The First in Synthetics®

Synthetic GH Series Heavy Duty EP Grease

NLGI #1 and #2

Lithium Complex • Moly Fortified

PRODUCT DESCRIPTION

AMSOIL GH Series Heavy Duty EP 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 temperatures by providing excellent oxidation stability, high temperature dropping points and good low temperature torque values and pumping capabilities. AMSOIL Heavy Duty EP 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.

AMSOIL Heavy Duty EP Greases are formulated with top performing lithium complex thickener systems that provide excellent water resistance as identified by the ASTM D-1264 water washout test. AMSOIL Heavy Duty EP Greases adhere to metal and are shear stable during severe mechanical activity, maintaining their consistency and providing superior lubricating protection.

Performance Features

- Moly fortified for added EP protection
- Adhesive and shear stable - prevents squeeze out
- High dropping point (exceeds 500ºF)
- Excellent water-washout resistance
- Oxidation and corrosion inhibited

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-64 Spec.
- GHD (#2) Mack MG-C

Application Recommendation

AMSOIL Heavy Duty EP Greases 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, automatic lubrication systems with long pumping runs and other applications (where recommended by manufacturer). NLGI #2 (GHD) grease is the preferred choice for medium to high ambient temperatures, sleeve type bushings, high shock loading environments, high water environments and automotive applications.

The correct consistency grade of AMSOIL Heavy Duty EP Grease is 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, 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 backhoe loaders, excavators and bulldozers. AMSOIL Heavy Duty EP Greases are suitable for use up to 325ºF. When operating at elevated temperatures, frequent regreasing may be required.

AMSOIL Heavy Duty EP 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 AMSOIL Heavy Duty EP 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	GHB	GHD	NLGI GC/LB
Thickener	lithium complex	lithium complex	NR
Fortified with moly compound	yes	yes	NR
NLGI consistency grade	1	2	NR
NLGI performance grade	GC-LB	GC-LB	NR
Penetration - ASTM D-217 (25ºC [77ºF], 0.1 mm) worked 60 strokes	310-340	265-295	220-340 min
Dropping point, ºF [ºC] - ASTM D-2265	500 [260]	550 [288]	428 [220] min
High temperature life, hours - ASTM D-3527	112	118	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	9.2	1.6	15 max
Rust and corrosion - ASTM D-1743	pass	pass	pass
Oil separation, percent loss - ASTM D-1742 (24 hours, 25º C [77ºF]	3.3	2.1	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 (-40ºC [-40ºF])	0.50	5.3	15.5 max
LT-37 pumpability, g/min (60ºF/0ºF [16ºC/-18ºC])	750/26	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			
40ºC [104ºF], cSt	130	130	NR
100ºC [212ºF], cSt	16.5	16.5	NR
Flash point, ºF [ºC] - ASTM D-92	450 (232)	450 (232)	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, 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.

