

Pure-Bore® ULV

Pure-Bore® ULV is an ultra-low viscosity drilling fluid additive that provides both filtration control and cuttings encapsulation.

Product description

Pure-Bore® ULV is a multifunctional proprietary polysaccharide for use in water-based drilling fluids. Its unique filter cake forming characteristics provide fluid loss control and clay encapsulation at minimal viscosity.

Applications

Pure-Bore® ULV is designed to work synergistically with Pure-Bore® in water-based drilling fluids to reduce filter loss and enhance encapsulation, with reduced additional viscosity. Pure-Bore® ULV is compatible with mono- and divalent brines and has a high tolerance to hardness and high pH.

Functions

Clay and shale encapsulation

Pure-Bore® ULV polymers are effective clay encapsulators, controlling the dispersion of clay cuttings and limiting the hydration and destabilisation of exposed shale formations. Unlike PHPA, Pure-Bore® ULV is effectively recycled through fine shaker screens.

Fluid loss control

Pure-Bore® ULV molecules will form a tight filter cake without the requirement of fine solids. This unique filter cake not only reduces fluid loss, but also effectively stabilises unconsolidated formations.

Advantages

- Minimal effect on rheology compared to regular Pure-Bore®
- Tight filter cake and solids free fluid loss control
- Provides clay and shale encapsulation
- Stabilises unconsolidated formations
- Effectively recycles through fine shaker screens
- Temperature stable to 250°F/121°C
- Readily dispersible and easy to mix
- Easily destroyed by enzyme- or oxidizing breakers

- Tolerant to hardness (calcium) and high pH:
 - Compatible with divalent brines
 - Largely unaffected by cement contamination
 - Treating for hardness with soda ash is not required
- Environmentally friendly:
 - CEFAS registered as PLONOR
 - Germany: WGK class 1 (NWG up to 3% wt. in mixtures)
 - Inherently biodegradable

Recommended treatment

Slowly and uniformly mix Pure-Bore® ULV into water or brine using a venturi or colloidal mixer and continue to agitate/circulate until the product is fully dispersed.

Polymer muds: $0.7 - 3.5 \text{ lbs/bbl } (2 - 10 \text{ kg/m}^3)^{-1}$

1. The required concentration may vary significantly depending on the application and the concentration of other products used in the formulation.

Typical physical properties

Physical appearance: White to off-white free flowing powder

Specific gravity: 1.2

Bulk density: 0.8 - 0.9 g/cm³ (approx.)

pH (0.5% solution): 6 - 8.5

Toxicity and handling

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the safety datasheet.

Packaging and storage

Store at room temperature in a dry, well-ventilated area. Keep in original container and store away from incompatibles.

Pure-Bore® ULV is available in:

- 5 kg plastic bags (5 x 5kg bags per cardboard case)
- 25 kg plastic bags (40 x 25kg bags per pallet)
- 25 lb plastic bags (85 x 25lb bags per pallet)

No warranty expressed or implied, of merchantability fitness for a particular purpose or otherwise is made, except the product conforms to seller specifications. Buyer assumes all risk of use, storage, and handling. Seller shall not be liable for any incidental or consequential damages arising directly or indirectly in connection with the purchase, use, storage, or handling of the product.

FOR INDUSTRIAL USE ONLY PRODUCED IN THE UK