

UNITED OIL COMPANY

Quality Industrial Lubricants Since 1906

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UNITED COATING OIL

(CO – 100)

Product Data Sheet

Product Description:

Coating Oil CO - 100 United is a medium viscosity long term rust preventative coating oil designed to be applied to steel strip after pickling, temper rolling, galvanizing, and after processing before storage. **CO- 100** is compatible with all temper mill coolants and one-phase oil-based coating oils, and may be applied by spray, felt wiper, or electrostatic oiler.

Outstanding Qualities:

1. Does not contain silicones, lanolin, hardeners, or waxes. It is relatively easily cleaned from the steel surface prior to processing of the strip.
2. Is a balanced between barrier type corrosion protection and additive based corrosion protection. Barrier protection involves simply preventing moisture (water) from reaching the steel surface of the coil. This is provided by the carrier or base oil and the water displacing additive.
3. Once barrier protection is established, additional protection is also needed for damaged areas of the barrier film e.g. scratches, nicks, uneven application and from stain and oxidation. As such contains non-staining, acid neutralizing film formers, polar additives, water displacers, and anti-oxidants.

Typical Physical Properties:

Appearance	Amber liquid
Viscosity @ 100° F	100-120 SSU
Type A-Ready Mix	Passes
Flash Point, COC	302° F
Specific Gravity @ 60° F	0.867

Outstanding Qualities:

ASTM D1748 (Humidity Cabinet)	40 days
MIL-C-22235	
Section 3.4 (Stack Test)	No Stain
Type A-Ready Mix	Passes
Electrostatic Oil Application Rating good spray with cusping (1-2mm) suitable for all application methods	
Cleanability \geq U.S. Steel SOP	
Loose stack	25 sec. Better than standard RP
Tight stack	30 sec. Similar to standard RP

Independent Laboratory Test Result:

Test	United CO – 100	Standard RP
ASTM D1748 Humidity Cabinet (Steel)	60 +Days	avg 456 hrs
ASTM D1748 Humidity Cabinet (Galv)	avg 228 hrs	avg 228 hrs
ASTM B117 Salt Spray (Steel)	>24 <40hrs	<16 hrs
ASTM B117 Salt Spray (Galv)	< 16 hrs	<16 hrs
Acid Fume (Steel)	3.0 – 3.5 hrs	1 hr
Acid Fume (Galv)	112 hrs	112 hrs