

Wells drilled with oil-based/invert-emulsion drilling fluids need to be cleaned before cementing. Cleaning these types of drilling fluids and creating a water-wet surface on the well bore typically requires multiple solvent and solution pills. This process is not only costly but also hazardous to the environment.

Aiming to provide a more efficient solution for well bore cleaning, Stepan Oilfield Solutions has developed PETROSTEP SC-1, a surfactant blend that cleans drilling fluid residue and leaves the well bore surface in a water-wet state. As the following figures show, even in low concentrations, PETROSTEP SC-1 shows excellent cleaning performance in a range of total dissolved solids, from fresh water to heavy brine.

When it comes to cleaning and preparing the well bore, PETROSTEP SC-1 may help address the needs of producers looking to create efficiencies and cost savings.

FIGURE 1

Invert Drilling Fluid 1 Cleaning Procedure: Fann 35 at 600 rpm for 3 minutes

Brine: 20% Sodium Chloride (NaCl)



Brine Only



20 wt% Xylene



3 wt% PETROSTEP SC-1

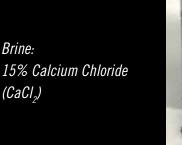








FIGURE 2

Invert Drilling Fluid 2

Cleaning Procedure: Fann 35 at 600 rpm for 3 minutes

Brine: 20% NaCl



Brine Only



20 wt% Xylene



3 wt% PETROSTEP SC-1







TYPICAL PROPERTIES

Brine: 15% CaCl,

- Appearance at 25°C: Clear liquid
- Density at 25°C, g/mL: 1.02
- Moisture, %: 30
- pH (1% in DI H₂0): 6 8

- Viscosity at 25°C, cps: 115
- Flash Point (SETA), °C: >94
- Pour Point, °C: 0
- DOT Classification: Not Regulated as a Dangerous Good

To learn more about PETROSTEP SC-1 and other PETROSTEP products, email oilfield@stepan.com or call 713.955.8100. For commercial ordering information, email order.placement@stepan.com.



2901 W Sam Houston Parkway N, Suite E-350, Houston, TX 77043 713.955.8100

PETROSTEP® IS A REGISTERED TRADEMARK OF STEPAN COMPANY. The information contained herein is based on the manufacturer's own study and the works of others and is subject to change without prior notice. The information is not intended to be all-inclusive, including as to the manner and conditions of use, handling, storage or disposal or other factors that may involve additional legal, environmental, safety or performance considerations. Nothing contained herein grants or extends a license, express or implied, in connection with any patents issued or pending of the manufacturer or others, or shall be construed as a recommendation to infringe any patents. STEPAN COMPANY MAKES NO PRODUCT WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR USE, EXPRESS OR IMPLIED, AND NO OTHER WARRANTY OR GUARANTY, EXPRESS OR IMPLIED, IS MADE, INCLUDING AS TO INFORMATION REGARDING PERFORMANCE, SAFETY, SUITABILITY, ACCUIRACY, COMPLETENESS, OR ADEQUACY. Stepan Company (and its employees, or any other party for any direct, indirect, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy, furnishing, use, or reliance upon information provided herein. The vendee assumes and releases Stepan Company (and its employees, subsidiaries and affiliates) from all liability, whether in tort, contract or otherwise to the fullest extent possible under the relevant law.

© Stepan Company, 2018