

## RAPID SHIELD™

### GUMBO SHALE TREATMENT

#### Description:

Rapid Shield™ is a water-soluble drilling fluid additive that is non-toxic, non-foaming, non-flammable and biodegradable. Rapid Shield™ is formulated from a group of proprietary surfactant and polyglycol shale penetrating agents that work to inhibit the hydration of shale by satisfying the unbalanced ionic charges of the clay mineral, and by forming a protective film that blocks the entry of water into the shale. This protective film prevents hydration of shale, which helps to reduce bit balling, collar plugging, sloughing, enlarged hole sections and hole fill on pipe trips. In addition to offering advanced shale control performance the Rapid Shield™ also performs as an extreme pressure lubricant. The Rapid Shield™ is not affected by the electrolyte content of the drilling mud.

#### ADVANTAGES:

- ⇒ Highly effective gumbo shale control
- ⇒ Not affected by shear
- ⇒ Easy to handle liquid

#### APPLICATION:

Rapid Shield™ is a liquid and easy to use. A starting point for application is 1% to 4% by volume in the mud system. If the depth for gumbo type shale is known, pre-treat with 1% to 2% and adjust accordingly.

#### PHYSICAL PROPERTIES:

Appearance	Light Amber Liquid
Density	8.83 to 9.00 lbs / gal
Specific Gravity	1.01 to 1.03
pH(neat)	8.5 (typical)
Solubility in Water	Totally Miscible
Flash Point, TCC	> 212° F (100°C)