK-FOAM® foaming agent is a proprietary blend of biodegradable surfactants that can be added to fresh, brine, or brackish water for air/foam, air/gel-foam, or mist drilling applications.

Applications/Functions

The use of QUIK-FOAM foamer assists or promotes the following:

- Enhance the rate of cuttings removal
- Increase the ability of lifting large volumes of water
- · Improve hole-cleaning capability of the airstream
- Reduce the sticking tendencies of wet clays, thereby eliminating mud rings and wall packing
- · Reduce erosion of poorly consolidated formations
- Provide a technique for drilling in zones with lost circulation
- Increase borehole stability
- Reduce air-volume requirement
- Suppress dust during air drilling operation

Advantages

- NSF/ANSI Standard 60 Certified
- High quality, high expansion foam with a consistency similar to shaving foam
- High stability with excellent retention time
- Versatile and compatible with various types of make-up water
- Readily undergoes primary and ultimate (>99%) biodegradation
- Proven product for multi-discipline application

Typical Properties

Appearance Light yellow, transparent liquid

Specific gravity 1.02 pH (0.5% solution) 7.1

Flash point, PMCC $82^{\circ}F$ (28°C) Pour point $0^{\circ}F$ (-18°C)

Recommended Treatment

Approximate Amounts of QUIK-FOAM® Added to Injection Water				
Application	Amount/100 gal	Amount/bbl	Liters/m ³	
Dry-air drilling (as a dust suppressant)	0.5 - 1 pints	0.2 - 0.5 pints	0.5 - 1.5	
Mud-mist drilling in sticky clays	1 - 2 quarts	1 - 2 pints	2.5 - 5	
Foam and gel-foam drilling	0.5 - 2 gallons	1.5 - 7 pints	5 - 20	
As a slug to clean the annulus	1 pint*	0.5 pints*	0.5**	

^{*} in drill pipe, followed by 3 to 5 gallons of water; ** followed by 20 liters of water

Note: Close product container immediately after use to avoid gelling.				
Product Make-ups for Air Drilling Injection Slurries				
Main Ingredient of Injection Slurry	Water (gallons)	QUIK-GEL® viscosifier (pounds)	QUIK-TROL [®] GOLD polymer (pounds)	QUIK-FOAM foaming agent (% by volume)
Foam Drilling System	100			0.02 - 3.0
Mixing/Injection Procedure				
Add QUIK-FOAM to injection water. Inject into the air stream at a rate necessary to maintain hole stability and penetration rate. Increase amount of QUIK-FOAM as required to compensate for downhole water dilution				
Firm-Foam	100		0.5 - 1	0.1 - 2.0

Mixing/Injection Procedure

Drilling System

Mix polymer with water before adding QUIK-FOAM. 1-2 pints of EZ MUD[®] may be used as a substitute for QUIK-TROL GOLD. Inject into the air stream at a rate necessary to maintain hole stability and penetration rate.

Mud-Mist Drilling	100	25		0.3 - 1.0
System	100	25	•••	0.3 - 1.0

Mixing/Injection Procedure

Mix viscosifier with water before adding QUIK-FOAM. Inject into the air stream at a rate necessary to maintain hole stability and penetration rate. Resulting viscosity is 32-40 sec/qt as measured by Marsh Funnel.

Gel-Foam Drilling System	100	12 - 15	1	0.3 - 1.0
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Mixing/Injection Procedure

Mix viscosifier and polymer with water before adding QUIK-FOAM. Inject into the air stream at a rate necessary to maintain hole stability and penetration rate. Resulting viscosity is 32-40 sec/qt as measured by Marsh Funnel.

Note:

In some states, it is illegal to discharge any foreign substance into the water shed due to potential contamination of ground water. After use, the foam mixture must be localized in an earthen pit or some type of containment and allowed to biodegrade naturally.

Packaging

QUIK-FOAM® is packaged in 5-gallon (19-liter) plastic containers or in 55-gallon (208-liter) drums.

Availability

QUIK-FOAM 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