

## DOUBLE DUTY DRILL COLLAR & TOOL JOINT COMPOUND

### DESCRIPTION

**JET-LUBE 21®**, an environmentally-friendly, double-duty drill collar and tool joint compound, has been formulated to provide a superior level of performance for the increasing demands of today's oilfield market. The lead-free formulation contains copper flake as the only metallic component and is fortified by a unique blend of natural, inorganic, extreme-pressure, and anti-wear additives. For invert or high-pH muds, a special base grease is available.

- Not classified as a marine pollutant - DOT Approval CA2006100003
- Contains no lead or zinc.
- Formulated with a proprietary blend of copper, graphite, and other additives for protection and prevention of excessive circumferential makeup in hostile drilling environments.
- Inhibitors protect against rust and corrosion.
- Sticks to wet joints.
- Aluminum complex base for brushability and stability over a wide temperature range.
- Consistent rig floor makeup.
- Excellent resistance to makeup downhole.
- Available in Arctic, Thermal, Biodegradable, and Specialty grades.

**JET-LUBE 21** has been designed to utilize the makeup charts in API RP7G. In the more severe drilling situations such as higher speeds, higher penetration rates, deviated holes, or harder formations, drill collars and other rotary shouldered connections should be made up at least 15% over the listed RP7G values.

### APPLICATIONS

**JET-LUBE 21** is recommended for the entire drill string in most drilling conditions. Typical applications would include geothermal wells, high angle holes, problem holes involving high temperature, whip stocks, and horizontal drilling applications. **JET-LUBE 21** prevents high stress in drill pipe connections which shortens their useful life.

### PRODUCT CHARACTERISTICS

Thickener	Aluminum Complex Fluid
Type	Petroleum
Dropping Point (ASTM D-566)	450°F (232°C) Specific
Gravity	1.1
Density (lb/gal)	9.0
Oil Separation (ASTM D-6184)	<5.0
Wt. % Loss @ 212°F (100°C)	
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
4-Ball (ASTM D-2596)	
Weld Point, kgf	620
Friction Factor* (Relative to API RP 7G)	1.15 (standard service)
Service Rating	0°F (-18°C) to 450°F (232°C)

\* 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.

### PACKAGING

Code No.	Container Size	Shipping Wt.
11023	1 gal.	10 lb.
11013	1½ gal.	26 lb.
11015	5 gal.	49 lb.
11017	5 gal. (metal)	49 lb.
11024	15 gal.	145 lb.
11029	50 gal.	489 lb.

### LIMITED WARRANTY

Jet-Lube, Inc. makes the Limited Express Warranty that at the date of delivery this product shall be free from defects in Jet-Lube, Inc. materials and workmanship.

This Limited Express Warranty is expressly in lieu of any other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose, and of any other obligation on the part of Jet-Lube, Inc.

The sole remedy for breach of the Limited Express Warranty shall be the refund of the purchase price. All other liability is negated and disclaimed, and Jet-Lube, Inc. shall not be liable for incidental or consequential damages.

0311

**AUTHORISED DISTRIBUTOR**  
**JET SEALANTS & LUBRICANTS**

**+91-22-24130003**  
**info@jetsealants.in**  
**www.jetsealants.in**