



SPECIFICATION SHEET

COPR PLUS PUMPABLE

**Non-Lead / Non-Zinc Thread Compound
for Rotary Shouldered Connections**

COLOR	Dark copper
PENETRATION	340-370 (ASTM D-217)
WEIGHT/GALLON	10.2 pounds/gallon
DROPPING POINT	300°F/149°C (typ)
FLASH POINT	350°F/177°C (min)
BRUSHABLE TO	-49°F/-45°C
SERVICE RATING	400°F/204°C
TORQUE FACTOR	1.1 (relative to API Modified)*
CONTAINS	Copper, amorphous and synthetic graphite and proprietary additive package.

Copr Plus Pumpable was developed to handle low temperature application and adherence problems found by drillers in rotary shouldered connections and pumps easily. It is a non-lead, non-zinc compound designed for all types of drilling applications and addresses the environmental concerns and costs of using thread compounds that contain these hazardous metals. Copr Plus Pumpable combines copper flake with a proprietary combination of graphite, non-metallic solids, and extreme pressure additives. Galling and seizing protection is provided by the solid additives and the extreme pressure additive package provides the load carrying capability to handle the high bearing stresses found in rotary shouldered connections. Copr Plus Pumpable has a torque correction factor of 1.1 (10% additional torque required) which will provide additional resistance to down-hole make up as compared to lead (API Modified) or zinc compounds.

Copr Plus Pumpable will meet or exceed the listed performance objectives in API Recommended Practice 7A1. It is stable to temperatures in excess of 400°F/204°C.

Copr Plus Pumpable applies easily to cold wet connections exposed to seawater in ambient temperatures as low as -49°F/-45°C and yet delivers optimum performance in all types of wells and pumps easily for all applications under all environmental conditions.

RECOMMENDED FOR all drilling applications (rotary-shouldered connections).

*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.

DO NOT USE ON OXYGEN LINES OR IN OXYGEN ENRICHED ATMOSPHERES.