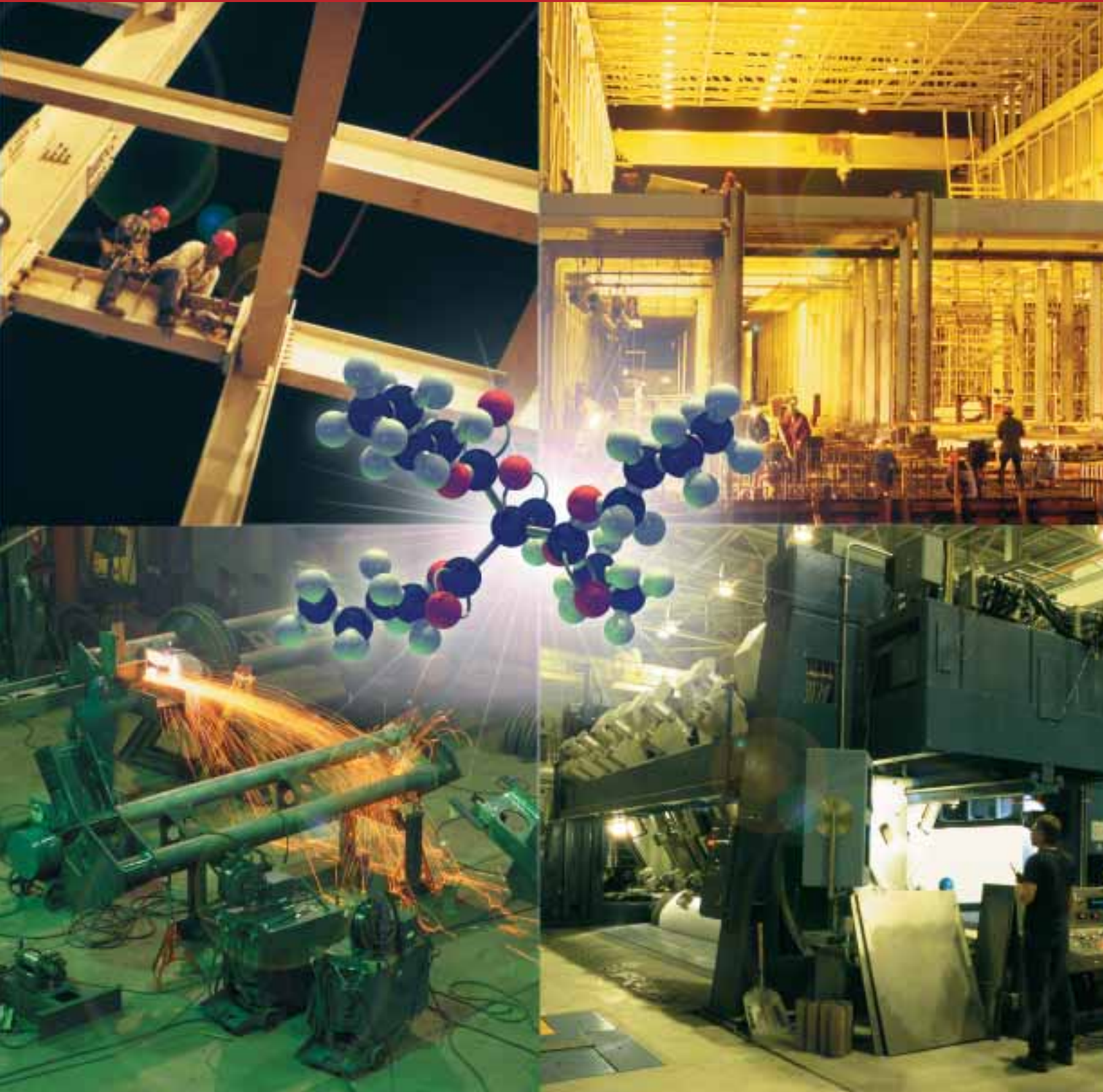




# Industrial Grade Synthetic Compressor Oils



PERFORMANCE DESIGNED FOR INDUSTRY



## *The FIRST in Synthetics ...the FIRST in Performance*

*AMSOIL Synthetic Compressor Oils increase the productivity and profitability of your operations.*

AMSOIL synthetic lubricants are superior to conventional lubricants in areas of thermal and oxidative stability, expanded high and low operational temperature ranges, increased heat transfer capabilities, reduced energy consumption and extended drain capabilities.

