

**AEON®**

Compressor Lubricants



Experience Proven Results™

## Protect Your Investment

### Gardner Denver AEON Compressor Lubricants

It is a known fact that a compressor's lubricant is its life-blood, its basic source of strength and vitality. So why jeopardize the efficiencies and longevity of your compressor with just any "oil"?

Gardner Denver, a name synonymous with quality, performance and dependability, offers the very best in compressor lubrication technology – AEON Lubricants. AEON Lubricants are specially formulated to combat the harsh elements of compression while maximizing efficiencies and equipment longevity.

Are you experiencing any of the following?

- operating in extreme temperatures or severe air intake environments
- unusually high oil carry-over
- high compressor maintenance/preventive maintenance costs
- degradation of air system seals/seal material

Some or all of these real life situations can result in:

1. Breakdown of the lubricant and its ability to protect the compressors critical components i.e. bearings
2. Oxidation/varnishing
3. Increased energy consumption
4. Compressor failure
5. Increased make-up, condensate and used oil disposal and maintenance costs
6. Swelling or cracking of air system seals/seal material

To avoid these costly and potentially catastrophic situations, contact your local, authorized Gardner Denver distributor immediately. Let him assist you in identifying the proper AEON lubricant that fits your special needs. Also, ask him about our FREE AEON oil analysis program!



AEON Lubricants...  
simply the best protection  
of your investment.

# Reciprocating

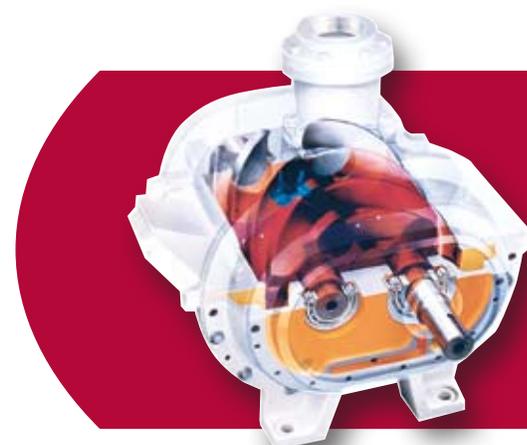
Synthetic	Food Grade	Semi-Synthetic	Petroleum
AEON AC SY	AEON AC FG	AEON 5000	AEON 500
<ul style="list-style-type: none"> <li>• Extended life, full synthetic lubricant</li> <li>• Extended valve life, as carbon buildup is virtually eliminated</li> <li>• Reduced oil carry over</li> </ul>	<ul style="list-style-type: none"> <li>• Food grade, extended life reciprocating lubricant</li> <li>• Excellent demulsibility for easy condensate separation.</li> </ul>	<ul style="list-style-type: none"> <li>• Long-life semi-synthetic lubricant</li> <li>• Minimizes carbon buildup</li> <li>• Maximizes compressor efficiency, minimizes oil carry over and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced lubricity and anti-wear properties</li> <li>• Minimizes carbon and residue buildup</li> <li>• Excellent compressor system compatibility</li> </ul>
<p>AEON AC SY is a premium grade diester lubricant which leaves virtually no carbon deposits. Excellent for use in 100% duty cycle applications.</p> <p>High viscosity index offers superior performance in both high and low temperature applications.</p> 	<p>AEON AC FG is authorized by the USDA as an H-1 approved lubricant suitable for incidental food contact.</p>	<p>AEON 5000 is a long-life, premium grade, semi-synthetic lubricant that provides extended time intervals between changes. It is recommended for use in industrial applications where ambient temperatures can be below -20°F.</p> <p>AEON 5000 reduces lubricant consumption and carry over while maintaining aftercooler cleanliness and efficiency. Valve carbon buildup is virtually eliminated, resulting in significant maintenance savings.</p>	<p>AEON 500 is a premium grade, non-detergent, petroleum lubricant. It is specifically blended and recommended for use in industrial reciprocating compressors' crankcases and cylinders.</p> <p>AEON 500's high viscosity index provides adequate lubrication over a wide operating temperature range. Rust inhibitors protect crankcase lubricated components, while oxidation inhibitors prevent oil degradation during normal service intervals.</p> <p>AEON 500's non-detergent properties and low vapor pressure leave less carbon residue on valves and internal cooler surfaces than conventional mineral oils.</p>

