EXCELLENT PERFORMANCE



ENVIRONMENTALLY SAFE

R-Clean SM-12 **Casing Scrubber for Synthetic Muds**

Description: R-Clean SM-12 is a proprietary blend of selected water-soluble surfactants specifically designed for the clean-up of casing, drill pipe, and surface equipment during completion operations. R-Clean SM-12 is specifically designed to work on synthetic based drilling fluids.

Physical Properties:

છ	AppearanceYellow liquid
છ	Specific Gravity
	Density (lbs/gal)8.6
	Flash Point. > 201° F
	pH8.0 – 10.0

Advantages:

- Non-flammable and non-corrosive
- Biodegradable, non-toxic, and non-hazardous
- Disperses oil and oil coated solids in to small droplets
- Reduces or eliminates the need for filtering brine completion fluids
- Leaves a water wet surface after displacement with no oily film on metal surfaces
- When used as directed, does not form or create a surface sheen on receiving water

Application:

R-Clean SM-12 is used to displace mud systems prior to completion operations and to thoroughly clean tubing O.D. and casing I.D for gravel packing operations. R-Clean SM-12 should be used at a 3 - 5% concentration with water or brine and circulated as a "pill" to remove residual mud. Total "pill" volume should be calculated to maximize time of contact while being circulated in turbulent flow. If more specific application recommendations are require, a **Reliant**® engineer will be happy to assist.

Handling:

Improper handling of this product can cause injuries to workers. Observe all safety precautions shown on the label and on the Material Safety Data Sheet.

Premium Quality Products at Competitive Pricing

RELIANT FLUID TECHNOLOGIES, INC.

2933 highway 1 North, Port Allen, Louisiana 70767

RELIANT FLUID TECHNOLOGIES, INC. ®



EXCELLENT PERFORMANCE



ENVIRONMENTALLY SAFE

R-Clean SM-12 **Displacement Procedures**

Directions for Seawater Displacement

- Circulate well with seawater until the returning water appears clean. Mix a "pill" containing 1) 3% R-Clean SM-12 in seawater. Pump the "pill" in turbulent flow.
- Circulate the pill around and continue circulating until the water behind the pill appears clean. 2)
- 3) Displace the seawater with a clean completion fluid.

Generalized Procedure for Direct Displacement of Mud with Completion Fluid

- Pump a 30 50 barrel "spacer" containing 4 pounds per barrel HEC. 1)
- Immediately follow the "spacer" with a 100 barrel "pill" containing 3% R-Clean SM-12 in 2) either seawater (or freshwater, if desired). Pump in turbulent flow.
- Follow the R-Clean SM-12 "pill" with a 30 50 barrel "pill" containing 4 pounds per barrel 3) HEC.
- Follow the last "pill" with clean completion fluid. Discard all the "pills" before final filtering of 4) the completion fluid.

Reliant can engineer a specific displacement procedure for any given situation.

Premium Quality Products at Competitive Pricing

RELIANT FLUID TECHNOLOGIES, INC. ®

2933 highway 1 North. Port Allen, Louisiana 70767