

## CALCIUM BASE HIGH-PRESSURE THREAD COMPOUND

### DESCRIPTION

API-Modified is a calcium base high-pressure thread compound that conforms to or exceeds the requirements of API RP5A3 (former API BUL 5A2) and ISO 13678 Annex A. It also contains rust and oxidation inhibitors blended in JET-LUBE's base grease compounded from custom-refined, lowsulfur oil to ensure brushability over a wide temperature range. It tenaciously adheres to all surfaces, resists water washout, and prevents rust & corrosion.

API-Modified reduces friction in the makeup of casing and tubing, preventing galling and wear. Maximum thread engagement is ensured, providing optimum leak resistance.

API-Modified contains inhibitors that provide maximum protection against rust and corrosion of threaded surfaces. Its conductivity reduces the possibility of electrolytic corrosion by preventing the formation of galvanic cells in the presence of salt water and other corrosive fluids.

For API 6A bolting and other flange bolting applications although API MODIFIED was used as the reference compound to establish some of the listed make-up torques, JET-LUBE recommends using 550 EXTREME or KOPR-KOTE for reasons of occupational health. Where the torques are provided multiply the value by 1.15 to generate the new torques needed to achieve the same loads as with API MODIFIED.

- Meets or exceeds API RP 5A3/ISO 13678 requirements.
- Additives for rust and corrosion protection.
- Excellent lubrication qualities prevent galling and
- Sticks to wet and oily threads.
- Brushable over a wide temperature range.
- Leak prevention to 10,000 psi on API Connection designs and higher on mechanical seal connection designs.

## **APPLICATIONS**

API-Modified is specially formulated for use on API casing, tubing connections (i.e. buttress & 8-Round), line pipe, flow lines, subsurface production tools, tank batteries, and will lubricate, seal and protect threaded connections of oilfield tubular goods on makeup, in service, and in storage. It is also approved for most proprietary mechanical seal connection designs.

Not recommended for rotary shouldered connections.

The maximum operating temperatures are based upon connection designs. For API connection designs the maximum operating temperatures can be used with certain connections up to 400°F (205°C). Please consult the connection manufacturer before using on mechanical seal connection designs where the temperature limits may be much higher.

## PRODUCT CHARACTERISTICS

Grade	1
Cone Penetration @77°F	310 – 340
(ASTM D-217)	
Dropping Point (ASTM D-566)	>280°F
Gas Evolution, ccs,	0 typical
120 h @ 66°C	
Friction Factor (API RP 5A)	1.0
K-Factor, Nut Factor (API 6A)	0.13
Density, lb/gl	
@ 77°F (25°C)	16.4
Specific Gravity, g/cc	1.97
@ 60°F (15.5°C)	
Flash Point, °F (°C)	>430°F (221°C)
Four Ball EP	
Weld Point, kgf	800
Load Wear Index	>130
Copper Strip Corrosion	1A
212°F (100°C) @ 3 hrs	
Oil Type	Petroleum
Thickener Type	Calcium
Color	Black / Brown

# SERVICE TEMPERATURE RATING: 0°F (-18°C) to 400°F (205°C)

#### For package types and part numbers

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

#### **Limited Warranty**

Shelf Life, Years

www.jetlube.com/assets/documents/Jet-Lube Warranty.pdf