

MudSCRUB-SX

Microemulsion spacer additive for oil- or synthetic-base mud removal

APPLICATIONS

- Oil- or synthetic-base mud (OBM or SBM) removal before cementing land and deepwater wells

BENEFITS

- Enhances long-term well integrity by improving cement bond
- Helps mitigate remedial cement jobs due to inadequate zonal isolation
- Saves pumping time and costs by combining solvent and surfactant into one fluid

FEATURES

- Removes approximately 98% of mud in the wellbore, casing, and formation
- Meets environmental regulations
- Eliminates need for other additives and multiple spacers
- Easily mixes in water or viscous spacers as a single additive
- Maintains excellent fluid stability after mixing
- Works in circulating temperatures ranging from 50 to 300 degF (10 to 149 degC)

Oil- and synthetic-base drilling fluids are valued in the industry for their performance and inhibition characteristics in water-sensitive land and deepwater formations. However, OBM and SBM are also some of the least compatible fluids with cement slurries and can be challenging to displace and remove from the wellbore. Nonaqueous drilling fluids leave a thin layer of oil on the casing and formation, preventing a strong cement bond from forming. To help ensure complete zonal isolation and reduce the risk of remedial work, spacer fluids are used to clean residual mud from the wellbore, casing, and formation before cementing operations.

Combines solvent and surfactant in one fluid

MudSCRUB-SX* (B353) spacer is the only single-fluid mud removal system consisting of a solvent-external microemulsion in the industry. Its proprietary blend of solvents, surfactants, and other additives enhance compatibility, mud removal, and water wettability of surfaces in wells drilled with OBM or SBM—without the time and costs associated with additional additives and multiple pumping stages.

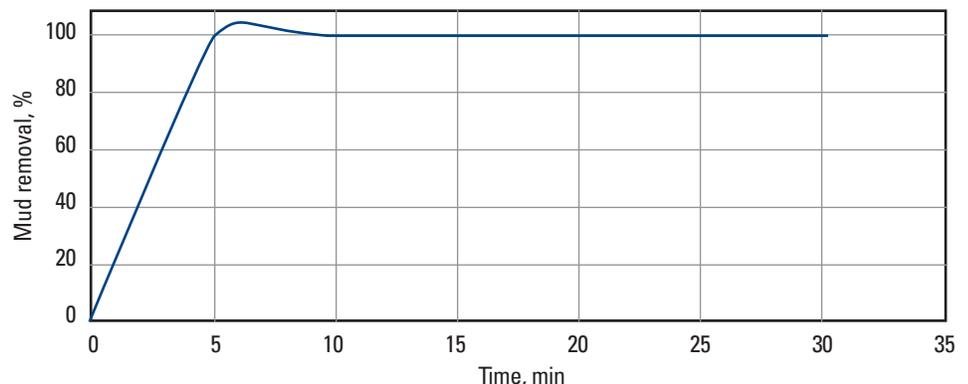
Removes 98% of OBM and SBM

MudSCRUB-SX spacer delivers superior performance when compared with conventional mud removal formulations. Laboratory tests with several mud types commonly used in offshore and land operations show a mud removal efficiency rate of approximately 98%—with more than 90% of mud removal attained in less than 10 minutes. The system has been qualified by a complete set of industry-recognized tests, including

- rheological compatibility
- spacer surfactant screening
- rotor/grid
- water wettability
- cement setting effect.

Compatible with many fluid and mud types

The MudSCRUB-SX spacer can be used at temperatures ranging from 50 to 300 degF (10 to 149 degC) and at densities from 10 to 18 lbm/gal US (1,198 kg/m³ to 2,157 kg/m³). Mud removal fluids prepared with the MudSCRUB-SX system show a high degree of stability when mixed in water-based, viscous, or weighted spacers, as observed in tests up to a period of three weeks (at 80 degF). This flexibility and stability helps ensure OBM and SBM removal, and ultimately, long-term zonal isolation, in a variety of wells.



Example of MudSCRUB-SX spacer performance (RHELIANT™ mud at 180 degF).