



"The First in Synthetics"®

Industrial Synthetic Lubricants

PRODUCT DESCRIPTION

AMSOIL Synthetic DC Diester-Based Compressor Oils are long-life, extended-drain premium compressor lubricants, based on novel, proprietary technology. DC Series Oils significantly improve operational temperatures, hydrolytic stability, oxidative resistance, oil service life, demulsibility and wear protection.

AMSOIL DC Series Compressor Oils incorporate the highest quality shear-stable, synthetic diester fluids and are fortified with a premium non-detergent/ashless additive system for maximum protection and superior lubrication at high temperatures and pressures, where petroleum lubricants typically break down.

AMSOIL DC Series Oils are designed to eliminate deficiencies common to petroleum compressor oils—specifically, thermal and oxidative degradation (which causes carbon varnish and sludge formation), oil and water emulsions (which can lead to rust and excessive wear), lubricant degradation and weight loss (due to hydrolytic instability or high-temperature vaporization).

The performance of synthetic base fluids ensures problem-free operation with service intervals up to 10 times longer than possible with mineral oil-based lubricants, producing a tremendous cost advantage. Studies indicate that synthetic lubricants can reduce energy consumption by as much as 10 percent, while providing clean operations, extended oil drain intervals and increased uptime. This performance increases efficiency and savings on energy, repair and maintenance costs.

PERFORMANCE FEATURES

- Outstanding thermal and oxidative stability
- Excellent vane, screw and piston protection
- Excellent low-temperature performance
- Low copper activity
- Superior hydrolytic stability
- Excellent rust and corrosion prevention
- Excellent demulsibility
- Superior antiwear performance
- Excellent foam resistance
- Extremely high film strength

SYNTHETIC DC SERIES DIESTER-BASED COMPRESSOR OILS

APPLICATION RECOMMENDATION

AMSOIL DC Series Oils are recommended for use in rotary screw, vane and reciprocating compressors. Consult the manufacturer for proper viscosity recommendations.

DC Series Oils can be used in a wide range of applications, including splash lubrication, cylinder/frame lubrication and oil-flooded, drip-feed, force-feed and large-cylinder-bore (18-in. diameter) compressors. DC Series Oils typically have an 8,000+ hour drain interval. However, this is subject to operating environment and maintenance practices, and should be monitored by oil analysis.

AMSOIL DC Compressor Oils are compatible with petroleum-based lubricants. It is suggested that the compressor be thoroughly drained and cleaned, if warranted, of the old oil and the filter be changed prior to filling with the DC Series Lubricant. If an appreciable amount of carbon deposit or residue is found on the internal compressor parts, it is suggested that the residue be removed, following manufacturers recommendations, prior to installing the new oil. For the first 100 hours of operation, check the filters regularly and clean or replace as necessary.

NOTE: AMSOIL DC Series Compressor Oils are not recommended for "breathing air" or refrigeration compressors.

SAFETY ADVANTAGE

AMSOIL DC Series Compressor Oils have a dramatically higher flash point and are usually deposit-free compared to petroleum oils. This contributes to an increase in the fire safety of the product. AMSOIL DC Series Oils increase fire safety; however, they cannot be considered non-flammable.

COMPATIBILITY

Following are recommendations on the use of seals, paints and plastics with DC Series Oils. Materials not recommended are also shown. For additional information on process gases and product compatibility, consult the AMSOIL Compressor Oil Process Gas and Compatibility Guide.

TYPICAL TECHNICAL PROPERTIES

Synthetic DC Series	DCH	DCI	DCJ	DCK	DCL
Diester-Based Compressor Oils	ISO 32	ISO 46	ISO 68	ISO 100	ISO 150
ISO VG — ASTM D-2422	.32	46	68	100	150
Viscometrics 100°C, cSt — ASTM D-445	.5.99	7.99	10.13	12.05	12.90
Viscometrics 40°C, cSt — ASTM D-445	.32.97	48.18	66.45	99.41	152.47
Viscosity Index — ASTM D-2270	.129	137	137	112	70
Specific Gravity g/ml — ASTM D-1298	.0.9212	0.9200	0.9200	0.9260	0.9567
Density lbs./gal. — ASTM D-1298	.7.671	7.661	7.661	7.711	7.967
Noack Volatility, % weight loss — DIN 51581	.5.48	5.98	5.68	5.02	5.70
Four-Ball Wear Test — ASTM D-4172					
40 kg, 1200 rpm, 75°C, 1 hr., mm	.0.40	0.40	0.40	0.45	0.39
40 kg, 1800 rpm, 150°C, 1 hr., mm	.0.45	0.45	0.45	0.48	0.45
Flash Point °C (°F) — ASTM D-92	.246 (475)	252 (486)	250 (482)	248 (478)	247 (477)
Fire Point °C (°F) — ASTM D-92	.288 (550)	286 (547)	280 (536)	286 (547)	292 (558)
Pour Point °C (°F) — ASTM D-97	-.51 (-60)	-51 (-60)	-48 (-54)	-44 (-47)	-33 (-27)

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, PVC, ABS

AMSOIL PRODUCT WARRANTY

AMSOIL Industrial Lubricants are formulated to meet or exceed accepted industry specifications. 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.

AMSOIL PRODUCT AVAILABILITY

AMSOIL products are 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.

AMSOIL Industrial Lubricants are stocked in Superior, Wisconsin and in select regional distribution centers throughout the United States and Canada. AMSOIL will stock additional quantities of lubricants or special order products based on customer requests and regional demands.

AMSOIL Industrial Synthetic Lubricants and Dealership information are available from the AMSOIL Industrial Lubricants Department, 715-392-7101 (fax 715-392-7252).

