

MAX BORE HDD



The MAX BORE HDD system is a proprietary, blended, high-yielding Wyoming bentonite supplied as a single-sack product used especially in boring-fluid applications. The MAX BORE HDD system provides suspension, wellbore stability and filtration control. The system also helps reduce torque and drag for water-base applications and is designed to minimize environmental impact.

Typical Physical Properties

Physical appearance..... Light tan/gray-green powder
 Specific gravity 2.3–2.6
 Bulk density 48–52 lb/ft³ (769–833 kg/m³)

Applications

MAX BORE HDD system provides suspension, improves wellbore stability, controls filtration, and helps reduce torque and drag in boring-fluid applications. It is a cost-effective product for achieving viscosity for hole cleaning, gel strength for cuttings suspension and transport, wellbore stability, fluid-loss control and filter-cake quality in freshwater and seawater applications. Typical concentrations of the MAX BORE HDD system range from 15-45 lb/100 gal (18-54 kg/m³).

Advantages

- One-sack system provides ease of mixing and reduces the number of products required to prepare boring fluid
- Hydrates more than other types of clays and is best for generating viscosity for hole cleaning, developing gels for suspension and controlling filtration
- Unique size, shape and high surface area provide superior filtration characteristics
- Provides lubricity and wellbore stability for ease of drilling and stability of water-sensitive clays and shales
- Non-toxic and environmentally safe

| Typical Amounts of MAX BORE HDD Additions Added to Freshwater | | | |
|---|------------|--------|-------------------|
| Drilling Application/Desired Results | lb/100 gal | lb/bbl | kg/m ³ |
| Normal drilling | 20-25 | 8.5-10 | 25-29 |
| Clay environments | 10-15 | 4-6 | 12-18 |
| Gravel/rock/cobble | 25-30 | 10-13 | 29-37 |



MAX BORE HDD



Limitations

Performance is reduced in salty ($>10,000$ mg/L Cl^-) or hard (>240 mg/L Ca^{++}) waters due to decreased hydration.

Toxicity and Handling

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheets (MSDS).

Packaging and Storage

The MAX BORE HDD system is packaged in 50-lb (22.7-kg) multi-walled sacks, 56 per pallet.

Store in a well-ventilated area away from sources of heat or ignition.

