NCS-30® ARCTIC
NONCONDUCTIVE THREAD COMPOUND

DESCRIPTION

NCS-30® ARCTIC is a premium quality, nonmetallic, nonconductive compound containing and 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. **NCS-30 ARCTIC** offers the same protection as regular **NCS-30**, but at lower service temperatures.

- 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.

NCS-30 ARCTIC's 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. **NCS-30 ARCTIC**, 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 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.

- 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 non-interference tubing thread designs when properly torque compensated.

* Trademark of Hydril Company.

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. % LOSS @ 212°F (100°C)	<3.0
Flash Point (ASTM D-92)	>340°F (171°C)
NLGI Grade	1
Penetration @ 77°F (ASTM D-217)	300 – 330
Copper Strip Corrosion (ASTM D-4048)	1A, typical
Friction Factor*	
Relative to API RP 7G	1.15 (drill strings)
Relative to API RP 5A3	1.40 (relative to API-Mod)

**** 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.***

Service Temperature	
Oilfield/Mining/Construction Drilling	-40°F (-40°C) to 350°F (177°C)
Industrial Anti-seize Applications	-65°F (-54°C) to 2600°F (1427°C)

Shelf Life: Minimum five years from manufacture date.

For package types and part numbers - www.jetlube.com/resources/product-index/

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

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