



Syncon® R&O Oil (ISO VG 32-68)

Syncon R&O Oil (ISO VG 32-68) is a premium quality, synthetic, rust and oxidation (R&O)-inhibited circulating oil developed primarily for use in rotary screw and rotary vane air compressors operating under severe-service conditions or at extreme temperatures. It is particularly recommended for use in applications where operating conditions may be unfavorable or too severe for conventional mineral oil-based circulating oils.

Syncon R&O Oil is formulated with synthetic polyalphaolefin (PAO) base oils and select additives to provide excellent protection against wear, rust, corrosion and foaming. It has outstanding oxidation resistance and thermal stability at high temperatures to minimize deposit and varnish formation and provide long service life. It has excellent low-temperature properties for use over a wide temperature range. It has good water-separating properties to reduce carryover and blockage of filters.

Syncon R&O Oil It is compatible with mineral oil-based lubricants, but mixing should be avoided for optimum performance benefits.

Applications

- Rotary and centrifugal air compressors where the manufacturer specifies a PAO-based lubricant
- Plain and rolling-element bearings operating at very high or very low temperatures
- Electric motor, fan and blower bearings
- Vacuum pumps
- Industrial equipment operating over a wide temperature range where an inhibited mineral oil is recommended

Features/Benefits

- Outstanding resistance to thermal breakdown at high temperatures
- Outstanding oxidation resistance to minimize deposit and varnish formation
- Protects against wear
- Protects against rust and corrosion
- Good water-separating properties
- Good foam resistance
- Excellent low-temperature fluidity
- Low carbon-forming tendency
- Extended service intervals compared with mineral oil-based lubricants

**Synthetic
PAO-Based
Rust & Oxidation-
Inhibited
Air Compressor
Oil**

CONTACT INFORMATION

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Lubricants.com**

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1-800-368-7128

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1-877-445-9198

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1-832-765-2500

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- Compatible with mineral oil-based lubricants⁽¹⁾

⁽¹⁾ **Note:** For optimum performance, the mineral oil lubricant should be drained before using Syncon R&O Oil. Mixing the two products can reduce the effectiveness and performance advantages normally gained by using Syncon® R&O Oil.

Note: For information on compatibility with seals, paints and plastics, please call our Technical Support Hotline.

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Typical Properties

ISO Grade	32	46	68
Specific Gravity @ 60°F	0.854	0.857	0.865
Density, lbs/gal @ 60°F	7.11	7.14	7.20
Color, ASTM D1500	L 0.5	L 0.5	L 0.5
Flash Point (COC), °C (°F)	245 (473)	270 (518)	275 (527)
Pour Point, °C (°F)	-51 (-60)	-39 (-38)	-39 (-38)
Viscosity,			
cSt @ 40°C	32.0	44.0	66.0
cSt @ 100°C	5.8	7.4	9.8
SUS @ 100°F	164	225	339
SUS @ 210°F	45.7	51.0	59.4
Viscosity Index	125	133	131
Acid Number, ASTM D974, mg KOH/g	0.17	0.17	0.17
Copper Corrosion, ASTM D130	1a	1a	1a
Demulsibility, ASTM D1401, minutes to pass	10	10	10
Foam Test, ASTM D892, Seq. I, ml	0/0	0/0	0/0
Four-Ball Wear, ASTM D4172, Scar Diameter, mm	0.40	0.33	0.48
FZG Scuffing Test, ASTM D5182, Failure Load Stage	9	9	9
Oxidation Stability, RPVOT, ASTM D2272, minutes	2,400	2,400	2,400
Rust Test, ASTM D665 A&B	Pass	Pass	Pass

Health and Safety Information

For recommendations on safe handling and use of this product, please refer to the Material Safety Data Sheet via <http://w3apps.phillips66.com/NetMSDS>.

Typical properties are average values only and do not constitute a specification. Minor variations that do not affect product performance are to be expected during normal manufacture, and at different blending locations. Product formulations are subject to change without notification.

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