



Synthetic SG Series Extreme Pressure Gear Oil

Industrial Synthetic Lubricant

AMSOIL SG Series Extreme Pressure Gear Oil is made from shear-stable, high-quality synthetic base oils and fortified with additives that deliver high performance in industrial gear applications. It is designed to reduce maintenance costs by extending equipment life, extending drain intervals, and protecting against wear, pitting and rust.

Base Stock Technology

AMSOIL SG Oil is compatible with mineral gear oils, synthetic gear oils*, and seals, making it easy to use. It preserves new seals, prevents leaks and helps rejuvenate old, brittle seals.

AMSOIL SG Oil's synthetic base stocks are inherently resistant to oxidation, helping provide long life. Its naturally high viscosity index, low pour point and lack of paraffins (wax) make it ideal for use in wide operating temperature ranges. At low operating temperatures, equipment starts easier, is not starved of lubrication from channeling and product solidification and the need for sump heaters is reduced. At higher operating temperatures, AMSOIL SG Oil's base stocks resist the degradative effects of oxidation that cause poor lubricant performance, and it maintains an optimal lubricating film between parts.

The base oils are also hydrolytically stable and readily separate from water. This prevents unwanted oil/water emulsions that have poor lubricating properties and eases water removal from the sump.

Additive Performance

AMSOIL SG Oil is fully formulated with sulphur/phosphorous extreme-pressure additives, antioxidants, rust inhibitors and anti-foam agents. The thermally stable, extreme-pressure additive system forms a hard, iron-sulfide coating on metal components. This iron-sulfide coating prevents metal-to-metal contact under boundary lubrication conditions, reduces friction and protects components against shock loading and wear. The antioxidants increase the oxidation resistance of the synthetic base oils for long, clean lubricant performance. AMSOIL SG Oil protects against rust from water or process contaminants and prevents foaming, ensuring proper lubrication.

Performance Features

- Extreme-pressure protection
- Additized to prevent rust, oxidation and foam
- Compatible with seals and other lubricants
- Extended drain intervals and all-season performance
- Hydrolytically stable and readily separates from water

Applications & Requirements

- U.S. Steel 224 • AGMA 250.04
- AGMA 9005-E02 • DIN 51517 Part 3
- Cincinnati Milacron P-35, P-59, P-63, P-74, P-76, P-77 and P-78
- David Brown S1.53.101

Application Recommendation

AMSOIL SG Series Extreme Pressure Gear Oil is recommended for industrial applications operating under heavy loads and shock-loading conditions and specifying an extreme-pressure lubricant. This includes, but is not limited to, enclosed industrial spur, bevel, herringbone, helical and worm gears**, chain drives, sprockets and most metal-on-metal systems requiring extreme-pressure additives. It is excellent for use in severe operating conditions and its synthetic properties make it a good all-season lubricant.

SG Series Gear Oil meets the AGMA ratings for synthetic gear oils and EP gear oils and is recommended for use in applications specifying these standards. Although AMSOIL SG Series Oil is compatible with mineral oil-based lubricants, for optimum performance it is recommended that the system be thoroughly drained and, if warranted, cleaned.

The ability of AMSOIL SG Series Gear Oil to extend drain intervals is subject to operating conditions and maintenance practices. Monitoring by oil analysis is recommended.

NOTES:

*AMSOIL SG Series Gear Oil, as well as other synthetic or mineral-based oils, is not compatible with polyglycol-type gear oils. Thorough flushing prior to changeover is required.

**AMSOIL SG Series Gear Oil is not recommended for use in worm gear applications or applications containing yellow metal and operating at or above 200°F (93°C). Also not recommended for use in other applications operating at or above 250°F (171°C). For such applications, please consult your AMSOIL Dealer or AMSOIL INC.

AMSOIL SG Series Gear Oil is not recommended for automotive hypoid gear applications.

TYPICAL TECHNICAL PROPERTIES
AMSOIL SG Series Extreme Pressure Gear Oil

	ISO 100 (SGK)	ISO 150 (SGL)	ISO 220 (SGM)	ISO 320 (SGN)	ISO 460 (SGO)	ISO 680 (SGP)
AGMA EP Gear.....	3 EP	4 EP	5 EP	6 EP	7 EP	8 EP
Kinematic Viscosity @ 100°C, cSt (ASTM D-445).....	14.3	19.7	26.2	34.1	44.9	58.6
Kinematic Viscosity @ 40°C, cSt (ASTM D-445).....	101.6	154.9	226.5	326.9	470.7	686.7
Viscosity Index (ASTM D-2270).....	144	146	147	148	150	150
Specific Gravity (ASTM D-1298)	0.8580	0.8607	0.8649	0.8692	0.8702	0.8751
Density (ASTM D-1298).....	7.128	7.167	7.202	7.238	7.246	7.287
Flash Point °C (°F) (ASTM D-92)	246 (475)	246 (475)	254 (489)	248 (478)	252 (486)	244 (471)
Fire Point °C (°F) (ASTM D-92)	268 (514)	268 (514)	272 (522)	274 (525)	268 (514)	282 (540)
Pour Point °C (°F) (ASTM D-97).....	-43 (-45)	-40 (-40)	-38 (-36)	-36 (-33)	-31 (-24)	-30 (-22)
NOACK Volatility, % weight loss (g/100g) (ASTM D-5800).....	5.4	4.4	4.5	4.4	3.5	3.9
Copper Strip Corrosion Test 121°C, 3 hrs. (ASTM D-130).....	1B	1B	1B	1B	1B	1B
Foam (ASTM D-892, Sequence I, II & III).....	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0
Four-Ball Wear Test (ASTM D-4172 @40 kgf, 1200 rpm, 75°C, 1 hr) scar, mm	0.40	0.40	0.40	0.40	0.40	0.40
Four-Ball Weld Point, kgf (ASTM D-2783).....	400	400	400	400	400	400
Four-Ball Load Wear Index, kgf (ASTM D-2783).....	60	60	60	60	60	60
Falex Procedure B (ASTM D-3233) (failure load, lbf)	2000	2000	2000	2000	2000	2000
Timken OK Load, lbf (ASTM D-2782).....	80	80	80	80	80	80

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 five-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.



Contact your AMSOIL Dealer for more information on AMSOIL products or to place an order. You may also order direct by calling AMSOIL INC. at 1-800-956-5695 and providing the referral number listed here. ▼

Referral # _____