

## FOAM-418

### Heavy Crude Foamer

FOAM-418 is a blend of different, complex, surfactants that foams in fresh water and brine and is oil tolerant. It does not foam oil; however, it can work in the presence of 5-25% oil cut water, depending upon the type and characteristics of the oil.

#### Key Features

- Highly effective foaming agent. Foams fresh, brine or oil contaminated water
- Foams in the presence of 5-25% oil cut water.
- High flash point and highly biodegradable.
- Non- hazardous labeling or shipping requirements.

#### Application

FOAM-418 is an all-purpose foamer that is safe to handle, has a high flash point, and is highly biodegradable.

Foamers are often referred to as soap; however, the more appropriate name is surfactant, which is a shortened term meaning surface active agent. Surfactants work at the interfaces between air and water to lower the surface tension. By lowering the surface tension, the surfactant holds air bubbles in a ring of water, therefore lightening the water's weight, and enabling the pressures to

effectively move the column of brine. It takes a special type of surfactant to work in both brine, and in the presence of hydrocarbons.

#### Usage

FOAM-418 should be added to the water in the liquid injector tank downstream of the compressors and booster. Dosage rates are best determined from field tests. An optimum concentration for a specific field or oil concentration should be the goal.

## Typical Physical Properties

<b>Appearance</b>	Clear
<b>Color</b>	Amber
<b>Form</b>	Liquid
<b>Flash Point °F(°C)</b>	>200 (>93)
<b>Freeze Point °F(°C)</b>	5 (-15)
<b>Specific Gravity</b>	0.98 – 1.0
<b>Density</b>	8.16 – 8.33
<b>pH (Neat)</b>	6.0 – 8.0
<b>Solubility in Water</b>	Complete
<b>Charge in Solution</b>	Anionic
<b>Shelf-Life (mo.)</b>	12
<b>Packaging L (gallons)</b>	55 gallon Drum
	5 gallon pail

## Handling and Safety

Consult the MSDS, safety posters, and/or product label before use, and use personal protective equipment as advised.

Observe standard precautions when handling this and all other organic chemical

## Test Data

Foam Height and Half-Life measured with 100 ml of fluid and FOAM-418 at 0.5% (5 L/m<sup>3</sup>) loading.

<b>FLUID</b>	<b>FOAM HEIGHT</b>	<b>HALF-LIFE (MM:SS)</b>
Fresh Water	>500 ml	>4:30
Brine	>350 ml	>2:00
5%oil contamination	>200 ml	>1:30