



Syndustrial® Rotary Compressor Oil

Phillips 66® Syndustrial Rotary Compressor Oil is a premium quality, readily biodegradable synthetic lubricant developed for use in centrifugal and rotary air compressors. It is particularly recommended for use in applications where operating conditions are unfavorable or too severe for conventional mineral oil-based compressor oils.

Syndustrial Rotary Compressor Oil is formulated with a blend of synthetic polyalkylene glycol (PAG) and synthetic ester base oils and carefully selected additives. It has outstanding oxidation resistance and thermal stability at high temperatures to minimize deposit formation and provide long service life. It has high film strength to protect against wear, and also protects against rust and corrosion. It is classified as readily biodegradable, as defined by the OECD 301B test method, for reduced environmental impact in case of leaks or spills. It also passes the visual “no sheen” requirements of the U.S. EPA Static Sheen Test (Federal Register Vol. 58, No. 41).

Syndustrial Rotary Compressor Oil is formulated to outperform conventional paraffinic or naphthenic compressor oils in oxidation resistance and deposit control. It has better thermal stability at high temperatures to minimize sludge and varnish formation. It also has lower volatility for lower oil consumption. These benefits result in longer service intervals and less maintenance than with conventional petroleum oils.

Applications

- Centrifugal air compressors and oil-flooded rotary screw, rotary lobe and rotary vane air compressors where the manufacturer specifies a synthetic polyglycol/ester lubricant
- Drop-in replacement for OEM-branded polyglycol-based compressor oils

Note: Syndustrial Rotary Compressor Oil is **not** compatible with petroleum compressor oils and should not be mixed with such products. When converting from mineral oil to Syndustrial Rotary Compressor Oil, a complete flush, drain and refill should be performed.

Features/Benefits

- Outstanding oxidation resistance and thermal stability at high temperatures
- High viscosity index and very low pour point for use over a wide temperature range
- Excellent cooling and heat transfer properties
- Excellent deposit control
- High film strength for wear protection

**Synthetic
Polyalkylene
Glycol/Ester-
Based Air
Compressor
Oil; Readily
Biodegradable**





- Low volatility for lower oil consumption and less makeup oil
- Protects against rust and corrosion
- Extended service intervals compared with mineral oil-based lubricants
- Readily biodegradable for reduced environmental impact in case of leaks or spills
- Compatible with commonly used seals, gaskets, and hoses⁽¹⁾

⁽¹⁾ **Note:** Syndustrial Rotary Compressor Oil is compatible with neoprene, silicone rubber, teflon, vespal and viton, as well as epoxy paints. It is **not** compatible with oil-based paints or with solvents, such as diesel fuel, kerosene, heptane, methanol, ethylene glycol or triethanolamine.

Syndustrial[®] Rotary Compressor Oil

Typical Properties	
ISO Grade	32/46
Specific Gravity @ 60°F	0.964
Density, lbs/gal @ 60°F	8.03
Color, ASTM D1500	0.5
Flash Point (COC), °C (°F)	251 (484)
Pour Point, °C (°F)	-57 (-71)
Viscosity	
cSt @ 40°C	35.9
cSt @ 100°C	7.3
SUS @ 100°F	182
SUS @ 210°F	50.6
Viscosity Index	174
Acid Number, ASTM D974, mg KOH/g	0.17
Copper Corrosion, ASTM D130, 48 hrs @ 80°C	1a
Foam Test, ASTM D892, Seq. I, mL	0/0
Four-Ball Wear Test, ASTM D4172, Scar Diameter, mm	0.53
Oxidation Stability, RPVOT, ASTM D2272, minutes	>1,800
Rust Test, ASTM D665 A&B	Pass
Biodegradability, OECD 301B, 28 days, %	>90

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.