



## SPECIFICATION SHEET

# CAL BRONZE® LEAD FREE

**Multipurpose Thread Compound for Drill Pipe and Drill Collars In  
Light-To-Medium Duty Drilling  
NSF Registered †**

COLOR	Copper - black
PENETRATION	310 - 330 (ASTM D 217)
WEIGHT/GALLON	10.2 pounds/gallon
DROPPING POINT	350°F/177°C (typ)
FLASH POINT	385°F/196°C (min)
BRUSHABLE TO	10°F/-12°C
SERVICE RATING	500°F/260°C
TORQUE FACTOR	1.1 (per API RP 7A1)*
CONTAINS	Copper, graphite and other nonmetallic additives

Cal Bronze® Lead Free is a lead and zinc free compound that can be used in a wide range of oil field drilling applications as well as water well drill pipe, casing or line pipe. Cal Bronze Lead Free provides the excellent sealing properties of lead and zinc in a compound that contains no toxic materials that exceed the current maximum allowable EPA limits for solid waste. The copper flake, graphite, and extreme pressure additives provide the resistance to galling and seizing necessary for rotary-shouldered connections. Contains oxidation and H<sub>2</sub>S inhibitors. Cal Bronze® Lead Free has obtained registration from NSF, National Sanitation Foundation.†

\*API RP 7A1: "Recommended Practice for Testing of Thread Compound for Rotary Shouldered Connections"  
NOTE: Due to operation and equipment variables, this value may require adjustment based on field experience.

† NSF Registration No. 141560 Category Code: H2

**A MATERIAL SAFETY DATA SHEET IS AVAILABLE FROM THE MANUFACTURER.  
DO NOT USE ON OXYGEN LINES OR IN OXYGEN ENRICHED ATMOSPHERES.**