

Bearing & Chassis Grease

AMSOIL 100% SYNTHETIC HIGH-VISCOSITY LITHIUM-COMPLEX GREASE

Product Code: GVCCR-EA



Product Description

AMSOIL Synthetic High-Viscosity Lithium-Complex Grease delivers heavy-duty bearing and chassis protection for industrial equipment, off-road machinery, and agricultural applications that operate under punishing loads, extreme temperatures, and constant exposure to the elements. Built on an ISO 320 synthetic base oil with a lithium-complex thickener, this NLGI #2 grease stays where you put it and keeps working long after conventional multi-purpose greases have broken down or washed away.

Heavy-duty bearings in construction equipment, farm implements like John Deere mowers and tractors, mining machinery, and off-road vehicles face a brutal combination of slow speeds, shock loading, water exposure, and temperature extremes. Standard multi-purpose greases often thin out under mechanical shear, wash out in wet conditions, or oxidize and harden at elevated temperatures. The result is premature bearing wear, unplanned downtime, and expensive repairs.

EXTREME-PRESSURE PROTECTION FOR SHOCK-LOADED BEARINGS

Slow-moving, heavily loaded bearings in equipment like excavators, skid steers, and agricultural implements are vulnerable to metal-to-metal contact under shock-loading conditions. AMSOIL High-Viscosity Synthetic Grease is formulated with EP additives and a high-viscosity synthetic base oil that produces a thick protective film between moving surfaces. In Four-Ball EP Weld Point testing (ASTM D2596), it achieved a weld point of 315 kg, and Four-Ball Wear testing (ASTM D2266) measured just 0.39 mm of wear scar diameter. That combination of load-carrying capacity and wear reduction translates directly to longer bearing life in demanding off-road and industrial service.

RESISTS WATER WASHOUT IN WET ENVIRONMENTS

Equipment operating outdoors, in washdown environments, or near water faces constant grease displacement. If the grease washes out, the bearing runs unprotected. AMSOIL High-Viscosity Synthetic Grease posted only 4.0% loss in ASTM D1264 water washout testing. Its cohesion and adhesion properties keep it locked in place on bearing surfaces even under direct water contact. For operators running equipment in rain, mud, or environments that require regular pressure washing, this means longer intervals between re-greasing and fewer opportunities for contaminant ingestion.

HIGH-TEMPERATURE STABILITY UP TO 400 DEGREES F

Bearings near engines, exhaust systems, kilns, or other heat sources can push grease beyond its thermal limits. When grease breaks down thermally, it loses viscosity, hardens, or separates, leaving bearings exposed. AMSOIL High-Viscosity Synthetic Grease handles continuous service temperatures up to 177 degC (350 degF) and intermittent service up to 204 degC (400 degF). Its dropping point of 267 degC (513 degF) per ASTM D2265 testing provides a wide margin of safety above normal operating temperatures. The synthetic base oil resists thermal and oxidative degradation, so the grease maintains its protective film even during sustained high-temperature operation.

SHEAR STABILITY AND ZERO OIL SEPARATION

Mechanical activity inside bearings can break down grease structure over time, thinning it out and reducing its ability to protect. AMSOIL High-Viscosity Synthetic Grease is shear stable, maintaining its NLGI #2 consistency and viscosity under continuous mechanical work. In ASTM D1742 oil separation testing, it recorded 0% weight loss, meaning the base oil stays locked within the thickener matrix during storage and service. The grease you apply is the grease that protects.

CORROSION AND RUST PREVENTION

Exposed metal surfaces in humid, wet, or salt-laden environments corrode quickly without proper protection. AMSOIL High-Viscosity Synthetic Grease earned a 1A rating in ASTM D4048 Copper Corrosion testing and a passing result in ASTM D1743 Rust Prevention testing. A robust additive package of corrosion and oxidation inhibitors protects bearing surfaces from rust formation and chemical degradation, even in harsh outdoor service.

SPECIFICATIONS AND COMPATIBILITY

AMSOIL High-Viscosity Lithium-Complex Synthetic Grease is an NLGI #2 grade with a smooth texture and light amber color. It is compatible with many other grease types, but when switching from a different grease, it is best practice to clean old grease from the equipment when possible or flush thoroughly with a liberal amount of AMSOIL grease while the mechanism is running. Monitor the system closely after any grease changeover.

APPLICATION NOTES

Wipe grease fittings clean before injecting grease to prevent contaminant ingestion. Maintain bearing housings one-third to one-half full. Over-greasing causes excessive heat buildup and can be as damaging as under-greasing. Supplement routine greasing by periodically cleaning and repacking housings with fresh grease on an established maintenance schedule.

