

# MAX-GUARD E shale inhibitor

## Effectively reduce clay hydration to prevent bit balling

### Applications

- Water-based drilling fluids
  - Compatible with freshwater, sodium and potassium chloride brines
- Wells where reactive clays are expected

### Features and benefits

- Reduces clay hydration
  - Minimizes the potential for bit balling
  - Increases rate of penetration
  - Aids in lowering dilution rates
  - Improves solids removal efficiency
- Tolerant to common contaminants
- Compatible with all common water-based mud additives
- Thermally stable up to 400°F (204°C)

The Baker Hughes **MAX-GUARD™ E shale inhibitor** provides effective inhibition of reactive clays by suppressing hydration and swelling within the clay mineral platelets.

MAX-GUARD E shale stabilizer is compatible with all common water-based drilling fluid additives. It can be combined with glycol shale inhibitors or high-molecular-weight polymeric encapsulants, and is tolerant to common contaminants such as cement, CO<sub>2</sub>, crude oil, and drill solids.

MAX-GUARD E shale inhibitor can be readily added to the mud system without affecting viscosity or filtration properties. It is thermally stable up to 400°F (204°C) and functions well in a pH ranging from 7.0 (neutral) to 11.0.

### Recommended treatment

MAX-GUARD E shale inhibitor should be used in water-based fluids at an initial concentration of 2 to 4% by volume. Concentrations for specific wells may vary based on the hole size, rates of penetration, and reactivity of the formation being drilled.

### Environmental information

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

### Shipping

MAX-GUARD E additive is classified as corrosive liquid (UN 2735) for transportation by international regulatory agencies.

### Safe handling recommendations

Take normal precautions when handling and wear appropriate personal protective equipment. See Safety Data Sheets (SDS) prior to use.

### Packaging

The MAX-GUARD E shale inhibitor is packaged in 55-gal (208.2-L) nonreturnable drums.

Typical properties	
Appearance	Amber to brown liquid
Specific gravity	1.05 to 1.15
pH	7.0 to 8.0
Flash point (Open cup)	> 194°F (90°C)