# Rotary Screw

## Synthetic

AEON 9000SP	AEON 9000TH	AEON 6000FG	AEON BIO
<ul style="list-style-type: none"> <li>• Superior Protection synthetic lubricant</li> <li>• Increased machine operating efficiencies</li> <li>• Formulated for excellent condensate oil/water separation</li> </ul>	<ul style="list-style-type: none"> <li>• Exceptional thermal stability</li> <li>• Completely demulsible</li> <li>• Long life at high temperature</li> </ul>	<ul style="list-style-type: none"> <li>• Food grade extended life lubricant</li> <li>• Minimizes maintenance and downtime</li> <li>• Improved lubrication at high and low temperatures</li> </ul>	<ul style="list-style-type: none"> <li>• Long life, polyolester synthetic lubricant</li> <li>• Non-hazardous, BIO-degradable, demulsible</li> <li>• Maximum operating efficiencies realized</li> </ul>
<p>AEON 9000SP is a Superior Protection PAO (polyalphaolefin)/MFSE (multi-functional synthetic ester) blend formulated with proven additive components. The result is superior thermal and oxidative stability.</p> <p>AEON 9000SP is ideal for applications which require extended operating intervals. It is formulated for demulsibility and optimum viscosity over the compressors entire operating temperature range.</p> <p>Lab life and multiple field applications have proven AEON 9000SP to provide superior service life, while minimizing oil carry over and unit maintenanc</p>	<p>AEON 9000TH is a polyalophaolefin (PAO)/MFSE synthetic ester custom blend formulation for proven performance.</p> <p>AEON 9000TH is an extended life lubricant for rotary screw compressors with oil injection operating under harsh service conditions with high compressor temperatures. It is ideal for rotary screw air compressor applications where oil is exposed to high operating temperatures needed to prevent condensation in high humidity applications. This lubricant may not be appropriate in applications with low ambient temperatures.</p>	<p>AEON 6000 Food Grade is a PAO (polyaphaolefin) blend, authorized by the USDA as an H-1 approved lubricant for use in federally inspected meat and poultry plants. It complies with FDA 21CFR 178.3570—lubricants for incidental food contact.</p> <p>AEON 6000 Food Grade is an extended life lubricant formulated to reduce maintenance intervals and extend compressor life.</p>	<p>AEON BIO is a custom blended polyolester (POE), long life synthetic lubricant, readily bio-degradable according to CEC Test L-33-T-82.</p> <p>AEON BIO is especially advantageous in applications where it is exposed to elevated temperatures for extended periods of time. AEON BIO resists forming sludge and varnish even under these extreme conditions.</p> <p>AEON BIO is formulated to be recyclable with standard mineral oil recycling systems and technology. Also, none of the ingredients are found on OSHA's list (29CFR 1910.1200) of hazardous materials.</p>

Semi-Synthetic		Petroleum
AEON 4000	AEON 2000	AEON 800
<ul style="list-style-type: none"> <li>• Extended life lubricant; demulsible formulation</li> <li>• Minimizes maintenance and downtime</li> <li>• Characteristics of a synthetic in a petroleum blend</li> </ul>	<ul style="list-style-type: none"> <li>• Hydrocarbon based, semi-synthetic lubricant</li> <li>• Excellent demulsibility</li> <li>• Maximizes compressor efficiency while minimizing oil carry over</li> </ul>	<ul style="list-style-type: none"> <li>• Formulated specifically for rotary screw compressors</li> <li>• Reliable</li> <li>• Economical</li> </ul>
<p>AEON 4000 is a semi-synthetic, severely hydrotreated lubricant formulated with a unique patented anti-oxidant package. It offers outstanding thermal and oxidation stability, while minimizing varnish formation. Life tests indicate a service interval up to three times longer than that of comparable petroleum based lubricants, depending on individual compressor characteristics and ambient conditions.</p>	<p>AEON 2000 is a blend of highly purified hydrocarbon base stocks and specially blended additives which provide economical operating and service life in rotary screw compressor systems.</p> <p>AEON 2000 offers superior oxidation stability, viscosity control, condensate demulsibility and low foaming tendencies.</p> <p>This semi-synthetic fluid is an excellent alternative to automotive lubricants, industrial hydraulic and turbine oils.</p>	<p>AEON 800 is formulated from special high quality base oils combined with viscosity index improvers, antioxidants, anti-wear agents, detergents and defoamants.</p> <p>Its high viscosity index and low pour point ensure good oil flow during cold starting while maintaining food lubrication under high ambient conditions.</p>



