CIRKAN RO





R and O Machine Oil

APPLICATIONS

R&O oils for all types of moving parts.

- CIRKAN RO oils are mineral oil based, premium circulating oils that contain additives to inhibit oxidation, provide rust protection and prevent foaming.
- Uses include: textile machinery, machine tools, hydraulic circuits operating at less than 1,000 psi, heat transfer systems, and steam turbines requiring a category HL oil.
 Viscous grades are recommended for the lubrication of plain and rolling contact bearings and gears not requiring anti-wear and extreme pressure properties.

SPECIFICATIONS

- ISO 6743/4 CATEGORY HL
- ISO 11158 CATEGORY HL
- DIN 51524 PART 1
- ISO 6743/6 CATGORY CKB
- AFNOR NFE 48602 CATEOGRY HL
- AFNOR NFE 60200 CATEGORY CB and HL
- MORGOIL

ADVANTAGES

- High natural viscosity index
- Good compatibility with elastomers and seals
- Excellent demulsification properties
- Excellent anti-foaming, anti-corrosion, and anti-oxidation properties

TYPICAL CHARACTERISTICS	CIRKAN RO									
	10	22	32	46	68	100	150	220	320	460
Viscosity at 40°C, cSt	10.0	22.0	32.0	46.0	68.0	100.0	150.0	220.0	320.0	460.0
Viscosity at 100°C, cSt	2.7	4.3	5.4	6.8	8.7	11.6	14.4	18.4	23.3	28.9
Viscosity Index	> 95	> 95	> 95	> 95	> 95	> 95	> 95	> 95	> 95	> 95
Density @ 60°F, lbs./gal.	7.14	7.20	7.25	7.28	7.30	7.35	7.38	7.42	7.45	7.44
Specific Gravity @ 60/60°F	0.855	0.863	0.868	0.872	0.874	0.880	0.884	0.889	0.893	0.891
Pour Point, °F	-10	0	0	5	-28	5	5	10	10	15
Flash Point, COC, °F	330	390	405	415	420	430	440	475	515	570
Copper Strip Corrosion	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B

CIRKAN RO Meets MORGOIL SPECIFICATION

MORGOIL Specification										
WONGOIL Specifica	CIOII		CIRKAN RO							
	ASTM D									
Viscosity Index	2270									
ISO 460 or less		90min.	>95							
ISO 680		85min.	>95							
	ASTM D									
Demulsibility	2711									
Free water		30ml min.	30ml							
% free water in oil		1.5%max	1.5							
Emulsion		1.0ml max.	1.0							
	ASTM D									
Demulsibility	1401									
ISO 68 or lowerat 54C										
at 82C										
		40-37-3	40-37-3							
ISO 32 - 220		(20min) 40-37-3	(15min) 40-37-3							
ISO 320 - 460		40-37-3 (40min)	40-37-3 (15min)							
150 320 - 400		40-37-3	40-37-3							
ISO 680 - 1000		(50min)	(15min)							
Pour point	ASTM D 97	()	(- /							
ISO 460 lower		minus 6C	minus 15C							
ISO 680 higher		0C	minus 10C							
150 000 Higher										
Foam	ASTM D 892									
Seq I	7.51.11.5 032	150 - 0	50 -0							
Seq II		133 3	30 0							
Seq III										
Rust, distilled water	ASTM D 665	Pass	Pass							
Flash point	ASTM D 003	195C, min.	215C, min							
Copper corr., 3hrs @	7.511010 32	1550, 11111.	2130, 111111							
100C	ASTM D 130	1a-b	1a-b							
Neutralization #	ASTM D 974	Report	0.27							

TOTAL Specialties USA, Inc.

Linden, NJ 07036

5 North Stiles Street 908.862.9300/800.526.4127