

Liquid Wellshield™ FINE

Wellbore Stabilizing Additive for Weak Formations Up To 300 Microns

Overview

A specialized noninvasive (NIF) loss circulation material (LCM) used to designed to be mixed in the circulation to prevent damage to mechanically weak formations and to seal micro-fractures up to 300 microns. Fine can also be mixed with Coarse to cure general and severe loss circulation without altering the rheology of the mud.

Fine is composed of particle shapes that maximize high-pressure integrity and compressibility designed to seal fractures up to 300 microns.

Its particles work together in the drilling mud to "wedge" into the surface of micro-fractures and porous formations to prevent and halt the invasion of fluids and solids.

The result is a surface seal that is hard like a "casing" but able to bend like a "liquid", forming a rubber-like cork that protects the formation from harm, stabilizing the wellbore.

Safety & Handling

Refer to the safety data sheets (SDS) for handling, transport, environmental and first aid information by contacting admin@liquidcasing.com.

Note: The use of solid lost circulation materials should be limited when pumping through small orifices, including liner hangers, stage collars, and poppet-type

float collars and casing shoes. The use of bottom plugs with these materials is not recommended.

Features and Benefits

- Seals fractures up to 300 microns
- Maximum return permeability
- Wellbore stabilizing
- No adverse affects to mud rheology
- Reduces torque and drag.
- Reduces wall cake permeability
- Prevents stuck pipe
- Prevents differential sticking
- Helps logging and casing run smoothly
- Forms effective filter cake
- Pump through all MWD and downhole tools
- Prevents seepage loss
- Virtually eliminates formation harm
- Compatible in OBM, WBM and SBW
- Approved for use in North Sea
- 100% Biodegradable and nontoxic

Lost Circulation Application

- Mix 15 ppb LC Fine with 15-20 ppb LC Coarse and 15 ppb Bentonite
- Seals depleted sands and micro-fractures
- Seals highly permeable formations with compressibility

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Appearance	Typical temp. range	Typical concentration	Specific Gravity	Bulk Density	Absolute volume
<i>Tan granular, free flowing powder</i>	<i>Up to 400°F (204°C) BHST</i>	<i>10 to 25 lb/bbl (28.5 to 71.3 kg/m3)</i>	<i>1.4-1.5</i>	<i>33.09 lb/ft3 530 kg/m3</i>	<i>0.0799 gal/b (0.6671 L/kg)</i>