

TORQUE-SEAL™ LCM/LPM



TORQUE-SEAL™ LCM/LPM is a new proprietary Loss Prevention Material (LPM) for use in casing drilling operations. This specially formulated product has a broad range of particles which cover a wide range of loss zones openings. TORQUE-SEAL™ LCM/LPM contains particles in the right size range to achieve both loss prevention with wellbore strengthening and more traditional loss circulation problems. This makes TORQUE-SEAL™ LCM/LPM multifunctional. TORQUE-SEAL™ LCM/LPM first stabilizes the borehole by plugging minute surface flaws and gravel-size pores. If fractures begin to develop TORQUE-SEAL™ LCM/LPM acts as a fracture propagation inhibitor by screening out at the fracture tip.

Advantages

- Product is all natural and therefore biodegradable
- Product has a high compressive strength of >8000 psi
- Product is a resilient material with an Elastic Modulus of 965 kpsi and a Resiliency of 20.0%
- Works in drilling fluids of any pH
- Acid solubility in 15% HCl at 150°F is 41.8% after a 16 hr. soak
- Product is a low crush material and is less brittle than many other LCM's such as calcium carbonate
- Product is granular and packs tighter than fibrous shaped LCM such as cedar fiber or mica
- Product is slightly deformable but not too deformable such that it forms a better seal and has a lower fracture conductivity value than other deformable materials
- Product maybe used in high concentrations with minimal impact on fluid density
- Product has minimal effects on rheology compared to other LCM's such as cedar fiber and cotton seed hulls

Applications:

1. As a LPM for casing drilling
2. As a LCM for casing drilling
3. As a LCM for any loss zone in any drilling application
4. As a torque reducer when used at 2 ppb or more

For more information please see "THE ENGINEERED LOST CIRCULATION MATERIALS" OF DRILLING SPECIALTIES COMPANY in the Technical Library.

Cost

TORQUE-SEAL™ LCM/LPM is a cost effective LCM/LPM/Torque Reducer for use in casing and horizontal drilling

Mud Types

All invert emulsion muds including diesel, mineral oil and synthetic oil based fluids. All water base drilling fluids

Mixing Requirements

May be mixed rapidly through conventional rig hopper or added directly into the mixing pit if sufficient agitation is present

Handling

For specific instructions refer to MSDS information or as illustrated on product containers

Packaging

50-pound (11.3 kg), multilayered paper sacks (40 bags to a pallet)

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Drilling Specialties Company does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.