---

### *Scientifically Designed*

Created by science rather than by geological accident, AMSOIL synthetic base fluids are pure, synthesized fluids obtained by precise chemical reaction. The chemical makeup and unique properties improve virtually every aspect in lubrication – particularly in severe operating conditions.

---

### *Pure Construction*

The carefully controlled and monitored processes used to manufacture AMSOIL synthetic base fluids eliminates impurities, contaminants and unsaturation – the primary cause of lubricant breakdown which commonly plagues conventional lubricants. Uniform molecular geometry improves efficiency and has demonstrated reduced heat and energy consumption – a direct savings.

---

### *Bottom Line*

AMSOIL synthetic compressor oils increase the productivity and profitability of your operations. By providing superior overall lubricating performance, you can expect longer lasting compressors, fewer unscheduled maintenance requirements, less oil consumption and improved operating efficiency. In addition, AMSOIL compressor lubricants last several times longer than conventional lubricants resulting in lower maintenance and waste oil disposal costs. Through better lubrication, AMSOIL improves your bottom line.





# The FIRST in Synthetics ...the FIRST in Quality

## Advantage AMSOIL: Protection



AMSOIL synthetic compressor oils form virtually no foam during ASTM D892 testing.

AMSOIL Synthetic Compressor Oils are designed for optimum compressor lubrication and protection. They extend compressor life and reduce maintenance costs by fighting all of the degradative processes found in compressor applications.

### Heat Control

AMSOIL Synthetic Compressor Oils have demonstrated temperature reductions of hot running equipment using conventional lubricants by as much as 40°F. This is due to the oil's low coefficient of friction, low internal fluid friction and good thermal conductivity.

### Sludge, Varnish, Lacquer and Carbon Control

AMSOIL Compressor Oils' unique synthetic base oil technology is inherently resistant to thermal and oxidative breakdown. These oils, combined with premium antioxidants, result in oils that eliminate or greatly minimize the formation of sludge, varnish, lacquer and carbon. Also, the good solvency characteristics clean systems as well as provide keep-clean performance.

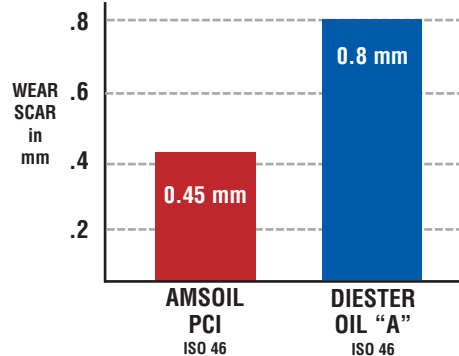


### Corrosion, Emulsion and Foam Control

AMSOIL Synthetic Compressor Oils are stable in the presence of water, and they readily separate from water. This prevents unwanted oil/water emulsions that inhibit an oil's ability to lubricate. It allows for longer lubricant life, and it means water can easily be drained from the sump. The top-quality rust preventatives offer complete and dependable protection to components in the presence of water or process contaminants. And an uninterrupted film of protection is ensured by antifoam agents that keep the fluid foam-free even in high-speed, high-pressure operations.

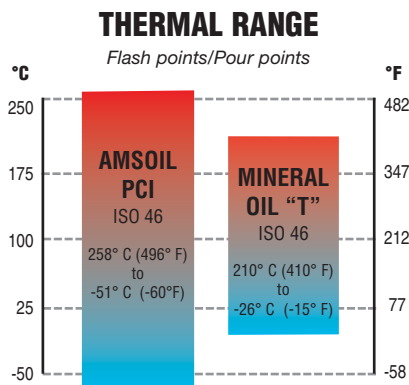
### FOUR BALL WEAR TEST

1200 rpm, 75° C, 40 kg., 1 hr



### Wear Protection

AMSOIL Compressor Oils' nondetergent additive system is the last line of defense against wear. The additive system forms a strong barrier on parts, preventing metal-to-metal contact, and as the industry standard Four-Ball Wear Test (ASTM D4172) indicates, AMSOIL Compressor Oils outperform competitive compressor oils, even other synthetics. As a result, wear decreases, maintenance decreases, component life increases and you benefit financially.



## All-Season Performance

Low pour points and good thermal stability allow AMSOIL Compressor Oils to be used in a wide temperature range. In cold temperatures, AMSOIL Compressor Oils provide easier starts and fast post start-up lubricant circulation to parts. In higher temperatures, AMSOIL Compressor Oils' film strength maintains a thick lubricating film between moving parts, ensuring complete protection all season long. These features reduce the need for seasonal fluid changes and mean an overall savings for you.

