



"The First in Synthetics"®

Industrial Synthetic Lubricants

SE SERIES SYNTHETIC ESTER OILS/COOLANTS FOR ROTARY AND RECIPROCATING COMPRESSORS

(SEI) ISO-32/46 and (SEK) ISO-100

PRODUCT DESCRIPTION

AMSOIL SE Series Synthetic Ester Compressor Oils/Coolants are formulated with premium synthetic ester technology. These high quality, long life fluids last several times longer in use than mineral-based oils. AMSOIL SE Series oils/coolants are fully formulated with non-detergent additives and are designed for use in rotary screw, vane and reciprocating compressors. SE Series oils/coolants prevent wear, oxidation, foam and rust and have inherent lubricity and good thermal conductivity which allow these fluids to reduce heat and energy consumption. AMSOIL SE Series oils/coolants increase operating efficiency, reducing money spent on energy, repair and maintenance costs.

AMSOIL SE Series Synthetic Compressor Oils/Coolants maintain performance across a wide operating temperature range. The low pour points, high viscosity indices and lack of paraffins (wax) make these excellent all season lubricants. At high temperatures, SE Series oils/coolants form virtually no carbon, allowing for clean operation. At cold temperatures, equipment starts easier and the lubricant is quickly pumped to critical components, preventing lubricant starvation and excessive wear. SE Series oils/coolants also resist water to prevent damaging oil/water emulsions, allowing for longer lubricant life and ease of water removal from the sump.

PERFORMANCE FEATURES

- Resists foaming
- Rust and oxidation inhibited
- Readily separates from water
- Recommended for use in rotary screw and reciprocating compressors
- Long-life/extended drain performance.
- Compatible with polyglycol fluids such as Sullube 32® and Ingersoll-Rand SSR Ultra-coolant®
- SEI is biodegradable under the CEC-L33-A94 standard

SAFETY ADVANTAGE

AMSOIL SE Series Synthetic Ester Compressor Oils/Coolants have higher flash, fire and auto ignition points than competitive petroleum oils. Their resistance to carbon formation and the ashless additive system minimize

the incidence of deposits acting as ignition-promoting hot spots. Although AMSOIL SE Series increase fire safety, they cannot be considered non-flammable.

APPLICATION RECOMMENDATION

AMSOIL SEI 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. It is recommended for use in single and multi-stage rotary screw compressors and vacuum pumps that call for this viscosity.

When installing AMSOIL SEI, it is recommended that the old oil be thoroughly drained and if warranted, the system cleaned. If a lot of carbon or residue is found on the internal compressor parts, follow the manufacturer's recommendations for removal prior to installing the new oil. AMSOIL Synthetic Ester Compressor Oils/Coolants have a high level of solvency and may remove deposits left in the system. Check the filters and oil/air separators regularly for the first 500 hours of operation and replace as necessary.

AMSOIL SEI is compatible with and recommended as a replacement for much higher priced polyalkylene glycol (PAG) compressor oils or coolants such as Sullube 32® and Ingersoll Rand SSR Ultra Coolant®. No flushing is necessary when changing over from Glycol Coolants to AMSOIL SEI. However, draining the system and changing the filters is recommended.

AMSOIL SEI is recommended for use up to 8,000+ hours for most compressor applications. However, this is subject to operating conditions and maintenance practices.* Monitoring by oil analysis every 1,000 hours is recommended.

AMSOIL SEK is designed for use in reciprocating compressors and may be used in crankcases or in cylinders with injection or drip feeding mechanisms. Its low carbon forming tendencies keep valves clean, substantially increasing compressor efficiency and minimizing costs of downtime and maintenance.

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

TYPICAL TECHNICAL PROPERTIES

SE SERIES Synthetic Ester Oils/Coolants (SEI & SEK)

	SEI	SEK
ISO Viscosity Grade ASTM D-2422	32/46	100
Viscosity 100° C, cSt ASTM D-445	6.68	11.32
Viscosity 40° C, cSt ASTM D-445	40.22	99.08
Viscosity Index ASTM D-2270	123	100
API Gravity ASTM D-287	15.30	20.60
Specific Gravity g/ml ASTM D-1298	0.9639	0.9303
Density (lb/gal) ASTM D-1298	8.027	7.747
Flash Point, °C (°F) ASTM D-92	272 (522)	250 (482)
Fire Point, °C (°F) ASTM D-92	306 (583)	282 (540)
Pour Point, °C (°F) ASTM D-97	-43 (-45)	-40 (-40)
NOACK Volatility, %Weight Loss DIN 51581	1.40%	4.56%
4-Ball Wear Para 1 in mm ASTM D-4172	0.50	0.45
Biodegradable	YES	NO

COMPATIBILITY

AMSOIL SEI and SEK are compatible with petroleum oils, most synthetic oils*, and many seals, paints and materials commonly used in compressors. Materials recommended and not recommended for use with SEI oils/coolants are listed below. For additional information, see the AMSOIL Compatibility Guide (G-1274) or consult your AMSOIL Dealer or AMSOIL INC.

*AMSOIL SE Series is NOT RECOMMENDED as a replacement or for use with the silicone based compressor oil Sullube 24KT®. AMSOIL SE Series is NOT RECOMMENDED for use in "Breathing Air or Refrigeration" compressors.

Recommended

Seals – Viton®, High Nitrile Buna N (>36%), Teflon®
Paints – Epoxy, Oil-Resistant Alkyd, Two-Part Urethane
Plastics – Nylon, Delrin®, Celcon®, PBT

Not Recommended

Seals – Neoprene, SBR Rubber, Low Nitrile Buna N
Paints – Acrylic Paint, Lacquer
Plastics – Polystyrene, Polycarbonate Plastic, PVC, ABS

Note: Process gases suitable for use with the SE Series: 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 AVAILABILITY

AMSOIL SE Series is available in 5-gallon pails, 55-gallon drums, 275-gallon totes and bulk quantities. For 275-gallon totes, please allow two to four weeks for delivery.

Sullube 32® and Sullube 24KT® are trademarks of the Sullair Corporation. Ingersoll-Rand SSR Ultra-coolant® is a trademark of Ingersoll-Rand, Inc.

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

