Wellbore Stabilizing Additive For Micro-Fractures Up To 150 Microns

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## **Overview**

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

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

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