

# SAFE-BREAK Prime

## Universal nonemulsifier

### APPLICATIONS

- Prevention of stable emulsions between clear brine completion fluids and reservoir crude oil

### BENEFITS

- Effective at low concentrations
- Soluble with most water-based and clear brine fluids
- Capable of preventing formation damage due to crude oil emulsions
- Excellent environmental rating
- High flash point

SAFE-BREAK Prime\* universal nonemulsifier is a specialty solvent and surfactant blend that prevents a stable emulsion forming between clear brine completion fluids and reservoir crude oil. It is designed to meet strict environmental standards for North Sea applications and has a gold rating with no substitution warning from the Centre for Environment, Fisheries, and Aquaculture Science (Cefas).

This nonemulsifier is formulated to avoid adsorption on the formation as clear brine invades and it does not precipitate out of solution at typical bottomhole temperatures. SAFE-BREAK Prime nonemulsifier is effective at very low concentrations and promotes full reclamation of the completion fluid.

Soluble in most standard halide brines and seawater-based completion fluids, SAFE-BREAK Prime universal nonemulsifier is compatible with some zinc bromide brines and formate brines but pilot testing is required. It provides superior water-wettability compared with other nonemulsifiers.

### Pilot testing and treatment

The typical application of SAFE-BREAK Prime nonemulsifier ranges from 0.1% to 1.0% by volume in a filtered completion fluid. Where practical, compatibility between the specific crude oil and completion fluid should be established through laboratory pilot testing prior to applying the product in the field. If pilot testing the nonemulsifier is not possible, it should be applied at 0.5% by volume. In all applications, fluid returns should be monitored and the dosage adjusted accordingly.

### Toxicity and handling

Bioassay information is available upon request. Handle as an industrial chemical, wearing protective equipment and observing the precautions as described in the Safety Data Sheet.

### Packaging and storage

SAFE-BREAK Prime nonemulsifier is packaged in 55-galUS [208-L] drums and 264-galUS [1,000-L] intermediate bulk container (IBC) tanks.

Store in a dry, well-ventilated area. Keep container closed. Keep away from heat, sparks, and flames. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping, and stacking.

### Typical Physical Properties

Physical appearance	Liquid
Color	Light yellow
Specific gravity	1.01
Flash point	180 degC [356 degF]