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DATA SHEET

## PC Series Synthetic Compressor Oil

### ISO VG 32 to 100

AMSOIL PC Series Synthetic Compressor Oil is a long-life, premium compressor lubricant that incorporates the highest quality, thermally stable synthetic oils fortified with premium non-detergent additives for maximum protection at high temperatures. It lasts up to 8,000 hours in rotary screw compressors, effectively reducing maintenance and waste oil disposal costs.



#### Improved Efficiency

AMSOIL PC Series Synthetic Compressor Oil reduces friction and resists viscosity increase from oxidation to help improve operating efficiency.

#### Controls Foam and Reduces Wear

AMSOIL PC Series Synthetic Compressor Oil contains anti-foam and anti-wear additives to reduce heat, oxidation and wear for increased oil and compressor life and lower maintenance costs.

#### Resists Water Contamination

Condensation causes unwanted oil/water emulsions that lead to rust and corrosion. AMSOIL PC Series Synthetic Compressor Oil is anti-rust fortified and hydrolytically stable. It readily separates from water for easy drainage and increased oil life.

#### Superior Varnish Resistance

Varnish is a major problem in high-temperature compressor applications, reducing efficiency and causing mechanical breakdowns. A leading competitor compressor oil and AMSOIL PC Series Synthetic Compressor Oil (PCI) were run in industrial rotary-screw compressors with a 200°F oil discharge temperature and compared using the Membrane Patch Colorimetry Test (ASTM D7843). The competing oil showed critical varnish potential after only 6,228 hours of service. AMSOIL PC Series continued to show ultra-low varnish potential after 8,000 hours, indicating **superior resistance to varnish**.

AMSOIL PC Series ISO 46  
Synthetic Compressor Oil (PCI)  
8,000 Hours @ 200°F



Ultra-low varnish potential

Leading Competitor ISO 46  
Synthetic Compressor Oil  
6,228 Hours @ 200°F



Critical varnish potential

#### Resists Heat and Oxidation

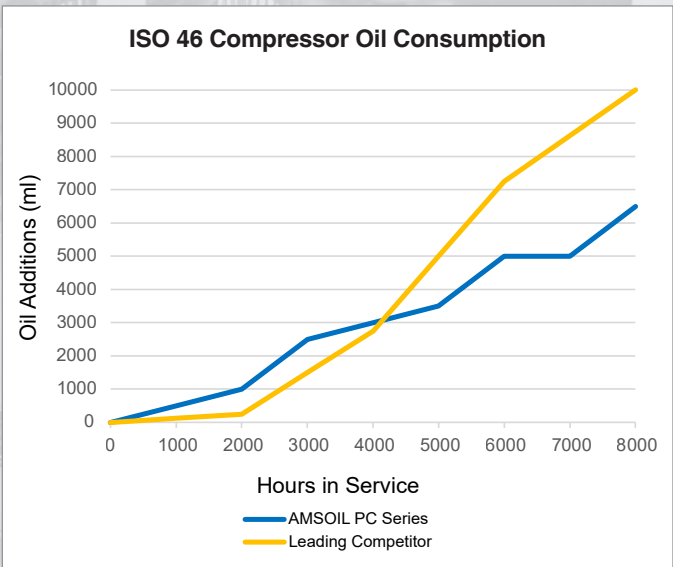
AMSOIL PC Series Synthetic Compressor Oil combines the inherent stability of premium synthetic base oils with specialized antioxidant additives to resist varnish, carbon and acid formation. It protects compressors better and lasts longer in service than petroleum oils, especially at high temperatures.

#### Safety Advantage

AMSOIL PC Series Synthetic Compressor Oil is an ashless, high-flash-point formulation with very low carbon-forming tendencies that minimizes ignition-promoting "hot spots." While it can provide improved fire safety, it is not a fire-resistant oil.

#### Reduced Oil Consumption

Excessive oil consumption requires frequent top-offs, wasting time and money. A leading competitor synthetic compressor oil and AMSOIL PC Series Synthetic Compressor Oil (PCI) were each run for 8,000 hours in an industrial rotary-screw compressor under the same operating conditions. The excellent foam resistance and air-release properties of AMSOIL PC Series Synthetic Compressor Oil helped **reduce oil consumption 35%**.