# Leading Innovation in Compressed Air Treatment

## AEON lubrication selection chart

	Lubricants	Compressor Type	Suggested Maximum Service Interval*
Petroleum Based	AEON 500	Reciprocating	Consult individual compressor service manual
	AEON 5000	Reciprocating	Consult individual compressor service manual
	AEON 800	Rotary screw	2000 hours
	AEON 2000	Rotary screw	2000 hours
	AEON 4000	Rotary screw	4000 hours
Synthetic	AEON AC SY	Reciprocating	4000 hours
	AEON AC FG	Reciprocating	4000 hours
	AEON 6000FG	Rotary Screw	4000 hours
	AEON BIO	Rotary screw	8000 hours
	AEON 9000SP	Rotary screw	8000 hours
	AEON 9000TH	Rotary screw	8000 hours

\*Registered trademark of E.I. DUPONT de Nemours. \*\*Registered trademark of Celanese Corp.

\*Recommended service interval recommendation for 1) clean ambient conditions, 2) filter and separator changes as required in compressor service and operating manual, and 3) "normal" compressor temperature conditions. NOTE: Laboratory analysis of compressor fluids should be used to determine lubricant service life.

Synthetic Lubricant Compatibility – AEON Lubricants are formulated to be compatible with materials found in air compressor systems. These compatible materials include: Viton®, High Nitrile Buna N, Teflon®, epoxy paint, oil resistant alkyd, nylon Delrin®\* and Celcor®\*\*.

Exceptions: AEON 9000SP is NOT compatible with PVC. AEON BIO is NOT compatible with Low Nitrile Buna, acrylic paint, polystyrene, PVC or ABS. AEON 5000 is NOT compatible with those materials listed and neoprene, SBR rubber or lacquer. AEON 2000, AEON 4000, AEON 6000FG and AEON 9000SP are NOT compatible with SBR rubber.

AEON Lubricants do not contain PCB's.

AEON products, assessed in accordance with OSHA 29 CFR 1910.1200, are determined not to be hazardous. Unused products are not specifically listed by the EPA as hazardous waste (40 DTR, Part 261D). However, used products may be regulated.

Material Safety Data (msds) and Material Compatibility Sheets are available from your authorized Gardner Denver Distributor.

## Typical Properties/Characteristics of AEON Compressor Lubricants

	Properties/Viscosity	AEON 500	AEON 5000	AEON AC FG	AEON AC SY
Reciprocating	@ 40°C, cSt	100.9	67	94	96.4
	@ 100°C, cSt	11.2	8.3	13.9	9.3
	@ 100°F, SUS	527	348	485	512.3
	@ 210°F, SUS	65	48.5	75	57.7
	Pour Point F/C	0 (-18)	0 (-18)	-60 (-51)	-20 (-28.9)
	Flash Point F/C	500 (260)	457 (236)	530 (277)	515 (268)
	Demulsibility*	43/37/0 – 15 min.	42/38/0 – 15 min.		

	Properties/Viscosity	AEON 800	AEON 2000	AEON 4000	AEON 6000FG	AEON 9000SP	AEON BIO	AEON 9000TH
Rotary Screw	@ 40°C, cSt	36.7	35.2	46.6	46.9	49.01	49.57	66.9
	@ 100°C, cSt	7.6	5.7	7	7.9	7.83	7.45	9.43
	@ 100°F, SUS	187.1	182.7	242	241.2	252.8	256.8	346.9
	@ 210°F, SUS	51.6	45	49.7	52.7	52.5	51.2	58.1
	Pour Point F/C	n/a	(-38.2) -39	-27 (-33)	-44 (-42)	-65 (-54)	-40 (-40)	-43 (-42)
	Flash Point F/C	400 (204)	(419) 215	475 (246)	475 (246)	500 (260)	550 (288)	485 (252)
	Demulsibility*		42/38/0 < 5 min	41/39/0 < 5 min	< 1 min	< 1 min	< 2 min	< 1 min

\*Demulsibility ratings based on test standard ASTM D1401.

