



"The First in Synthetics"®

**For Superior Lubrication
in Automotive, Marine and
Industrial Applications**

PRODUCT DESCRIPTION

AMSOIL Synthetic Gear Lubes are extreme pressure lubricants engineered specifically to meet the high temperature/high load demands of today's geared equipment. AMSOIL Synthetic Gear Lubes, unlike conventional lubricants, don't break down in extreme heat and form damaging deposits, varnish and sludge. AMSOIL Synthetic Gear Lubes maintain their protective capability even in thermally stressed conditions, preventing the ridging, rippling and spalling caused by surface distress. In addition, the superior lubricity of AMSOIL Synthetic Gear Lubes improves fuel economy and provides limited slip capability.

Resist Oxidation and Thermal Breakdown

AMSOIL Synthetic Gear Lubes resist the damaging effects of heat and oxidation at temperatures much higher than conventional gear lubes can resist. AMSOIL Synthetic Gear Lubes inhibit the formation of acids and will not thicken or develop sludge, even under severe operating temperatures such as those encountered in heavy hauling and fleet operation.

Reduce Friction

AMSOIL Synthetic Gear Lubes have an extremely low coefficient of friction due to their synthetic construction. With reduced friction, excessive operating temperatures in transmissions and differentials are reduced by 20°F to 50°F. By controlling friction, AMSOIL Synthetic Gear Lubes reduce component wear, resist thermal degradation and improve fuel economy up to five percent.

Provide Low Temperature Protection

AMSOIL Synthetic Gear Lubes remain fluid at extremely low temperatures to provide instant lubrication to components during start-up. In low temperatures, conventional gear lubricants thicken to make shifting difficult. At temperatures of 0°F (-18°C), it can take as long as 18 minutes for gear lube to flow and lubricate the front pinion bearing of a differential. AMSOIL 75W-90 only takes 45 seconds

SYNTHETIC GEAR LUBES SAE 75W-90, 80W-90 AND 85W-140

APPROPRIATE VISCOSITIES MEET OR EXCEED
THE FOLLOWING SPECIFICATIONS:

- API MT-1 • AUTO SPEC API GL-4 and GL-5
- MIL PRF-2105E • MACK GO-J, GO-J PLUS
- GM 12346190 • FORD M2C197-A, M2C201A
- ROCKWELL 0-76-E, 0-76-L • CHRYSLER MS-8985, MS-9070 • EATON/FULLER PS-037A, PS-109

to 2 minutes. AMSOIL Synthetic Gear Lubes resist low temperature thickening to provide superior component protection, smoother shifting and increased fuel economy.

Protect Against Rust and Corrosion

Moisture penetration can cause the rusting of gears and bearings. AMSOIL Synthetic Gear Lubes coat components with a durable, protective film to prevent the formation of harmful rust or corrosion.

High Load Carrying Capacity

AMSOIL Synthetic Gear Lubes have excellent load carrying capabilities to protect gear surfaces in high load and speed conditions. They maintain their viscosity when exposed to the extreme shearing forces of hypoid differentials. AMSOIL Synthetic Gear Lubes provide an extra margin of protection that effectively increases gear life.

Provide Seal Compatibility

AMSOIL Synthetic Gear Lubes increase seal life and reduce oil leakage. They are compatible with the elastomer materials used to make seals and will not cause excessive swelling, shrinkage or hardening.

Protect Against Surface Distress

AMSOIL Synthetic Gear Lubes are thermally durable to protect gears against surface distress in extreme pressure conditions. They provide a tough lubricating film that resists the wear, pitting and spalling caused by surface distress. With their superior film protection, AMSOIL Synthetic Gear Lubes maintain their extreme pressure additives to increase component life.

Inhibit Foaming

AMSOIL Synthetic Gear Lubes contain special anti-foam additives to allow the release of air bubbles in the gear box. When foaming is controlled, lubricant circulation and load-carrying ability are improved.

TYPICAL TECHNICAL PROPERTIES

AMSOIL Synthetic Gear Lubes

	AGR SAE 75W-90 (GL-2 thru GL-5)	AGL SAE 80W-90 (GL-2 thru GL-5)	AGT, ALU SAE 80W-90 (GL-4)	AGO SAE 85W-140 (GL-2 thru GL-5)
Kinematic Viscosity @ 100°C, cSt (ASTM D-445)	15.3	15.3	14.9	27.8
Kinematic Viscosity @ 40°C, cSt (ASTM D-445)	112.7	141.2	129.0	329.0
Flash Point, °C (°F) (ASTM D-92).....	206 (403)	208 (407)	224 (435)	210 (410)
Pour Point, °C (°F) (ASTM D-97)	-45 (-49)	-36 (-33)	-36 (-33)	-25 (-13)
Four-Ball Wear Test (ASTM D-4172B: 40 kg, 75°C, 1,200 rpm, 1 hr) Scar diameter, mm ...	0.40	0.38	0.38	0.35

SERVICE LIFE

With their chemically advanced formulation, AMSOIL Synthetic Gear Lubes last longer than conventional petroleum gear lubes. In non-commercial passenger vehicles under normal conditions, AMSOIL Synthetic Gear Lubes do not have to be drained. In situations where severe water and/or dirt contamination occurs, a chemical lube analysis can determine if the gear lube is still serviceable. Also, AMSOIL Synthetic Gear Lubes can be recycled along with used motor oil.

APPLICATION

AMSOIL 75W-90, 80W-90 and 85W-140 Gear Lubes exceed the lubrication and performance requirements for gear boxes where API MT-1, GL-4 or GL-5 lubricants are specified. AMSOIL Synthetic Gear Lubes provide limited slip performance. Although generally not necessary, manufacturers' limited slip additives may be used in conjunction with AMSOIL Synthetic Gear Lube.

After changing a vehicle's limited slip lubricant, drive the vehicle in a tight "figure 8" pattern (lock to lock turns) for a minimum of eight repetitions.

AMSOIL 80W-90 GL-4 Gear Lube is recommended for marine outboard and stern drive lower unit gears and bearings. It is also recommended where the manufacturer specifies GL-4 performance. AMSOIL 80W-90 GL-4 Gear Lube is not recommended as a replacement for API GL-5 products.

NEW VEHICLES UNDER WARRANTY

The use of AMSOIL Synthetic Gear Lubes will not void vehicle warranties. New vehicle warranties are based upon the use of lubricants meeting specific service classifications. All AMSOIL Lubricants meet the current service requirements (as labeled) and thus are recommended for use in any vehicle without affecting the validity of the new vehicle warranty.

AMSOIL PRODUCT WARRANTY

AMSOIL INC. warrants that the use of its products will not cause mechanical damage to any mechanically sound equipment when AMSOIL INC. products are used in full compliance with the company's recommendations.

AMSOIL products and Dealership information are available from your local AMSOIL Dealer.

