

HiPerm™

CLAY INHIBITOR



NEWPARK
DRILLING FLUIDS

www.newparkdf.com

PRODUCT DESCRIPTION

HiPerm™ clay inhibitor is a chloride-free, cationic organic multivalent stabilizer, designed to provide enhanced return permeability in productive zones.

BENEFITS

HiPerm inhibitor offers significant advantages over typical clay stabilizers, including:

- Excellent return permeability
- Lower overall fluid costs through reduced chemical usage
- Environmental superiority as it incorporates no chlorides and delivers excellent biodegradability (>60% by DOC Method)
- Effective hydration blocking through multiple absorption sites
- Non-oil wetting and non-foaming characteristics

APPLICATION

The effective HiPerm clay inhibitor is chloride-free for use in water-sensitive formations. It forms the basis for a unique non-damaging drill-in fluid, providing superior borehole stability. Due to its small ionic radius, HiPerm clay inhibitor allows easy substitution of the sodium ion on the exchange sites, thereby effectively blocking water hydration into the sites. While effective in any pH range, increased dosage will be required above a pH of 10.5. The product should not be added to existing clay-based drilling fluids or those with MBT values higher than 15 lb/bbl, as severe flocculation will occur. Pilot testing is strongly advised.

TREATMENT RECOMMENDATION

Concentration requirements vary depending upon the reactive clay content of the formation. Non-reactive formations with interstitial clay or shale stringers may require as little as 0.3-0.6% by volume, whereas marine shales may require 1-4% by volume. Precise recommendations for specific applications can be obtained through the Newpark Technology Center. HiPerm clay inhibitor will deplete through the ion exchange process. A specific HiPerm test procedure will offer accurate results. HiPerm concentrations can be maintained either through additions or pretreatment with high concentration. The liquid can be added directly to the drilling fluid system, either on the surface or through the mixing system.

TYPICAL PHYSICAL PROPERTIES

Appearance.....	Clear liquid
Boiling Point	213°F (101°C)
Flash Point (TCC).....	Not relevant
Specific Gravity.....	1.107
Water Solubility	Soluble

HANDLING AND STORAGE

Avoid contact with skin and eyes. Use appropriate hygiene, clothing and personal protective equipment suitable for work being done. Review the MSDS thoroughly before using this product.

PACKAGING

HiPerm clay inhibitor is available in 5-gallon (19-liter) pails and in 55-gallon (208-liter) drums.