

DESCRIPTION

HDD environmental is a premium quality, nonmetallic, nonconductive compound and contains other natural extreme pressure and anti-wear additives. These are blended into JET-LUBE's all-weather calcium complex base grease. This new base grease offers the additional advantage of low temperature application and service, superior adhesion to wet steel surfaces, resistance to water wash-off, and most drilling muds.

- Excellent performance on high-chrome or nickel alloys
- Contains no metals
- Extreme-pressure additives provide additional protection against seizing and galling
- Nonconductive for MWD applications
- Provides maximum protection on Wedge Thread™* drill string connection designs
- High frictional properties ideal for casing drilling applications
- Pumpability makes it ideal for HDD and other construction drilling applications.

HDD Environmental solids package is formulated to prevent excessive circumferential makeup by increasing the coefficient of friction under compressive forces. 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. HDD Environmental, with frictional properties similar to KOPR-KOTE®, has been designed to utilize the makeup charts in API RP7G by multiplying the listed torque by 1.15. Premium drill string connections such as HITORQUE® (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.

PRODUCT CHARACTERISTICS

Thickener	Calcium Complex
Fluid Type	Petroleum
Dropping Point (ASTM D-2265)	≥450°F (232°C)
Specific Gravity, typical	1.36
Density (lb/gal), typical	11.30
Oil Separation (ASTM D-6184) WT. %	<3.0
LOSS @ 212°F (100°C)	
Flash Point (ASTM D-92)	>340°F (171°C)
NLGI Grade 1 Penetration @ 77°F (ASTM D-217)	300 – 330
Copper Strip Corrosion, typical (ASTM D-4048)	1A
Friction Factor*	
Relative to API RP 7G	1.15 (drill strings)
Relative to API RP 5A3	1.40 (relative/API Mod)

- For a “Yellow”-rated product, use NCS-30 ECF.
- Designed for optimum performance on all Rotary Shouldered connections such as Tool Joints and Drill Collars. It can also be used on premium/proprietary thread designs such as Double-Shouldered, Wedge Thread™*, and other types of mechanical seal designs. It may also be used on certain noninterference tubing thread designs when properly torque compensated.

* Trademark of Hydril Company

SERVICE RATING:

-40°F (-40°C) to 350°F (177°C)

For package types and part numbers

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

Limited Warranty

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