# **G-DRILL®** POLYGLYCOL SHALE INHIBITOR

#### Description

G-DRILL® is a polyglycol shale inhibitor. Protects clay minerals from swelling. "Clouds out" within the shale matrix and causes pore plugging and preventing pore pressure transmission. Promotes cuttings integrity, helps their disposal at the shale shakers. Improves mud lubricity and antiballing properties.

When heated at the bottom by the bit rotating polyglycols form separate phases at higher temperatures and coat the wellbore and the cuttings with the protective film. When the mud is cooled at the surface the two phases again recombine to form a clear, single phase solution. The same mechanism takes place when the mud filtrate with G-DRILL® particles enters the formation with higher temperature.

Due to the slightly anionic nature of G-DRILL® the attraction between the polyglycol particles and positively charged clay edges gets easier.

## **Applications/Functions**

- improves shale stability
- prevents fluids invasion into the shale matrix
- coats cuttings with the protective film, helps removal on the shakers
- improves lubricity
- prevents colloidal solids build-up, decreases dilution volumes

#### Advantages

- is compatible with the most used mud chemicals, it is recommended to combine G-DRILL® with STABILITE® II, POLYCAP®, aluminum complex)
- is compatible with the most brines bromides, acetates, formates

#### **Recommended treatment**

7-11 ppb (20-30 kg/m3). It is recommended to add BLACKTROL® to the active mud before penetrating troublesome shales. It can be added directly into the suction pit or through the mud hopper. It is recommended to add the product slowly for proper mixing. Please refer to the product brochure for additional information.

#### **Typical properties**

Dark brown to black liquid

## Handling

Please refer to the MSDS for specific instructions

## Packaging

G-DRILL® polyglycol shale inhibitor is packaged in 55-gal (200 l) drums

Disclaimer: Prior to using this product, the user is hereby informed and cautioned to make their own determination and assessment of the safety and applicability of the product for the specific job. It is the final responsibility of the user to ensure that the product is suitable and the information is applicable to the user's specific application.

