

PRIME 770

Remove synthetic and oil-based residue from wellbore surfaces

Application

- MICRO-PRIME displacement system

Features and benefits

- Blended into brine to formulate the PRIME 770 cleaning spacer for MICRO-PRIME displacements
 - Removes all residual debris that are not removed by PRIME 100 viscosified transition spacer
 - Creates a Newtonian fluid that can be easily pumped in turbulent flow to clean and water-wet all metal surfaces that are not cleaned or wetted by the viscosified transition pill
- Compatible with high- and low-density brine
 - Provides desired density and hydrostatic overbalance for well control
- Does not require a solvent to remove oil residue
 - Reduced environmental and health hazards
- Low interfacial tension
 - Yields a highly efficient detergent that instantaneously incorporates oil
- Solubilizes oil and removes emulsions
 - Water-wets all surfaces and mobilizes all solids

The **PRIME™ 770 proprietary surfactant blend** from Baker Hughes is a component of **MICRO-PRIME™ displacement system** to remove residual debris during the displacement of invert emulsion systems from casing and risers while leaving them in a water-wet state.

The following is a standard sequence of a MICRO-PRIME displacement train:

1. Base oil spacer (optional);
2. **PRIME™ 100** weighted/unweighted viscosified transition spacer;
3. PRIME 770 solids free cleaning spacer;
4. Viscosified tail spacer;
5. Clear completion brine

The PRIME 770 cleaning spacer system is primarily used as the Newtonian cleaning and wetting fluid during invert emulsion drilling fluid displacements. This cleaning spacer should be preceded by the PRIME 100 viscosified transition spacer and followed by a viscous tail spacer based in brine. The PRIME 100 spacer initiates the cleaning process while the viscous tail spacer carries any remaining dislodged debris to the surface.

The PRIME 770 solids free cleaning spacer is pumped in turbulent flow to clean any residual oily debris not removed by the preceding PRIME 100 viscosified transition pill. Additionally, this cleaning spacer will complete the water wetting process of downhole surfaces.

Recommended treatment

The field concentration for the PRIME 770 surfactant blend in a MICRO-PRIME solids-free cleaning spacer depends on the type of invert emulsion system being displaced. A typical treatment concentration of the PRIME 770 surfactant blend into a brine is 10% by volume.

It is recommended to use these displacement chemicals in combination with the Baker Hughes mechanical Wellbore Cleanup (WBCU) system to enhance cleaning performance.

Environmental information

For information concerning environmental regulations applicable to this product, contact the Health, Safety, and Environmental department of Baker Hughes.

Shipping

Transportation of the PRIME 770 surfactant blend is not restricted by either international or United States regulatory agencies.

Safe handling

recommendations

Use normal precautions for employee protection when handling chemical products. See Safety Data Sheet (SDS) prior to use.

Packaging

PRIME 770 surfactant blend is packaged in 5-gal (18.9-L) pails, 55-gal (208.2-L) drums, or 275-gal (1041-L) intermediate bulk containers (IBCs).

Typical properties	
Appearance	Yellowish liquid
Specific gravity at 68°F (20°C)	0.95 to 1.10
pH	9.7
Flash point (Closed cup)	> 212°F (100°C)