#### --- Airfoam B ---

Airfoam B is a muli-purpose, air-drilling foamer that forms in fresh or hard water and saturanted brine water. It is also used to unload water from gas wells to increase gas production.

#### **Treating rates will vary depending on:**

- (1) Water characteristics
- (2) Bottom hole pressure and gas flow rate
- (3) Tubing depth and size
- (4) Hydrocarbon amounts

Airfoam B produces large volumes of stable foam even in the presence of oil and is effective in broad range of oil field brines up to a temperature of 350°F.

Airfoam B is safe to handle, has high flash point, and does not require and hazardous shipping labels.

#### --- Chemistry ---

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 of surfactant to work in both brine, and in the presence of hydrocarbons.

While most foamers can generally be described as an alcohol-ether-sulfate, Airfoam 311 is a blend of different, complex, alcohol-ether-sulfates, and as such is highly biodegradable.

## --- Specifications ---

Color: amber

Pour Point: -20°F

Flash Point: > 192°F

Specific Gravity: 1.048

Density: 8.6/1bs per gallon

pH: 7.0-8.0

Charge In Solution: slightly anionic

## --- Advantages ---

Highly effective foaming agent

Foams fresh or hard water, and saturated brine

Foams in the presence of oil contamination

Half life over five minutes to fresh water

Half life in seconds equals 57% of foam height in ml

Half life over three minutes in saturated brine

Eliminates the need for two different foaming agents

Highly flash point

Highly biodegradable

No hazardous labeling or shipping requirements

## --- Handling And Storage ---

Avoid contact with eyes

Avoid prolonged or repeated contact with skin

Do not take internally

Keep container closed when stored

--- First Aid ---

In case of contact with skin and eyes, flush infected area with water for no less than 15 minutes. If irritation continues to develop, call a physician as soon as possible.

# --- Package Availability ---

Available in five-gallon pales

Available in 55-gallon lined steel drums

Available in bulk