



# AMSOIL Synthetic Polymeric Off-Road Grease

**NLGI #1 • NLGI #2**  
**5% Moly**

## PRODUCT DESCRIPTION

AMSOIL Synthetic Polymeric Off-Road Grease (GPOR1, GPOR2) combines an over-based calcium-sulfonate complex thickener and proprietary synthetic polymeric technology to provide outstanding performance in heavy-duty off-road applications.

AMSOIL developed an exclusive synthetic polymeric system custom-built to provide performance benefits specific to off-road equipment. This synthetic technology helps give AMSOIL Off-Road Grease tenacious cling ability and maximum pound-out resistance over extended service intervals, even in wet environments.

## Extreme Impact Resistance

Greased components in heavy equipment are subjected to serious abuse. Virtually all heavy-duty off-road equipment operates under heavy-load conditions. The extreme impact common to off-road equipment forces all of that heavy load (pressure) onto places where the equipment pivots, relying on the grease to prevent metal-to-metal contact. Lesser-quality greases cannot withstand the load and are pounded out of the impact area.

When pound-out occurs, heavily-loaded components are left unlubricated, which can

result in metal-to-metal contact and extreme amounts of wear.

AMSOIL Off-Road Grease's exclusive synthetic polymeric technology provides exceptional adhesion (ability to cling to components) and cohesion (ability to cling to itself) properties. It is engineered to resist pound-out better than other greases in heavily-loaded, extreme-pressure applications and stay in place longer, providing outstanding lubrication over extended service intervals and reducing the detrimental effects of missed grease points.

## 5% Moly-Fortified to Meet CAT Requirements

AMSOIL Synthetic Polymeric Off-Road Grease is heavily fortified with moly for maximum wear protection to meet Caterpillar's requirement for pin and bushing applications. Its high Timken OK load and excellent four-ball wear and four-ball weld test results are proof of its exceptional load-bearing capacity.

## Extended Service Life, Excellent Value

AMSOIL Synthetic Polymeric Off-Road Grease provides serious severe-duty performance over extended service intervals. It resists pound-out and significantly reduces the amount of grease ejected during repetitive pounding action. AMSOIL Synthetic Polymeric Off-Road Grease's ability to extend service intervals and reduce grease consumption is application-dependent and operator-determined. However, field test results show that it can reduce grease consumption by up to 50 percent. That allows operators to either maintain their current maintenance schedule and use less grease per application, or extend the length of time between re-greasing intervals. Its superior pound-out resistance combined with extended service intervals and superior protection result in reduced lubricant, labor and equipment-replacement costs.



# TYPICAL TECHNICAL PROPERTIES

## AMSOIL Synthetic Polymeric Off-Road Grease

	GPOR1	GPOR2
NLGI Grade	1	2
Penetration [25°C (77°F), 0.1 mm] worked 60 strokes (ASTM D-217)	310-340	265-295
Base Oil Viscosity [40°C (104°F)], cSt (ASTM D-445)	68	220
Timken OK Load Test, lbs. (ASTM D-2509)	65+	75+
Four-Ball Weld Point, kgf (ASTM D-2596)	620+	620+
Four-Ball Wear Test, scar mm (ASTM D-2266)	< .45	< .45
Dropping Point, °C (°F) (ASTM D-2265)	321 (610)	343 (650)
Water Washout, % (ASTM D-1264)	1	1
Ambient Operating Temperature Range, °C (°F)	-34 to 40 (-30 to 104)*	-23 to 54 (-10 to 130)*
Thickener	Calcium-Sulfonate Complex	Calcium-Sulfonate Complex
Moly Content, %	5	5
Rust Test (ASTM D-1743)	Pass	Pass
Impact Resistance (AMS-POR)	30+	60+

## Excellent Water Washout Resistance

Greased components on heavy equipment are frequently exposed to water. AMSOIL Synthetic Polymeric Off-Road Grease resists water washout to maintain the external seal on greased components and help prevent water and other contaminants from entering wear-prone areas

## Calcium-Sulfonate Complex Thickener

AMSOIL Synthetic Polymeric Off-Road Grease features a calcium-sulfonate complex thickener for enhanced extreme-pressure performance. Calcium-sulfonate complex is the ideal thickener for off-road grease. Its inherent extreme-pressure benefits deliver excellent impact resistance.

**\*Note:** AMSOIL Synthetic Polymeric Grease is designed to remain in place for long service intervals. The same properties that provide its enhanced tenacity can also make it harder to pump, particularly in cold temperatures. AMSOIL GPOR2 pumps best in temperatures above 40°F; GPOR1 pumps best in temperatures above 0°F. A heavy follower plate may be necessary when pumping grease from larger package sizes. GPOR2 is not recommended for automatic or centralized lubrication systems on heavy equipment unless the system is designed to successfully pump a tackier grease.

## APPLICATIONS

AMSOIL Synthetic Polymeric Off-Road Grease is ideal for heavy-duty, heavy-load-bearing applications operating in the adverse conditions found in agricultural, construction, landscaping, logging and mining environments. Applications include power shovels, drag lines, wheel and track loaders, excavators, bulldozers, skid steers, dump trucks and other heavy-duty equipment with heavily-loaded pivot pins, king pins, bucket pins and bushings. AMSOIL Synthetic Polymeric Off-Road Grease is a perfect choice for Caterpillar equipment requiring 5 percent moly for pin and bushing applications. AMSOIL Off-Road Grease provides superior performance, protection and longevity in heavy-duty, off-road applications.

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

