

# Liquid Wellshield™ CURE

## Wellbore Stabilizing Additive for Fractures up to 850 Microns

### Overview

A wellbore stabilizing and noninvasive fluid additive (NIF) for loss circulation. Generally used in hole sections that have a wide mix of fractures up to 850 microns. The product is biodegradable, passes through a 1/4 dry screen, does not block mud motors or tools.

Liquid Wellshield Cure was formulated for mixed sized fractures within the same hole section, such as a combination of induced and natural fractures.

Liquid Casing® Cure is manufactured with a mechanical particle size and shape distribution tailored to support and enhance Liquid Wellshield Fine during Drilling. It is recommended to add 1 twenty-five pound sack of Liquid Wellshield Cure to every 2 twenty-five pound sacks of Liquid Casing® Fine every 100-150 feet while drilling in order to maintain Liquid Wellshield® Fine in the system.

### Safety & Handling

Refer to the safety data sheets (SDS) for handling, transport, environmental and first aid information by contacting [admin@liquidcasing.com](mailto: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 850 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
- Logging and casing runs smoothly
- Forms effective internal and external filter cake
- Compatible in OBM, WBM and SBW
- Approved for use in North Sea
- 100% Biodegradable and nontoxic

### Applications

- Seals depleted sands and fractured formations
- Seals highly permeable formations with compressibility

### Cementing Application

- Mix 20 ppb LC Cure with 10 ppb LC Coarse and 2 ppb HEC Polymer

### Workover Application

- Mix 15 ppb LC Cure with 15 ppb LC Coarse and 2 ppb XC Polymer

| Appearance                        | Typical temp. range      | Typical concentration                             | Specific Gravity | Bulk Density                                   | Absolute volume            |
|-----------------------------------|--------------------------|---|------------------|--|----------------------------|
| Tan granular, free flowing powder | Up to 400°F (204°C) BHST | 10 to 25 lb/bbl (28.5 to 71.3 kg/m <sup>3</sup> ) | 1.4-1.5          | 33.09 lb/ft <sup>3</sup> 530 kg/m <sup>3</sup> | 0.0799 gal/b (0.6671 L/kg) |

A product from Liquid Casing, Inc. USA