



*The First in Synthetics®*

## **Industrial Synthetic Lubricants**

# **SYNTHETIC PC SERIES COMPRESSOR OILS**

### **PRODUCT DESCRIPTION**

AMSOIL Synthetic PC Series Compressor Oils are made from high-quality, shear-stable synthetic base oils. PC Series oils provide long compressor life through reduced component wear, corrosion protection, water resistance and lubricant breakdown resistance. These oils reduce maintenance costs by extending drain intervals and lowering labor and used product disposal requirements.

### **AMSOIL Synthetic Base Oil Technology**

AMSOIL's unique formulation of synthetic base oils combine the advantages of esters and polyalphaolefins (PAO's) into one balanced product. The high viscosity indices, low pour points, low volatility and prolonged thermal stability allow for use in a wide operating temperature range. These oils minimize carbon buildup, provide clean performance and exhibit low frictional characteristics. This superior formulation has demonstrated increased operational efficiency, reduced energy consumption and lower operating temperatures.

### **AMSOIL Compressor Oil Additives— A Thorough System for Top Performance**

The antifoam agents stop unwanted foaming and air entrainment. Corrosion inhibitors prevent rust and corrosion caused by water and process contaminants, and oxidation inhibitors extend lubricant life and prevent carbon formation. The PC Series is fortified with ashless, nondetergent additives designed for compressor applications. They are designed to increase the length of compressor serviceability.

### **Stable in the Presence of Water**

AMSOIL PC Series exhibit very good hydrolytic stability, and they readily separate from water. This prevents acid formation and unwanted oil/water emulsions. These features allow water to be easily drained from the sump and extends the life of a lubricant.

### **Safety Advantage**

AMSOIL PC Series Compressor Oils have higher flash, fire and auto-ignition points than competitive petroleum oils. Also, their resistance to carbon formation and the ashless additive system minimize the incidence of

deposits acting as ignition-promoting hot spots. Although AMSOIL PC Series Compressor Oils have high fire points, they cannot be considered nonflammable.

### **PERFORMANCE FEATURES**

- Antifoam, antiwear protection
- Rust and oxidation inhibited
- Suitable for use in rotary screw, vane, centrifugal and reciprocating compressors
- Combines advantages of ester and PAO technology
- Excellent compatibility with components and other oils

### **APPLICATION RECOMMENDATION**

The manufacturer's recommended viscosity grade of AMSOIL PC Series Oils is recommended for use in single and multistage rotary screw, vane, centrifugal and reciprocating compressor crankcases and cylinders, vacuum pumps and other compressor applications. In addition, the correct viscosity may be used in light-duty gear and bearing applications, blowers, pumps and handheld pneumatic tools.

- PC Series Synthetic Compressor Oils are recommended for use in a wide temperature range, from 20°F above the pour point to 275°F discharge temperature.
- The PC Series may be used up to 8000 hours for many compressor applications.\* This drain interval is subject to operating conditions and maintenance practices. Monitoring by oil analysis at 1,000-hour intervals is recommended.
- PC Oils are compatible with petroleum oils, most synthetic oils,\*\* and almost all seals, paints and materials commonly used in compressors. It is suggested that the compressor be thoroughly drained and cleaned if warranted, and the filter be changed prior to filling with the new lubricant. Cleaning should be done in accordance with manufacturer's recommendations. Consult the AMSOIL technical department when further recommendations are needed.

\* Where discharge temperature exceeds 205°F, lubricant life expectancy is reduced.

\*\* Not compatible with silicon or polyglycol fluids such as Sullair Sullube 24KT®, Sullair Sullube 32® and Ingersoll Rand SSR Ultra Coolant®

## TYPICAL TECHNICAL PROPERTIES

Synthetic PC Series Compressor Oils	PCH ISO 32 SAE 10W	PCI ISO 46 SAE 20	PCJ ISO 68 SAE 30	PCK ISO 100 SAE 40	PCL ISO 150 SAE 50
ISO VG—ASTM D-2422	32	46	68	100	150
VK 100°C—ASTM D-445	5.8	7.8	10.3	13.5	17.5
VK 40°C—ASTM D-445	30.8	47.2	68.2	102.3	150.0
Viscosity Index—ASTM D-2270	131	132	137	132	128
Specific Gravity—ASTM D-1298	0.8473	0.8519	0.8565	0.8597	0.8670
Density—ASTM D-1298	7.055	7.093	7.132	7.158	7.219
Flash Point °C(°F)—ASTM D-92	264 (507)	258 (496)	262 (504)	264 (507)	256 (493)
Fire Point °C (°F)—ASTM D-92	276 (529)	276 (529)	278 (532)	278 (532)	276 (529)
Pour Point °C(°F)—ASTM D-97	-54 (-65)	-51 (-60)	-48 (-54)	-45 (-49)	-38 (-36)
Four-Ball Wear Test—ASTM D-4172 (40 kg, 1200 rpm, 75°C, 60 min.)	0.45	0.45	0.45	0.40	0.40
Copper Strip Corrosion Test— ASTM D-130	1A	1A	1A	1A	1A
Rust Tests—ASTM D-665A&B. Fresh water and synthetic sea water	pass	pass	pass	pass	pass
Foam, ml (ASTM D-892). Sequence I, II, III at Test End	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0
Demulsibility ASTM D-1401 [oil/water/cuff(minutes)]	40/40/0 (15)	40/40/0 (15)	40/40/0 (15)	40/40/0 (10)	40/40/0 (10)

### AMSOIL PRODUCT COMPATIBILITY

PC Series Compressor Oils are not recommended for “breathing air” or refrigeration compressors; they are also not recommended for use with polycarbonate plastic that is not metal covered, PVC plastic, butyl, ethylene-propylene and SBR rubber.

The following process gases are suitable for use with PC Series Compressor Oils: nitrogen, hydrogen, helium, carbon monoxide, carbon dioxide (dry), ethylene, methane, propane, butane, propylene, butylene, natural gas, benzene, butadiene, furnace (crack gas), hydrogen sulfide (dry), sulfur hexafluoride, synthetic gas, sulfur dioxide.

### AMSOIL PRODUCT WARRANTY

AMSOIL warrants that the use of its lubricants will not cause mechanical damage to any mechanically sound equipment when AMSOIL products are used in full compliance with the company’s recommendations. However, the purchaser of these lubricants is responsible for determining

if these specifications are adequate and proper for the intended application. The AMSOIL warranty is limited to lubricant performance consistent with indicated specifications. No additional warranty, expressed or implied, can be made. Complete warranty is stated in document G-1363.

### AMSOIL PRODUCT AVAILABILITY

AMSOIL PC Series Compressor oils are available in 5-gallon pails, 55-gallon drums, 275-gallon totes and bulk quantities.

AMSOIL Industrial Lubricants are stocked in Superior, Wisconsin and in select regional distribution centers throughout the United States and Canada.

\* Sullair Sullube 32® and Sullair Sullube 24 KT® are registered trademarks of Sullair Corporation; Ingersoll-Rand SSR Ultra-coolant® is a registered trademark of Ingersoll-Rand Company. SIROCCO® is a registered trademark of AMSOIL INC. The product code for SIROCCO® is SEI.

*For applications and recommendations, contact your local AMSOIL industrial sales representative or AMSOIL INC.*

