

DESCRIPTION

HDD™ KOPR 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. HDD™ KOPR uses the same solids package formulated to prevent excessive circumferential makeup by increasing the coefficient of friction under compressive forces as standard KOPR-KOTE® but in a smaller particle size range to accommodate automatic application systems. As stress levels rise above 50% of yield, the friction factor increases, limiting downhole makeup. Full hydraulic joint shoulder faces to mate completely without standoff or deformation. For invert or high-pH muds, use Jet-Lube EXTREME™.

- Not classified as marine pollutant – DOT Approval CA2004080025.
- Contains no lead or zinc.
- Low pour point oil for optimum low temperature performance.
- Specially formulated to meet the requirements of the auto-lube system on most major HDD rigs.
- 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 makeup downhole
- Available in Brush on Summer grade.
- Conforms to assembly bill 1953.

SERVICE RATING:

-65°F (-55°C) TO 300°F (149°C)

PRODUCT CHARACTERISTICS

Thickener	Anhydrous Calcium
Fluid Type	Petroleum
Dropping Point (149°C) (ASTM D-2265)	<300°F
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 1	
Penetration @ 77°F (ASTM D-217)	325 - 345
Copper Strip Corrosion (ASTM D-4048)	1A, typical
4-Ball (ASTM D-2596)	
Weld Point, kgf	620, typical

For package types and part numbers

www.jetlube.com/resources/product-index/

Limited Warranty

www.jetlube.com/assets/documents/Jet-Lube_Warranty.pdf