JET-LUBE®

TECHNICAL DATA SHEET

HDD MANUAL™

HDD AND AUGER THREAD COMPOUND

DESCRIPTION:

HDD MANUAL™ thread compound is lead-free, containing copper flake, graphite, rust and corrosion inhibitors. The formulation also contains antioxidants, extreme pressure and anti-wear additives, blended into Jet-Lube base grease. The base oil viscosity of **HDD MANUAL** is also more suitable for HDD equipment and use, compared to oilfield operations.

HDD MANUAL™ exhibits superior adhesion to wet steel surfaces and resistance to water wash-off.

HDD MANUAL™ is designed 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 joints efficiency is maintained allowing joints to make-up completely without stand-off or deformation.

BENEFITS:

- Contain no lead or zinc
- Extreme pressure additive provides additional protection against seizing and galling
- Formulated with inhibitors to protect against rust and corrosion
- Sticks to wet joints
- Smooth grease base for brushability and stability over a wide temperature range
- Consistent makeup
- Unequalled resistance to downhole makeup
- Suitable for manual application using a dope brush

HELPFUL LINKS:

Package Types and Part Numbers

Limited Warranty

TYPICAL CHARACTERISTICS	
Thickener	Aluminum Complex
Fluid Type	Petroleum
Color	Metallic
NLGI Grade	1
Cone Penetration @77°F (ASTM D-217)	310-330
Dropping Point °F (°C) (ASTM D-566)	500 °F (260 °C)
Oil Separation Wr. % Loss @ 212 °F (100 °C)	<3.0
Friction Factor, (API RP 5A3)	1.0
Specific Gravity g/cc @ 60°F (15.5°C)	1.15
Flash Point °F (°C) (ASTM D-92)	500 °F (260 °C)
4-Ball EP Weld Point, kg (ASTM D-2596)	800
Copper Strip Corrosion 212°F (100°C) @ 3 hrs	1A
Service Rating	0 °F (-18 °C) to 500 °F (260 °C)