**DESCRIPTION**
SHIELD BOND wellbore shielding® spacer system helps prepare the wellbore for cementing. The spacer system forms an impermeable shield on the formation face, mitigating lost circulation issues before cement enters the annulus and reduces loss of cement. SHIELD BOND also helps reduce fluid invasion, and allows safe operations slightly above the frac gradient to handle the typical high equivalent circulating density (ECD) near the end of the displacement in wells where the fracture gradient has traditionally limited the design of the cement job.

**ADVANTAGE**
- Adjustable rheology
- Extends the frac gradient for higher ECDs
- Enhances hole cleaning and mud removal prior to cement placement
- Forms a shield against the formation to limit fluid invasion
- Reduces cement losses and formation damage

**APPLICATION**
- Used in fragile and fractured formations
- When circulating drill fluid is an issue
- In wells where pre-job simulations show final ECD near or above the frac gradient
- When the capability to mix on-the-fly with a weighted spacer is preferred

**ENVIRONMENTAL ADVANTAGE**
Environmentally compliant for use in all areas
- PLONDR listed for North Sea use, HMCS Category P, OCNS Group E
- Passes the North America 96-hr LC50 bioassay mysid shrimp

**PHYSICAL PROPERTIES**
- Appearance: light brown powder
- Temperature range: up to 135°C (275°F)
- Specific gravity: 1.8 g/cm³ (15.02 lb/gal)

**HANDLING AND STORAGE**
SHIELD BOND® should be stored in a dry environment. Avoid excessive dust and inhalation. Use appropriate PPE and review the SDS before use.

**PACKAGING**
SHIELD BOND® is available in 45-lb, multiwalled bags. 2475 pounds per pallet (55 sacks).

**TREATMENT RECOMMENDATIONS**
Base concentration can and should be optimized to meet well objectives. Standard concentration is 15 lb spacer concentrate per barrel of mix water (One sack of spacer concentrate yields 3 barrels of spacer).