

SUREMUL

Primary invert-emulsion system emulsifier

APPLICATIONS

- Establishing a stable emulsion
- Oil wetting
- HTHP filtration control
- Temperature stability

ADVANTAGES

- Improves emulsion stability
- Functions as a secondary wetting agent
- Provides filtration control
- Minimizes dispersion tendencies of reactive clay solids
- Helps maintain HPHT filtrate in a water-free state
- Improves thermal stability and contamination resistance of RHELIANT* thermally stable, flat-rheology drilling fluid system

SUREMUL* primary invert-emulsion system emulsifier provides excellent emulsion stability, preferential wetting of solids by the continuous phase, filtration control, and temperature stability. SUREMUL emulsifier is used in conjunction with SUREWET* RHELIANT system invert-emulsion system surfactant. The SUREMUL emulsifier can also be used in other M-I drilling fluid additives as well as the VERSA* oil-based drilling fluid systems in conjunction with a secondary emulsifier or a wetting agent.

Applications

SUREMUL emulsifier is designed for use as the primary emulsifier in the RHELIANT system to provide a stable emulsion and excellent oil wetting. SUREMUL emulsifier contributes to HTHP filtration control and to the temperature stability of the system. It is effective over a wide temperature range and in the presence of contaminants. SUREMUL emulsifier exhibits minimal dispersion tendencies when drilling reactive formations.

SUREMUL primary emulsifier is used in conjunction with the SUREWET surfactant in the RHELIANT system to enhance the emulsion characteristics of the fluid. SUREMUL emulsifier can also be used as a primary emulsifier in VERSA systems.

Initial system formulations typically require 6 to 10.2 lb/bbl [17 to 29 kg/m³] depending on the desired properties and other components in the system. Daily treatments are usually in the range of 0.1 to 1 lb/bbl [0.3 to 2.85 kg/m³].

For high-temperature applications (temperatures >300°F [>150°C]), initial system formulations require 8.75 to 14.0 lb/bbl [25 to 40 kg/m³].

Toxicity and handling

Bioassay information is available on request. Handle as an industrial chemical, wearing protective equipment and observing the precautions as described in the MSDS.

Packaging and storage

SUREMUL emulsifier is packaged in 55-galUS [208-L] drums and 550-galUS [2,131-L] totes. Store in a dry, well-ventilated area. Keep container closed. Keep away from heat, sparks, and flames. Store away from incompatibles.

Typical Physical Properties

Physical appearance	Amber liquid
Specific gravity	0.89–0.97
Flashpoint	>150 degF [>65 degC]