## Greater Safety

AMSOIL Synthetic Compressor Oils make your plant a safer place to work by minimizing fire and explosion hazard. AMSOIL Compressor Oils' flash, fire and auto-ignition points are higher than those of competitive petroleum fluids. Plus, their resistance to carbon deposit formation combined with the ashless additive system minimizes the incidence of ignition-promoting hot spots.

# Advantage AMSOIL: Savings



Your choice of compressor oil affects more than compressor life. It affects profitability. With AMSOIL Compressor Oils, you will increase your profitability through lower energy consumption, lower lubricant consumption and lower maintenance costs.

## Enhanced Efficiency

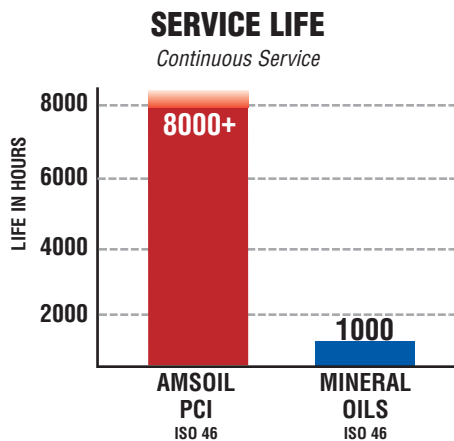
Because of AMSOIL Compressor Oils' low frictional characteristics, losses due to drag are minimized, and energy used for gas compression is maximized. Also, little or no carbon forming on valves limits the detrimental effect of recompression, which is the result of hot air continually being recompressed due to deposits not allowing the exhaust valves to completely close during the intake stroke. Increase in efficiency can result in reduced power consumption by as much as 7 to 8 percent.

## Reduced Lubricant Consumption

AMSOIL Synthetic Compressor Oils reduce fluid loss by readily separating oil from air in the separator, increasing the separator's efficiency and reducing the likelihood of oil ending up downstream. Also, their low volatility and excellent stability in the face of shearing forces and high temperatures leave more lube in the system, less lost to operations.

## Lower Maintenance Costs

AMSOIL Synthetic Compressor Oils may be used up to 8000+ hours when used with a conscientiously applied oil sampling and preventative maintenance program. Extended drain intervals cut the downtime, labor and disposal costs associated with lube changes to an eighth of that required by conventional fluids.



# AMSOIL SIROCCO™ Synthetic Compressor Oil

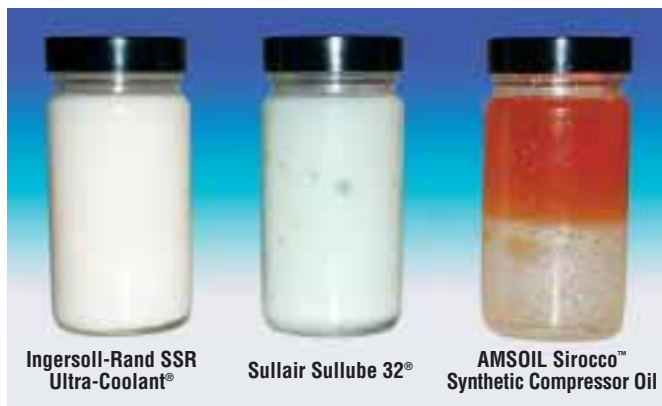


AMSOIL SIROCCO™ Synthetic Compressor Oil (SEI) is a superior quality, multi-viscosity lubricant formulated with premium synthetic ester technology. It maintains performance across a wide operating temperature range, effectively extends compressor life and reduces maintenance costs by reducing component wear and protecting against oxidation, corrosion, foam and rust.

## Cost Savings

AMSOIL SIROCCO™ Synthetic Compressor Oil provides significant savings over PAG-type fluids. In fact, SIROCCO® is priced an average of \$1,000 to \$1,500 less per drum than Ingersoll-Rand SSR Ultra-Coolant® or Sullair Sullube 32®.

AMSOIL SIROCCO™ further reduces maintenance and used product disposal costs through extended drain intervals. It may be used for up to 8,000+ hours (about one year of constant compressor operation) in most applications, and its inherent lubricity and thermal conductivity saves money by reducing energy consumption, increasing operational efficiency and lowering operating temperatures.