## Convenient Package Sizes

A national network of factory trained Gardner Denver distributors is ready to assist you with AEON lubricants for all your compressor needs—and with Genuine Parts for your Gardner Denver and Joy compressors.

AEON lubricants...designed for maximum reliability in air compressor equipment.

- Factory Recommended
- Factory Tested
- Factory Approved

See your authorized Gardner Denver Distributor for a NEW Level of Equipment and Parts Integrity, Quality and Service.

Rotary Screw Compressor Lubricants	Package Size	Part Number
<b>AEON 9000SP</b> Polyalphaolefin (PAO) based synthetic premium extended life lubricant	5 Gal.	28H109
	55 Gal.	28H110
<b>AEON BIO</b> Polyolester based, bio-degradable extended life synthetic	5 Gal.	28H102
	55 Gal.	28H103
<b>AEON 6000FG</b> Polyalphaolefin (PAO) based H-1 Food Grade, extended life synthetic lubricant. Authorized by USDA for incidental contact with food	5 Gal.	28H39
	55 Gal.	28H35
<b>AEON 4000</b> Hydrocarbon based semi-synthetic extended life lubricant	5 Gal.	28H57
	55 Gal.	28H36
<b>AEON 2000</b> Hydrocarbon based semi-synthetic rotary screw lubricant	5 Gal.	28G36
	55 Gal.	28G37
<b>AEON 800</b> Petroleum based lubricant formulated specifically for use in rotary screw compressors	5 Gal.	28G7
	55 Gal.	28G8
<b>AEON 9000TH</b> Synthetic ester blend with a polyalphaolefin (PAO)	5 Gal.	28H286
	55 Gal.	28H270

Reciprocating Compressor Lubricants	Package Size	Part Number
<b>AEON AC SY</b> Diester based extended life synthetic lubricant	12 – 1 Qt. Case	28H216
	5 Gal.	28H214
<b>AEON AC FG</b> Polyalphaolefin (PAO) based H-1 Food Grade, extended life synthetic lubricant. Authorized by USDA for incidental contact with food	12 – 1 Qt. Case	28H219
	5 Gal.	28H217
<b>AEON 5000</b> Diester blended long life semi-synthetic lubricant	5 Gal.	28G14
	55 Gal.	28G15
<b>AEON 500</b> Petroleum based, lubricant formulated specifically for use in reciprocating compressors	six – 1 Gal.	28G22
	5 Gal.	28G19
	55 Gal.	28G13

## Other Innovative Products



### FIL Series High Efficiency Filters

A full range of filters 20–21,250 cfm; coalescing, particulate, and activated carbon for the removal of water, oil, and particulates from compressed air.



### DS2 Series Evacuator Drain Valves

A full family of zero air loss, energy efficient demand drains. Ruggedly designed to effectively and reliably prevent moisture damage to dryers, air tools, gauges, and other critical components.



### RNC Series Refrigerated Dryers

A full line of high quality refrigerated dryers with features and benefits unmatched by the competition. Designed to produce dew points as low as 38°F in compressed air.



### DGH Series Desiccant Dryers

A complete line of desiccant dryers for the removal of water vapor in compressed air to dew points as low as -100°F.

# Gardner Denver®

[www.GardnerDenverProducts.com](http://www.GardnerDenverProducts.com) [maggie@gardnerdenver.com](mailto:maggie@gardnerdenver.com)

Gardner Denver Compressor Division  
1800 Gardner Expressway, Quincy, IL 62305

Customer Service Department  
Telephone: (800) 682-9868 FAX: (217) 224-7814



Member



©2008 Gardner Denver, Inc. Litho in U.S.A. GA-AEON-FAM 1st Ed. 12/08