

# FLEXFIRM™

SHALE INHIBITOR



**NEWPARK**  
DRILLING FLUIDS

www.newparkdf.com

## PRODUCT DESCRIPTION

FlexFirm™ shale inhibitor is an anhydrous potassium silicate powder. It inhibits hydration of reactive drill cuttings before they have a chance to disperse in the active fluid system. By keeping the cuttings intact, the efficiency of the solids control equipment is greatly improved.

## BENEFITS

- Reduces dilution requirements through enhanced cuttings inhibition
- Improves rheological properties
- Delivers in-gauge wellbores
- Increases efficiency of solids control equipment

## APPLICATION

FlexFirm inhibitor is recommended for drilling reactive shale formations where dispersed fine solids require increased rates of drilling fluid dilution to maintain ideal rheological properties. It is applicable for any water-based drilling fluid that does not contain high concentrations of calcium and magnesium. The limited solubility of this product allows it to react with drill cuttings and the wellbore surface without incurring a build-up of soluble silicate in the drilling fluid, avoiding the problems often associated with silicate drilling fluids.

## TREATMENT RECOMMENDATION

FlexFirm shale inhibitor should be added to water-based drilling fluid systems at a concentration of 0.25-2.0 lb/bbl. The optimum concentration will be determined by hole size, drilling rate and reactivity with the cuttings. Treatment levels may best be determined by the condition of cuttings coming across the shaker.

## TYPICAL PHYSICAL PROPERTIES

Appearance..... White powder  
Bulk Density ..... 54 lb/ft<sup>3</sup> (865 kg/m<sup>3</sup>)  
Water Solubility..... Slightly soluble

## HANDLING AND STORAGE

Avoid breathing dust. Store in steel or plastic containers away from aluminum, reactive metals and ammonium salts. Keep container tightly closed. Use appropriate hygiene, clothing and personal protective equipment suitable for work being done. Review the SDS thoroughly before using this product.

## PACKAGING

FlexFirm shale inhibitor is available in 50-pound (22.7-kilogram) multi-walled bags.

This document is supplied solely for informational purposes and Newpark Drilling Fluids makes no guarantees or warranties, either expressed or implied, with respect to the accuracy and use of this data.

All product warranties and guarantees shall be governed by the General Terms and Conditions.