TYPICAL TECHNICAL PROPERTIES
AMSOIL PC Series Synthetic Compressor Oil

|                                                                    | SAE 10W<br>(PCH) | SAE 20<br>(PCI) | SAE 30<br>(PCJ) | SAE 40<br>(PCK) |
|--------------------------------------------------------------------|------------------|-----------------|-----------------|-----------------|
| ISO VG (ASTM D2422)                                                | 32               | 46              | 68              | 100             |
| Kinematic Viscosity @100°C (ASTM D445)                             | 6.1              | 7.3             | 10.2            | 13.4            |
| Kinematic Viscosity @ 40°C (ASTM D445)                             | 32.3             | 43.0            | 66.6            | 100.2           |
| Viscosity Index (ASTM D2270)                                       | 139              | 132             | 138             | 133             |
| Specific Gravity (ASTM D1298)                                      | 0.8499           | 0.8529          | 0.8597          | 0.8550          |
| Density (ASTM D1298)                                               | 7.08             | 7.1             | 7.16            | 7.12            |
| Flash Point °C (°F) (ASTM D92)                                     | 252 (486)        | 260 (500)       | 260 (500)       | 262 (504)       |
| Fire Point °C (°F) (ASTM D92)                                      | 272 (522)        | 288 (550)       | 284 (543)       | 274 (525)       |
| Pour Point °C (°F) (ASTM D97)                                      | -40 (-40)        | -38 (-36)       | -37 (-35)       | -44 (-47)       |
| Four-Ball Wear Test (ASTM D4172)<br>(40 kg, 1200 rpm, 75°C, 1 hr.) | 0.40             | 0.42            | 0.41            | 0.45            |
| Copper Strip Corrosion Test (ASTM D130)                            | 1A               | 1A              | 1A              | 1A              |
| Rust Tests (ASTM D665 A & B)<br>Fresh and synthetic sea water      | Pass             | Pass            | Pass            | Pass            |
| Foam (ASTM D892, Sequence I, II, & III)                            | 0/0, 0/0, 0/0    | 0/0, 10/0, 0/0  | 0/0, 0/0, 0/0   | 0/0, 0/0, 0/0   |
| Demulsibility (ASTM D1401)<br>[oil/water/cuff (minutes)]           | 40/40/0 (15)     | 40/40/0 (10)    | 40/40/0 (15)    | 40/40/0 (10)    |

APPLICATIONS

Use the appropriate viscosity of AMSOIL PC Series Synthetic Compressor Oil in single and multistage rotary screw, vane, centrifugal and reciprocating compressor crankcases and cylinders, vacuum pumps, pressure washer pumps and other applications such as gears, bearings, blowers and pumps

Drain intervals of up to 8,000 hours can be expected under normal operation in rotary screw compressors, subject to operating conditions and maintenance practices. Monitoring by oil analysis is recommended. Consult the equipment manufacturer or AMSOIL Technical Services for specific application info.

| Rotary Compressor        |           |                                         |
|--------------------------|-----------|-----------------------------------------|
| Product                  | Viscosity | Fluid Life                              |
| PCH, PCI, PCJ            | 32-68     | Up to 8,000 hours at 200°F discharge    |
| Reciprocating Compressor |           |                                         |
| Product                  | Viscosity | Stages                                  |
| PCJ, PCK                 | 68-100    | Single-piston, single-stage vacuum pump |

COMPATIBILITY

AMSOIL PC Series Synthetic Compressor Oil is compatible with petroleum oils and most synthetic oils, seals, paints and materials. For best performance, flush the compressor of old oil, remove any carbon deposits present on internal components following the compressor manufacturer recommendations and change all filters prior to installation.

**Not recommended** for “breathing air” or refrigeration compressors or for use with polycarbonate or PVC plastics and butyl, ethylene-propylene or SBR rubber.

**Not compatible** with polyalkylene glycol or silicone oils.

HEALTH & SAFETY

This product is not expected to cause health concerns when used for the intended application and according to the recommendations in the Safety Data Sheet (SDS) available at AMSOIL.com or upon request at (715) 392-7101.

Don't pollute. Return used oil to collection centers.

**Keep Out of Reach of Children.**

PRODUCT WARRANTY

AMSOIL products are backed by a Limited Liability Warranty. For complete information visit AMSOIL.com/warranty.

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