



EMBLEM R & O OILS

EMBLEM R & O Oils are premium quality lubricants for use in hydraulic systems, turbine oils, circulating oil systems and general purpose oiling. They are blended from carefully selected base oils to insure outstanding stability. In addition, these oils are fortified to resist oxidation and provide rust protection. R & O 55 is widely used as a spindle oil. Available in eight grades: 55, 100, 160, 200, 300, 400, 600, 900 and 1100.

Typical Properties

GRADE	55	100	160	200	300	400	600	900	1100
ISO Grade	10	22	32	46	68	100	150	220	220
Viscosity, SUS @ 100°F	50-60	100-110	150-160	190-220	290-310	380-420	600-630	850-950	1100
Gravity °API	33-35	28-30	26-28	25-27	25-27	25-27	23-25	23-25	22-24
Flash °F Min.	300	330	365	365	365	365	380	380	385
Pour °F Max.	- 35	- 20	- 15	- 10	- 5	+ 5	+ 5	+ 5	+15
Anti-Foam Treated	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Oxidated Inhibited	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rust Inhibited	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Carbon Residue %	-	0.1	0.03	0.2	0.2	0.2	0.2	0.25	.30

Oxidation & Corrosion	Specification/procedure	0.7%v
Rotary Bomb (Min to 25 psi loss)	ASTM D-2272	300
Turbine Oil Oxidation(h to 2.0 NNA)	ASTM D-943	2700 +
Sludge and Metal Cor. (MIL-L-17672C)	ASTM D-943 (1000 h)	
NNA	2.0 max	< 0.2
Insoluble Sludge, mg	100 max	99
Total Copper, mg	100 max	-
Total Iron, mg	100 max	-
Thermal Stability [168h, 275°F(135°C)]	Cincinnati Milacron	
Sludge, mg/100 ml	25 max	15

Condition of Copper Rod *	5 max	3
Condition of Steel Rod *	5 max	2
Turbine Oil Rust Test	ASTM D-665A/B	PASS/PASS
Turbine Oil Demulsibility 130°F (54.4°C)	ASTM D-1401	40-40-0
ml: Oil-Water-Cuff (minutes)		(25)
Acid Number, New Oil	ASTM-D974	0.15

* Appearance, CM Color Class