Product Data Sheet

KOPR-KOTE®

DRILL COLLAR & TOOL JOINT COMPOUND

Experience the power of Kopr-Kote, a highly trusted and proven copper-based drilling compound tailored for drill collars, tool joints, and drill strings. This advanced, lead-free formulation incorporates copper flake, graphite, and additional natural additives with extreme pressure and antiwear properties. Kopr-Kote's unique solids package is meticulously crafted to counteract excessive circumferential makeup by enhancing the coefficient of friction when subjected to compressive forces. As stress levels rise, so does the friction factor, effectively restricting downhole makeup. This ensures the preservation of joint efficiency, enabling seamless mating of joint shoulder faces without any standoff or deformation.

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APPLICATIONS

Oilfield threads on:

- Drill collars
- Tool joints
- Drill Strings

For optimum performance on API drill string connections, Kopr-Kote should be utilized with the torque charts in API RP7G by multiplying the torque value by 1.15 or by contacting the drill pipe and connection manufacturer. Friction factors for KOPR-KOTE were developed using full scale API tool Joint connections. Premium drill string connections such as HI-TORQUE® (HT), eXtreme® Torque (XT®) and XT-M™ connections, etc., utilize make-up torques based upon thread compound friction factors of 1.0. Therefore, use the torque provided by the premium connection manufacturer. Adjusting make-up torque based on thread compound friction factor may still be advised.

BENEFITS

- Contains no lead or zinc
- Extreme-pressure additives provide protection against seizing and galling and allow consistent makeup
- Aluminum-complex grease base protects against rust and corrosion
- Unequaled resistance to makeup downhole
- Sticks to wet joints
- Available in Arctic grade
- Approved by NAM/Shell for under-balanced drilling applications
- Not classified as a marine pollutant - DOT Approval CA2004080025

For invert or high-pH muds, use Jet-Lube® EXTREME®. NCS-30® ECF™ is the ideal choice for wear protection with wedge-type thread connections. For friction factor 1.0 use Jet-Lube KOPR EXT FF 1.0.

TYPICAL CHARACTERISTICS	
Thickener	Complex soap
Fluid Type	Petroleum
Dropping Point, (ASTM D-2265)	450°F (232°C)
Specific Gravity	1.15
Density (lb/gal)	9.6
Oil Separation (ASTM D-6184) WT. % LOSS @ 212°F (100°C)	<3.0
Flash Point (ASTM D-92)	>430°F (221°C)
NLGI Grade	1
Penetration @77°F (ASTM D-217)	310 - 330
Copper Strip Corrosion (ASTM D-4048)	1A, typical
4-Ball (ASTM D-2596) Weld Point, kgf	800, typical
Friction Factor, * (Relative to API RP 7G)	1.15 (standard service) 1.25 (very severe service)
Environmental Rating UK	CEFAS OCNS Group B
Service Rating	0°F (-18°C) to 450°F (232°C)

Part Numbers

Learn more
jetlube.com/product/kopr-kote-drill-collar-tool-joint-compound

*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. Contact your drill pipe manufacturer for torque and friction related specifications.

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