



UNIVERSAL R&O TURBINE OIL

Product Description **Universal Rust & Oxidation Turbine Oils** are premium, multi-purpose lubricants formulated to protect against rust and oxidation. The product exhibits good viscosity/temperature characteristics, low foaming and excellent water separation properties.

Applications **Universal R&O Turbine Oils** are recommended for both gas and steam turbines; for hydraulic systems using piston or gear type pumps; for vacuum pumps; as a high quality circulating oil; as a general purpose machine oil; as an R&O gear oil where EP properties are not required; and for reciprocating air compressors.

Universal R&O Turbine Oil meets or exceeds the requirements for industrial equipment which call for:

- Cincinnati Machine P-38, P-45, P-54, P-55, P-57, P-62
- DIN 51524 Part 1
- AFNOR E-48600 HL
- Denison HF-1
- US Steel 126
- MIL-H-17672D

- Benefits**
- Outstanding oxidation & thermal stability
 - Low copper activity
 - Extra long service life
 - No deleterious effect on demusibility
 - Excellent rust protection
 - Low temperature fluidity; extends useful operating range
 - Good Hydrolytic Stability

Specifications

Typical Property	ASTM Test Method	Typical Results							
		22	32	46	68	100	150	220	320
ISO Viscosity Grade		22	32	46	68	100	150	220	320
Gravity, Deg API	D 287	33.0	30.2	29.4	28.5	28.4	28.4	28.4	26.3
Viscosity									
@ 40°C, cSt	D 445	21	31	45	67	98	148	218	320
@ 100°C, cSt	D 445	5.2	6.3	6.6	8.9	11.0	14.0	18.3	23.1
Viscosity Index, Min	D 2270	95	95	95	95	94	94	94	91
Pour Point, F	D 97	-29°	-29°	-10°	-10°	0°	0°	+5°	+15
Flash Point, F min.	D 92	400°	415°	425°	465°	500°	500°	500°	500°
AGMA R&O Number		----	0	1	2	3	4	5	6
Rust Test	D 665A	----	Pass	Pass	Pass	----	----	----	----
Oxidation	D 943	5000+	5000+	5000+	5000+	4000+	4000+	3500+	3500+
UO Item Number		16-19-13	16-19-14	16-19-15	16-19-16	16-19-17	16-19-18	16-19-19	16-16-20

Refer to Universal Oil's Material Safety Data Sheet (MSDS) 16-19-13 for additional information.