

# MAX-PLEX

## Imparts borehole and cuttings stability

### Applications

- Water-based drilling fluids
  - Fresh water to saturated sodium chloride brines
- Instances when enhanced wellbore stability is required
- Time-dependent shales
- Complex geological stresses

### Features and benefits

- Prevents pore pressure elevation into formations
- Reduces formation breakout and sloughing shale
- Penetrates microfractures
- Decreases permeability of rock matrix
- Improves annular hydraulics for better hole cleaning
- Minimizes drilling fluid volumes and associated wastes
- Reduces dusting while handling with improved formulation

The **MAX-PLEX™ shale control and wellbore stability additive** from Baker Hughes is an aluminum/sulfonated resin complex designed to impart borehole and cuttings stability when using the **PERFORMAX™ high-performance water-based drilling fluid system**. MAX-PLEX works synergistically with **MAX-SHIELD™ deformable sealing polymer** to impart superior wellbore stability. MAX-PLEX precipitates in the rock matrix and provides a barrier to pore pressure transmission (PPT). Controlling PPT is essential for preventing wellbore breakout and the host of problems it can cause. MAX-PLEX formulations are generally less abrasive than silicate muds and provide improved lubricity.

MAX-PLEX can withstand high temperatures and salt concentrations.

### Recommended treatment

The recommended concentration of MAX-PLEX for cuttings and borehole stability is 4.0 to 8.0 lb/bbl (11.4 to 22.9 kg/m<sup>3</sup>). For maximum performance, it is recommended that this material be pre-hydrated prior to adding it to the fluid system. **XAN-PLEX™ D polymer** with dispersant is the recommended viscosifier and **MIL-CARB™ sized calcium carbonate bridging agent** is the recommended bridging agent. Makeup water should be treated to reduce hardness to less than 400 mg/L, and pH of the fluid system should be maintained above 10.5 when using MAX-PLEX.

### Environmental information

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

### Shipping

International transport regulatory agencies classify MAX-PLEX additive as corrosive solids (UN1759).

### Safe handling

#### recommendations

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

### Packaging

MAX-PLEX additive is packaged in 50-lb (22.7-kg) multiwalled bags.

### Typical properties

<b>Appearance</b>	Brown powder
<b>Specific gravity</b>	1.84
<b>Temperature stability</b>	< 350°F (177°C)