



CLEAR SOLUTIONS
Performance Drilling Products
The Earth Can Trust

Pure-Bore® HT

Pure-Bore® HT effectively increases shear thinning viscosity in high temperature environments, while also providing cuttings encapsulation and fluid loss control.

Product description

Pure-Bore® HT is a multifunctional proprietary polysaccharide for use in water-based drilling fluids in high temperature environments. It uniquely combines a highly shear thinning viscosity profile with clay encapsulation and fluid loss control. Its distinct cake-building properties effectively stabilises loose and unconsolidated formations.

Applications

Pure-Bore® HT is designed to perform in high temperature polymer-based drilling fluids. Pure-Bore® HT is compatible with mono- and divalent brines and has a high tolerance to hardness and high pH. Due to its non-damaging, non-invasive character, Pure-Bore® HT is an ideal product in reservoir drill-in fluids (RDF's).

Functions

Rheology

Drilling fluids built with Pure-Bore® HT are characterised by an elevated low shear rate viscosity combined with a low plastic viscosity, resulting in excellent hole cleaning and cuttings suspension at lower pump pressures and ECD's.

Clay and shale encapsulation

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

Fluid loss control

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

Advantages

- Exceptionally shear thinning with non-progressive gels
- Tight filter cake and solids free fluid loss control
- Provides excellent clay and shale encapsulation
- Stabilises unconsolidated formations
- Effectively recycles through fine shaker screens
- Optimized for 275 - 310°F (135 - 154°C).
- Readily dispersible and easy to mix
- Non-damaging to reservoirs
- 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® HT into water or brine using a venturi or colloidal mixer and continue to agitate/circulate until the product is fully dispersed. The time required for the product to yield its ultimate viscosity depends on salinity, temperature, and shear.

HT Polymer muds: 3 - 8 lbs/bbl (8.5 – 22.5 kg/m³) 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/cm ³ (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® HT is available in:

- 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.

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