

# MAX BORE HDD

One-step boring system

## **APPLICATIONS**

- Provide suspension
- Improve wellbore stability
- Control filtration
- Reduce torque and drag

#### **ADVANTAGES**

- 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
- Displays unique size, shape, and high surface area for superior filtration characteristics
- Provides lubricity and wellbore stability for ease of drilling and stability of watersensitive clays and shales

#### LIMITATIONS

 Performance is reduced in salty (>10,000-mg/L Cl<sup>-</sup>) or hard (>240-mg/L Ca<sup>2+</sup>) waters due to decreased hydration. The MAX BORE HDD\* one-step boring system provides suspension, improves wellbore stability, controls filtration, and helps reduce torque and drag in boring-fluid applications and is designed to minimize environmental impact. 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 filtercake quality in freshwater and seawater applications. Typical concentrations of the MAX BORE HDD system range from 15 to 45 lb/100 galUS [18 to 54 kg/m<sup>3</sup>].



# **Toxicity and handling**

Bioassay information is available on request. Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the MSDS.

### Packaging and storage

The MAX BORE HDD system is packaged in 50-lb [22.7-kg] multiwalled sacks, 56 per pallet. Store in a well-ventilated area away from sources of heat or ignition.

### Typical Physical Properties

| .,                  |   |  |
|---------------------|---|--|
| Physical appearance | Light tan to gray green powder                        |  |
| Specific gravity    | 2.3–2.6   |  |
| Bulk density        | 48–52 lb/ft <sup>3</sup> [769–833 kg/m <sup>3</sup> ] |  |

# Typical Amounts of MAX BORE HDD Additions to Freshwater

| Drilling Application or<br>Desired Results | lb/100 galUS | lb/bbl | kg/m <sup>3</sup> |  |
|--|--------------|--------|-------------------|--|
| Normal drilling                            | 20–25        | 8.5–10 | 25–29             |  |
| Clay environments                          | 10—15        | 46     | 12–18             |  |
| Gravel, rock, cobble                       | 25–30        | 10–13  | 29–37             |  |
|  |              |        |                   |  |