

MAX-SHIELD

Reduce severe losses while mechanically stabilizing wellbore

Applications

- Water-based and invert emulsion drilling fluids
- Horizontal, deviated, and extended-reach wells
- Depleted sands and limestone sections

Features and benefits

- Suitable for use in both water-based and invert emulsion drilling fluid systems
 - Provides versatility in use
- Bridges and seals depleted formations
 - Eliminates differential sticking, severe losses, logging problems, and nonproductive time
- Tolerant to a wide range of salinities
 - Can be used from freshwater to saturated salt water
- Effective in high-temperature environments
 - Provides borehole stability in excess of 300°F (149°C)
- No special procedures or equipment are necessary for treatment
 - Enables faster mixing time
- Designed for use in conjunction with **MAX-PLEX™ shale control and wellbore stability agent**
 - Reduces pore pressure transmission into the shale matrix

The **MAX-SHIELD™ wellbore sealing polymer** from Baker Hughes is an innovative nanotechnology that reduces pore pressure transmission to increase wellbore stability.

The MAX-SHIELD polymer is a key component in the **PERFORMAX™ high-performance water-based drilling fluid system** and **MAX-BRIDGE™ advanced bridging solution**. The MAX-SHIELD sealing polymer reduces pore-pressure transmission by sealing pore throats and microfractures and effectively generating a semipermeable membrane at the borehole interface.

Due to its small particle size, the MAX-SHIELD sealing polymer is also effective in reducing differential sticking and reducing mud losses across depleted sand sections.

Intelligent Fluids Solutions

The MAX-SHIELD wellbore sealing polymer is one of Baker Hughes' *Intelligent Fluids Solutions* designed to address your greatest well construction and production challenges.

Recommended treatment

The recommended concentration of MAX-SHIELD sealing polymer is 2 to 5% by volume depending on the application. MAX-SHIELD sealing polymer can be added directly through the mud hopper. No pre-treatment steps are necessary regardless of the make-up water.

Environmental information

For information concerning environmental regulations applicable to this product, contact the Health, Safety, and Environmental department of Baker Hughes.

Shipping

Transportation of the MAX-SHIELD sealing polymer is not restricted by either international or United States regulatory agencies.

Safe handling recommendations

Use normal precautions for employee protection when handling chemical products. See Safety Data Sheet (SDS) prior to use.

Packaging

The MAX-SHIELD sealing polymer is available in bulk and packaged in 55-gal (208.2-L) nonreturnable drums.

Typical properties	
Appearance	White liquid
Specific gravity	1.05
Solubility	Miscible with water
pH	6.0 to 9.0