Available in 14 oz. cartridges, 35 lb. pails, and 120 lb. kegs.

Technical Specifications

Property	Value	Test Method
NLGI Grade	2	
Thickener Type	Lithium Complex	
Texture	Smooth	
Color	Light Amber	
Base Oil Viscosity, cSt @ 40 degC	295	ASTM D445
Worked Penetration	266	ASTM D217
Dropping Point, degC (degF)	267 (513)	ASTM D2265
Four-Ball EP Weld Point, kg	315	ASTM D2596
Four-Ball Wear, mm	0.39	ASTM D2266
Water Washout, % loss	4.0	ASTM D1264
Copper Corrosion	1A	ASTM D4048
Rust Prevention	Pass	ASTM D1743
Oil Separation, % weight loss	0	ASTM D1742
Low-Temperature Torque @ -20 degC (Starting), g-cm	1500	ASTM D1478
Low-Temperature Torque @ -20 degC (Running), g-cm	250	ASTM D1478

Frequently Asked Questions

Q1: What equipment and applications is AMSOIL Synthetic High-Viscosity Lithium-Complex Grease designed for?

AMSOIL Synthetic High-Viscosity Lithium-Complex Grease is designed for heavy-duty industrial and off-road applications where equipment operates under adverse conditions. It is suitable for a wide range of equipment categories including auto/light truck, motorcycle, ATV, UTV, snowmobile, marine outboard, PWC, heavy-duty on-road, heavy-duty off-road, and agricultural equipment. It

excels in slow, heavily loaded applications, shock-loading conditions, and environments with exposure to environmental elements where typical multi-purpose greases may fall short.

Q2: How does AMSOIL High-Viscosity Synthetic Grease protect against water washout and corrosion?

AMSOIL High-Viscosity Synthetic Grease is formulated with excellent cohesion and adhesion properties that help it resist water washout, allowing it to stay in place longer and reduce maintenance time. It also contains a premium blend of corrosion inhibitors that protect components against rust and corrosion formation, along with a robust package of oxidation inhibitors that help prevent grease breakdown and component surface damage.

Q3: What base oil and thickener does AMSOIL Synthetic High-Viscosity Lithium-Complex Grease use?

AMSOIL Synthetic High-Viscosity Lithium-Complex Grease is blended with premium ISO 320 synthetic base oils and uses a lithium-complex thickener system. It is fully compounded with extreme-pressure (EP) additives, oxidation inhibitors, and corrosion inhibitors. The grease is shear stable, meaning it maintains its viscosity and consistency even in the presence of mechanical activity, and it can handle continuous service temperatures up to 177 degC (350 degF) and intermittent service up to 204 degC (400 degF).

Q4: How does AMSOIL High-Viscosity Synthetic Grease compare to typical multi-purpose greases for heavy-duty use?

AMSOIL High-Viscosity Synthetic Grease is specifically engineered to outperform typical multi-purpose greases in hostile environments and extreme applications. Its combination of a lithium-complex thickener system, high-viscosity ISO 320 synthetic base oil, and high-quality EP additives provides superior extreme-pressure protection, oxidation resistance, and water washout resistance that standard multi-purpose greases may not deliver. This results in increased uptime and reduced repair and maintenance costs.

Q5: How much grease should I use and how do I properly maintain bearings with AMSOIL High-Viscosity Lithium-Complex Grease?

When using AMSOIL High-Viscosity Synthetic Grease, maintain bearing housings one-third to one-half full of grease -- over-greasing should be avoided as it can result in excessive heat buildup. Always wipe grease fittings clean prior to injecting grease to prevent contaminant ingestion. Supplement standard grease maintenance by periodically cleaning and packing housings with fresh grease on an established maintenance schedule to ensure optimum performance.

Q6: Is AMSOIL Synthetic High-Viscosity Lithium-Complex Grease compatible with other types of grease?

AMSOIL High-Viscosity Synthetic Grease is compatible with many other types of greases. However, when switching greases, AMSOIL recommends cleaning the equipment of the old grease when possible or flushing with a liberal amount of AMSOIL High-Viscosity Synthetic Grease while the mechanism is in operation. The system should be closely monitored for any inconsistencies after the change. For specific grease compatibility questions, AMSOIL advises contacting your AMSOIL representative or AMSOIL INC. directly.

Available Product Codes

Product Code	Package Size	Unit of Measure
GVCCR-EA	14 oz. Cartridge	Each
GVCCR-CA	14 oz. Cartridge	Case of 10
GVCCR-PK	14 oz. Cartridge	Packs of 40
GVC35-EA	35 lb. Lug	Each
GVC99-EA	120 lb. Keg	Each

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