*The first two oils are glycol-based and have difficulty separating from water, causing them to form damaging emulsions. AMSOIL SIROCCO™ quickly separates from water, increasing compressor protection.*

## Demulsibility

When air is compressed, moisture forms inside compression chambers, building up to contamination levels and saturating the compressor oil. In order to prevent rusting, increased wear and a breakdown in lubricant film, compressor oils must readily separate from water. Test results demonstrate that AMSOIL SIROCCO™ provides superior demulsibility over competing glycol-based compressor oils, increasing compressor protection, allowing for extended lubricant life and easing water removal from the sump.

## Application Recommendations

AMSOIL SIROCCO™ Synthetic Compressor Oil is a multi-viscosity oil meeting the requirements of 5W-20. It may be used in applications calling for either an ISO-32 or ISO-46 compressor oil or coolant and is recommended for use in single and multi-stage rotary screw compressors and vacuum pumps calling for this viscosity.

## Compatibility

AMSOIL SIROCCO™ is compatible with the vast majority of compressor oils on the market and many materials commonly used in compressors. It is compatible with mineral and synthetic oils, including glycol-based compressor oils such as Sullair Sullube 32® and Ingersoll-Rand SSR Ultra-Coolant®, and requires no flushing when changing over from these lubricants. SIROCCO™ is not compatible with silicone compressor oils such as Sullair 24KT™.

Consult your AMSOIL Industrial Distributor or AMSOIL INC. for additional information on compatibility.

# AMSOIL Synthetic PC Compressor Oils



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

AMSOIL PC Compressor Oils' proprietary combination of unique synthetic base oils combines the advantages of esters and Poly Alpha Olefins (PAO's) into one balanced product. The naturally high viscosity indices, low pour points, low volatility and excellent thermal stability make the PC Series good for use in a wide operating temperature range. These oils prevent carbon buildup, provide clean performance and exhibit low frictional characteristics. These attributes increase operational efficiency and have demonstrated reduced energy consumption and operating temperatures.

AMSOIL PC Oils are recommended for use as high-quality replacements for high-priced original equipment manufacturer synthetic lubricants. Applications include vacuum pumps and single or multi-stage rotary screw, vane and reciprocating compressors. The correct viscosity grade of AMSOIL PC Oils can also be used in light duty gear and bearing applications, blowers, pumps, pneumatic tools and hydraulic or circulating systems. Consult the manufacturer for viscosity recommendations.

AMSOIL Compressor Oils are compatible with petroleum oils, most synthetic oils and almost all seals, paints and materials commonly used in compressors. Compressors lubricated with compatible fluids may be converted simply by draining the old fluid and installing AMSOIL.

### **Process Gases suitable for use with the PC Series Oils:**

Nitrogen, hydrogen, helium, carbon monoxide, carbon dioxide (dry), ethylene, ethane, methane, propane, butane, propylene, butylene, natural gas, benzene, butadiene, furnace (crack gas), hydrogen sulfide (dry), sulfur hexafluoride, synthetic gas, sulfur dioxide.

Consult your AMSOIL Industrial Distributor or AMSOIL INC. for additional information on compatibility.

*PC Series Compressor Oils are not recommended for "breathing air" or refrigeration compressors; they are also not recommended for use with poly carbonate plastic that is not metal covered, PVC plastic, butyl, ethylene-propylene and SBR rubber. Not compatible with silicon or polyglycol fluids such as Sullair 24 KT, Sullube 32 or Ingersoll-Rand SSR Ultra Coolant.*



