



*"The First in Synthetics"®*

## Synthetic Lubricants

**Lithium Complex • Moly Fortified**

### PRODUCT DESCRIPTION

AMSOIL GH Series Extreme Pressure greases are qualified against the highest grease standard, NLGI GC (wheel bearing) and LB (chassis), and are designed for heavy duty applications. These greases are composed of synthetic base oils and lithium-complex thickeners that provide the film strength, shear resistance, and mechanical stability critical to high load protection. 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 GH Greases are compounded with oxidation and corrosion inhibitors, effective oil soluble EP additives and molybdenum disulfide (moly) solid EP additives for all around protection in severe conditions.

The presence of moly provides an extra measure of protection in shock loading situations common in both construction and agricultural use. During heavy shock loading, the lubricant film between metal surfaces can be temporarily ruptured, but moly remains intact to prevent metal to metal contact which could cause equipment damage. Moly also assists in dirty environments or when proper re-greasing intervals are not followed.

AMSOIL's top performing lithium complex thickener system provides excellent water resistance as identified by the ASTM D-1264 water washout test. Therefore, even in wet conditions a lubricant film remains present to protect equipment against wear while the corrosion inhibitors prevent rust. AMSOIL GH greases adhere to metal and are shear stable during severe mechanical activity. These features mean the grease does not thin during operation, but rather it maintains its consistency and stays in place to provide good lubrication.

### PERFORMANCE FEATURES

- Moly Fortified for added EP protection
- Adhesive and Shear Stable — prevents squeeze out
- High dropping point (exceeds 500°F)
- Excellent water-washout resistance
- Oxidation and corrosion inhibited

# SYNTHETIC GH SERIES HEAVY DUTY EP GREASE

- NLGI #1 and #2

### APPLICATIONS OR REQUIREMENTS

- GHB (#1) & GHD (#2) ASTM D-4950 (NLGI) Service GC/LB
- GHB (#1) Cincinnati Milicron P-72 Spec.
- GHD (#2) Cincinnati Milicron P-62 Spec.
  - GHD (#2) Mack MG-C

### APPLICATION RECOMMENDATION

AMSOIL GH Greases in grades #1 and #2 are recommended for use in manual or automatic lubricating systems. NLGI #1 (GHB) grease has better mobility and is 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 (GHD) is the preferred choice for medium to high ambient temperatures, sleeve type bushings, high shock loading environments, high water environments, and is the primary choice for automotive applications.

The correct consistency grade of AMSOIL GH EP Moly 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, gears, bushings, thrust bearings, wheel bearings, chassis lubrication, universal joints, ball joints, tie-rod ends, steering knuckles, and heavily loaded pivot pins on mining and off road equipment such as power shovels, draglines, wheel and back hoe loaders, excavators and bulldozers. AMSOIL GH greases are suitable for use up to 325° F. When operating at elevated temperatures, frequent regreasing may be required.

AMSOIL GH Lithium Complex Greases are compatible with many other types of grease. 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. Any grease compatibility questions should be referred to your AMSOIL representative or AMSOIL INC.

## TYPICAL TECHNICAL PROPERTIES

### Synthetic GH Series Grease

	<b>GHB</b>	<b>GHD</b>	<b>NLGI GC/LB</b>
Thickener	lithium complex	lithium complex	NR
<b>Fortified with moly compound</b>	<b>yes</b>	<b>yes</b>	<b>NR</b>
<b>NLGI consistency grade</b>	<b>1</b>	<b>2</b>	<b>NR</b>
NLGI performance grade	GC-LB	GC-LB	NR
Penetration - ASTM D 217 (25°C [77°F], 0.1 mm) worked 60 strokes	310-340	265-295	220-340 min
Dropping point, °F[°C] - ASTM D2265	500[260]	550[288]	428[220] min
High temperature life, hours - ASTM D 3527	140	160	80 min
Oxidation stability, psi - ASTM D 942 (100 hr/300 hr)	0/5 max	0/3 max	NR
Water washout, percent - ASTM D 1264	6.0	1.8	15 max
Rust and corrosion - ASTM D 1743	pass	pass	pass
Oil separation, percent loss - ASTM D 1742 (24 hours, 25° C [77°F])	3.3	1.1	6.0 max
Leakage, g lost - ASTM D 4290	6.0	1.0	10 max
Four ball wear test, mm scar - ASTM D 2266	0.40	0.40	0.60 max
Fretting wear, mg - ASTM D 4170	3.5	3.4	10 max
Four ball EP, kgf - ASTM D 2596			
Weld point	400	400	200 min
Load wear index	65	68	30 min
Timken OK load test, lbs - ASTM D 2509	70	70	NR
Low temperature torque, N•m - ASTM D 4693 (-40° C [-40° F])	0.50	1.3	15.5 max
LT-37 pumpability, g/min (60° F/0° F [16°C/-18°C])	840/26	350/9	NR
Copper corrosion - ASTM D 4048	1B	1B	NR
Disc brake wheel bearing specifications			
Ford ESA-M1C 198-A	NA	yes	NR
Chrysler MS-3701	NA	yes	NR
Oil viscosity			
40° C [104° F], cSt	151	151	NR
100° C [212° F], cSt	19.2	19.2	NR
Flash point, °F[°C] - ASTM 92	470[243]	470[243]	NR
Color	purple/black	purple/black	NR
Texture	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 GH Series Greases are available in 14-oz. cartridges, 16-oz. tubs (GHD only), 35-lb. pails, 120-lb. kegs and 400-lb. drums.

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.

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

