



ULTRAFOAM™ EU

Foaming Agent

Description ULTRAFOAM EU Foaming Agent is a biodegradable mixture of foaming agents that can be used for air/foam, air/gel-foam, or mist drilling in water well, horizontal direction drilling (HDD) and tunneling applications.

Applications/Functions

- 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
- Lowers the compressor requirements for a given depth or water influx
- Increase borehole stability
- Reduce air-volume requirement
- Suppress dust during air drilling operation

Advantages

- Produces high quality foam at low concentrations
- Highly stable foam with excellent retention time
- Readily undergoes primary and ultimate (>99%) biodegradation
- Proven product for multi-discipline application

Typical Properties

Appearance	Liquid
Specific gravity	1.070
Flash point	> 100°C (> 212°F)
Solubility	Soluble in Water

Recommended Treatment

Approximate Amounts of ULTRAFOAM EU Foaming Agent Added to Injection Water

% by Volume	Gallons/100 gal	Liters/m ³
0.5 - 2	0.5 - 2 gallons	5 - 20

Notes:

- Close product container immediately after use to avoid contamination of remaining ULTRAFOAM EU.
- Foam and effluent must never be discharged into a stream or waterway. It is the end-user's responsibility to contain foam/effluent, cuttings, and production water. Utilize hay bales, temporary containment ponds or systems to isolate the foam.

**Recommended
Treatment
(Continued)**

Approximate Product Make-ups for Air Drilling Injection Slurries				
Injection Slurry	Water (Liters)	QUIK-TROL® GOLD polymer (kg)	EZ-MUD® liquid polymer (Liters)	ULTRAFOAM™ EU foaming agent (% by volume)
Air-Foam Drilling System	1000	0 – 1.5	0 – 2.5	0.5 - 2
<p>Foam mixing/injection procedure:</p> <p>Add ULTRAFOAM EU Foaming Agent to injection water. Inject into the air stream at a rate necessary to maintain hole stability and penetration rate. Increase amount of ULTRAFOAM EU Foaming Agent as required to compensate for downhole water dilution.</p> <p>To build a stiff-foam drilling system:</p> <p>Mix QUIK-TROL GOLD polymer (0.5 – 1.5 kg per 1000 Liters) or EZ-MUD liquid polymer (0.5 – 2.5 Liters per 1000 Liters) with water before adding ULTRAFOAM EU Foaming Agent. Inject into the air stream at a rate necessary to maintain hole stability and penetration rate.</p>				
Injection Slurry	Water (Liters)	TUNNEL-GEL® PLUS, viscosifier (kg)	QUIK-TROL® GOLD polymer (kg)	ULTRAFOAM EU foaming agent (% by volume)
Gel-Foam Drilling System	1000	15 – 18	2.5 – 3	0.5 - 1
<p>Gel-Foam Mixing/Injection Procedure:</p> <p>Mix viscosifier, then polymer with water before adding ULTRAFOAM EU Foaming Agent. Inject into the air stream at a rate necessary to maintain hole stability and penetration rate.</p>				

Packaging

ULTRAFOAM™ EU Foaming Agent is packaged in 20 kg plastic pail.

Availability

ULTRAFOAM™ EU Foaming Agent can be purchased through a Baroid Industrial Drilling Products Retailer.

**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