

## TOOL JOINT & DRILL COLLAR COMPOUND

### DESCRIPTION

**KOPR-KOTE**® **ARCTIC** drill collar, tool joint and drill rod compound is a premium-quality, unleaded compound containing copper flake, graphite, and other natural extreme pressure and anti-wear additives. KOPR-KOTE® ARCTIC uses the same solids package formulated to prevent excessive circumferential makeup by increasing the coefficient of friction under compressive forces as standard KOPR-KOTE. As stress levels rise above 50% of yield, the friction factor increases, limiting downhole makeup. Full hydraulic joint efficiency is maintained allowing joint shoulder faces to mate completely without standoff or deformation. For the severe cold drilling applications KOPR-KOTE ARCTIC utilizes a very low pour-point naphthenic oil which greatly improves the applicability of the compound to the connection while providing the same water resistance of standard KOPR-KOTE. For invert or high-pH muds, use Jet-Lube EXTREME™.

# KOPR-KOTE® ARCTIC

- Not classified as marine pollutant DOT Approval CA2004080025
- Improved low temperature applicability in the Arctic Grade.
- · Contains no lead or zinc.
- Extreme pressure additives provide additional protection against seizing and galling and allow consistent make- up.
- Anhydrous calcium grease base protects against rust and corrosion.
- · Sticks to wet joints.
- Unequaled resistance to make up downhole. Available in Standard, Thermal and Specialty grades

## PRODUCT CHARACTERISTICS

Thickener Anhydrous Calcium

Fluid Type Petroleum **Dropping Point** <300°F (149°C)

(ASTM D-2265)

Specific Gravity 1.15 Density (lb/gal) 9.6 Oil Separation (ASTM D-6184) < 5.0

WT. % LOSS @ 212°F (100°C)

Flash Point (ASTM D-92) >320°F (160°C)

**NLGI** Grade

Penetration @ 77°F 310 - 335

(ASTM D-217)

Copper Strip Corrosion 1A, typical

(ASTM D-4048)

4-Ball (ASTM D-2596)

Weld Point, kgf 800, typical

Friction Factor\*

Relative to API RP 7G 1.15 (drill strings)

Relative to API RP 5A3 1.40 (relative to API-Mod)

For package types and part numbers contact sales@jetlube.com.

#### LIMITED WARRANTY

For warranty information please visit http://www.ietlube.com/pdf/Jet-Lube Warrantv.pdf

<sup>\*</sup> Many factors such as pipe size, thread geometry, drilling mud contamination, etc. affect the friction factor. This is a relative number and, in all applications experience, and prior knowledge should be used to adjust make-up torque accordingly.