



*The First in Synthetics®*

## SYNTHETIC LUBRICANTS

### REGULAR AND SPRAY GREASE

#### LITHIUM COMPLEX • EXTREME PRESSURE

### PRODUCT DESCRIPTION

AMSOIL GL Series multi-purpose, EP greases are qualified against the highest grease standards\*, NLGI GC (wheel bearing) and LB (chassis), and are designed for multiple use applications. These greases are composed of synthetic base oils and lithium complex thickeners that provide the film strength, shear resistance and mechanical stability required for good grease lubrication. This combination excels in high and low operating temperature ranges by providing excellent oxidation stability, high temperature dropping points, good low temperature torque values and good low temperature pumping capabilities. The GL Greases are compounded with an effective oil soluble extreme-pressure additive for heavy loads, plus oxidation and corrosion inhibitors that impart good oxidation stability and rust protection.

AMSOIL's top performing lithium complex thickener system provides excellent adhesion properties and water resistance as identified by ASTM D-1264 water washout test. \*This resistance to water means a protective film of lubricant remains present to protect equipment against wear while the corrosion inhibitors prevent rust. AMSOIL GL Greases adhere to metal in all types of environments and they resist squeeze out during operation. These qualities ensure maximum lubricant protection during harsh operations.

AMSOIL GL multi-purpose greases are recommended for many different applications. Its diversity simplifies lubricant inventories and prevents greasing errors while providing problem-free operation. AMSOIL GL Greases reduce repair and maintenance costs.

### PERFORMANCE FEATURES

- High dropping point of 500°F+ (#1 and #2)
- Resists thermal and oxidation degradation (lasts longer than conventional grease)
- Excellent water-washout resistance
- Good low temperature pumpability and torque values
- Adhesive and shear stable to prevent squeeze out

\* Applicable only to NLGI Consistency Grades #1 and #2

# SYNTHETIC GL SERIES MULTI-PURPOSE EP GREASE

- NLGI #0, #1 and #2

### APPLICATIONS OR REQUIREMENTS

- GLB (#1) & GLC (#2) ASTM D-4950 (NLGI) Service GC/LB
- GLB (#1) Cincinnati Millicron P-72 Spec.
- GLC (#2) Cincinnati Millicron P-64 Spec.
  - GLC (#2) Mack MG-C

### APPLICATION RECOMMENDATION

AMSOIL GL Greases grades #0, #1 and #2, are recommended for use in manual or automatic lubricating systems. NLGI #0 (GLA) and #1 (GLB) have better mobility and are the preferred choice for colder applications, for automatic lubrication systems with long pumping runs, and for gear box applications (where recommended by manufacturer). NLGI #2 (GLC) is the preferred choice for medium to high ambient temperatures, sleeve type bushings, high shock loading environments, wet environments, and is the primary choice for wheel bearings and other automotive applications.

The correct consistency grade of AMSOIL GL multi-purpose greases are recommended for use in heavy and light duty applications found in manufacturing plants, automotive applications, agricultural equipment and construction equipment. These include, but are not limited to, roller bearings, plain bearings, thrust bearings, gears, electric motors, presses, winches, bushings, wheel bearings, chassis lubrication, universal joints, ball joints, tie-rod ends, and steering knuckles. AMSOIL GL greases are suitable for use up to 325° F. When operating at elevated temperatures, frequent regreasing may be required.

AMSOIL GL Lithium Complex Greases are compatible with many other types of greases. However, it is recommended that when changing greases, the equipment be cleaned of the old grease when possible or flushed with a liberal amount of the GL grease while the mechanism is in operation. Closely monitor the system for any inconsistencies. Grease compatibility questions should be referred to your AMSOIL representative or AMSOIL Inc.

## TYPICAL TECHNICAL PROPERTIES

### Synthetic GL Series Grease

	GLA	GLB	GLC	NLGI GC/LB
Thickener	lithium complex	lithium complex	lithium complex	NR
Fortified with moly compound	no	no	no	NR
<b>NLGI consistency grade</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>NR</b>
NLGI performance grade	NA	GC-LB	GC-LB	NR
Penetration - ASTM D 217 (25°C [77°F], 0.1 mm) worked 60 strokes	355-385	310-340	265-295	220-340 min
Dropping point, °F[°C] - ASTM D2265	430[221]	500[260]	550[288]	428[220] min
High temperature life, hours - ASTM D 3527	120	140	160	80 min
Oxidation stability, psi - ASTM D 942 (100 hr/300 hr)	1/5	0/5	0/3	NR
Water washout, percent - ASTM D 1264	16.7	5.8	1.6	15 max
Rust and corrosion - ASTM D 1743	pass	pass	pass	pass
Oil separation, percent loss - ASTM D 1742 (24 hours, 25° C [77°F])	5.2	3.4	1.1	6.0 max
Leakage, g lost - ASTM D 4290	NA	7.8	1.0	10 max
Four ball wear test, mm scar - ASTM D 2266	0.45	0.43	0.40	0.60 max
Fretting wear, mg - ASTM D 4170	NA	3.5	3.4	10 max
Four ball EP, kgf - ASTM D 2596				
Weld point	315	315	400	200 min
Load wear index	47	49	50	30 min
Timken OK load test, lbs - ASTM D 2509	45	45	50	NR
Low temperature torque, N•m - ASTM D 4693 (-40° C [-40° F])	0.46	0.50	1.3	15.5 max
LT-37 pumpability, g/min (60° F/0° F [16°C/-18°C])	1475/73	855/29	360/7	NR
Copper corrosion - ASTM D 4048	1B	1B	1B	NR
Disc brake wheel bearing specifications				
Ford ESA-M1C 198-A	NA	NA	yes	NR
Chrysler MS-3701	NA	NA	yes	NR
Oil viscosity				
40° C [104°F], cSt	151	151	151	NR
100°C [212°F], cSt	19.2	19.2	19.2	NR
Flash point, °F[°C] - ASTM 92	450[232]	450[232]	450[232]	NR
Color	red	red	red	NR
Texture	smooth	smooth	smooth	NR

NA: Not applicable

NR: Not required for NLGI GC-LB labeling

### APPLICATION MAINTENANCE

Maintaining a clean work environment is important when equipment greasing is performed. Wipe grease fittings clean prior to injecting grease to prevent contaminant ingestion. Maintain bearing housings one-third to one-half full of grease. Do not over-grease, as excessive heat buildup can result. Supplement standard grease maintenance by periodically cleaning and packing housings with fresh grease on an established maintenance schedule.

### AMSOIL PRODUCT AVAILABILITY

AMSOIL GL Series Greases are available in 14-oz. cartridges, 16-oz. tubs, 35-lb. lugs, 120-lb. kegs and 400-lb. drums. Spray Grease available in 10½-fl. oz. cans.

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

