

Liquid Casing **ULTRA FINE**

Wellbore Stabilizing Additive For Micro-Fractures Up To 150 microns



Overview

A specialized noninvasive (NIF) wellbore stabilizing material with proprietary particle concentration size designed to be mixed in the circulation to prevent damage to mechanically weak formations and seal fractures up to 150 microns. Liquid Casing® Ultra Fine can also be mixed with Liquid Casing® Coarse and Liquid Casing® Fine for mixed-sized fractures.

Liquid Casing® Ultra Fine is composed of particle shapes that maximize high-pressure integrity and compressibility.

Its particles work together in the drilling mud to "wedge" into the surface of micro-fractures and voids to prevent and halt the invasion of fluids and solids without damage to the formation.

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 prevents harm to 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 micro-fractures up to 150 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
- Prevents seepage loss
- Forms effective and protective filter cake
- Virtually eliminates damage to formation due to its wedging compressibility of particles
- Compatible in OBM, WBM and SBW
- Approved for use in North Sea
- 100% Biodegradable and nontoxic

Applications

- Seals highly fractured formations
- Seals depleted sands and micro-fractures
- Seals highly permeable formations in compressible manner

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>
--	---------------------------------	---	----------------	---------------------------------	-----------------------------------