## TYPICAL TECHNICAL PROPERTIES

Synthetic Compressor Oils	SEI ISO 32/46 SAE 5/20	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	32	46	68	100	150
VK 100°C—ASTM D-445	6.68	5.8	7.8	10.3	13.5	17.5
VK 40°C—ASTM D-445	40.22	30.8	47.2	68.2	102.3	150.0
Viscosity Index—ASTM D-2270	123	131	132	137	132	128
Specific Gravity—ASTM D-1298	0.9639	0.8473	0.8519	0.8565	0.8597	0.8670
Density—ASTM D-1298	8.027	7.055	7.093	7.132	7.158	7.219
Flash Point°C(°F)—ASTM D-92	272 (522)	264 (507)	258 (496)	262 (504)	264 (507)	256 (493)
Fire Point °C (°F)—ASTM D-92	306 (583)	276 (529)	276 (529)	278 (532)	278 (532)	276 (529)
Pour Point °C(°F)—ASTM D-97	-43 (-45)	-54 (-65)	-51 (-60)	-48 (-54)	-45 (-49)	-38 (-36)
Noak—DIN 51581	1.4%	5.6%	5.0%	5.4%	5.1%	4.0%
Four-Ball Wear Test—ASTM D-4172 (40 kg, 1200 rpm, 75°C, 60 min.)	0.50	0.45	0.45	0.45	0.40	0.40
Copper Strip Corrosion Test— ASTM D-130	1A	1A	1A	1A	1A	1A
Rust Tests—ASTM D-665A&B. Fresh water and synthetic sea water	pass	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	0/0/0
Demulsibility ASTM D-1401 [oil/water/cuff(minutes)]	40/40/0 (20)	40/40/0 (15)	40/40/0 (15)	40/40/0 (15)	40/40/0 (10)	40/40/0 (10)

### AMSOIL Synthetic Compressor Oils Application Guide

MANUFACTURER	TYPE	SEI ISO 32/46 SAE 5/20	PCH ISO 32 SAE 10	PCI ISO 46 SAE 20	PCJ ISO 68 SAE 30	PCK ISO 100 SAE 40	PCL ISO 150 SAE 50
Atlas Copco	Reciprocating				X	X	
Champion	Rotary Screw	X	X	X	X		
	Reciprocating Rotary Screw			X	X		
Chicago Pneumatic	Reciprocating	X		X	X	X	
Curtis	Rotary Screw				X		
Davey	Reciprocating					X	
Dunham-Bush	Rotary Vane						
	Rotary Screw	X		X			
Elliott	PAP Centrifugal	X	X				
Fuller	Rotary Vane						X
Gardner Denver	Reciprocating				X	X	
	Rotary Screw	X		X	X		
Ingersoll-Rand	Type 30 & 40				X	X	
	ESV & ESH					X	X
	XLE				X	X	
	XHE & PHE					X	X
	LLE					X	X
	PACAIR	X			X		
	SSR 2000				X		
CENTAC	X	X					
	AXI-H					X	
Joy	Reciprocating					X	
Kellogg-American	Rotary Screw	X		X			
	Reciprocating				X	X	
	Rotary Screw Rotary Vane	X		X			X
Leroi	Reciprocating				X	X	
Quincy	Rotary Screw	X	X	X			
	Reciprocating Rotary Screw	X		X	X	X	
Schramm	Reciprocating				X	X	
Sullair	Rotary Screw	X	X	X			
	Reciprocating				X		
Worthington	Reciprocating					X	
	Rotary Screw	X			X		

This guide provides general information to assist you in determining which AMSOIL product to use. Viscosity recommendations are based on normal operating temperatures. Consult the owners' manuals for lubricant recommendations on your specific compressor units. Contact your AMSOIL representative or AMSOIL industrial for further information.

**NOTE:** PC Series Compressor Oils are not recommended for "breathing air" or refrigeration compressors; they are also not recommended for use with poly carbonate plastic that is not metal covered, PVC plastic, butyl, ethylene-propylene and SBR rubber. Not compatible with silicon or polyglycol fluids such as Sullair 24 KT, Sullube 32 or Ingersoll-Rand SSR Ultra Coolant.



*"I was initially attracted to AMSOIL for its price. Now, I'm switching all the plant's air compressors to AMSOIL because I'm impressed with the product. AMSOIL Compressor Oil was found 'fit for ongoing service' after 8400 hours of use. Performance like that takes a top-quality product.*

*"AMSOIL gives me the best of both worlds: the top-quality performance of a synthetic and manufacturer-direct savings. That's an unbeatable combination."*

*– Don Ussery, World Color Printing*

*"I credit AMSOIL Compressor Oil with savings in five areas. By helping our compressors run*

*20 to 40° F cooler, we no longer need fans and special ventilation systems for heat reduction. With those cooler operating temperatures and the fluid's superior stability, our valves don't carbon up, so we don't have to replace them as often. Our compressors draw 10 percent less amperage with AMSOIL. Our oil consumption is way down. And we've gone from three month to 8000 hour compressor oil drain intervals. Multiply those savings times thousands of compressors and you can see why we're installing AMSOIL nationwide."*

*– John Small, Sears*

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

**AMSOIL**  
*The First in Synthetics®*