

## Copper Guard 4

Forum Copper Guard 4 no-lead tool joint compound is a copper-based, API RP 7A1 tool joint compound that employs a high-quality, low-sulphur petroleum base composition including anti-galling and anti-seizing agents. This compound is not affected by solvents, oil, mud, corrosion, and mild acids or alkalis.

This copper compound is designed for rotary shouldered connections used in shallow and medium depth wells. The compound may be used for drill collars and tool joints to promote proper makeup and stress development in the connection when the proper makeup torque is applied. The compound provides excellent anti-seize protection for all threaded fittings, bolts, or heat exchanger connections up to 500°F and inhibits excessive circumferential makeup as additional torque is applied.



### Applications

Tool joints, drill collars, and associated rotary shouldered connections for medium depth drilling at higher than normal temperatures.

### Temperature Range

Service Rating: 0°F to 500°F

### Order Information

Item #	Net Weight	Pail Size
89986109P	9 #	1 Gallon
89986218P	18 #	2 Gallons
89986545P	45 #	5 Gallons

### Specifications

Color:	Copper	Penetration @ 77°F (ASTM D-217):	310, NLGI Grade 1
Base Grease:	Lithium Complex	Brushability:	Applicable at 0°F
Solids:	Copper Graphite	Relative Density:	1.25
Additives:	Corrosion Inhibitor Anti-Oxidant Friction Control Extreme Pressure	Friction Factor:	1.1