



**Product One Voice  
Q&A**

**Product: AMSOIL Synthetic Polymeric Off-Road Grease**  
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**1. Question:**

What is AMSOIL Synthetic Polymeric Off-Road Grease?

**Answer:**

AMSOIL Synthetic Polymeric Off-Road Grease is a calcium-sulfonate complex thickened grease engineered specifically for heavy-duty equipment operating in severe off-road conditions. This exclusive synthetic polymer technology is designed to provide superior protection and lubricant longevity in the extreme environment encountered by off-road equipment. AMSOIL Synthetic Polymeric Grease is fortified with 5% molybdenum disulfide (moly) for enhanced EP protection. It meets moly requirements for Caterpillar® applications.

**2. Question:**

Why did AMSOIL develop Synthetic Polymeric Grease?

**Answer:**

AMSOIL Off-Road Grease fills a performance gap in the heavy equipment marketplace and provides a high-quality alternative to competitive products. It was specifically formulated to address the major suffering points in heavy equipment grease lubrication, including operator neglect, high cost of operation, extreme operating conditions and grease "pound-out." AMSOIL encourages Dealers to maximize their profits in commercial markets, and this new grease is specific to commercial applications.

**3. Question:**

How does AMSOIL Synthetic Polymeric Off-Road Grease address the needs/suffering points of the off-road market?

**Answer:**

Operator neglect – Greasing equipment is not an enjoyable job and is often overlooked.

Equipment operators are less likely to maintain equipment the way the owners of the equipment would. AMSOIL Synthetic Polymeric Grease is engineered to last longer in service and provide a significant margin of protection in the event of infrequent greasing intervals or missed grease points.

High cost of operation – Pivot joint repair and replacement is common and expensive. The additional protection delivered by AMSOIL Synthetic Polymeric Grease saves owners money and keeps equipment operational longer by extending pivot joint life. AMSOIL grease also reduces costs to owners through extended lubrication intervals.

Extreme operating conditions – Water, extreme pressure, inadequate lubrication and excessive dust and dirt are all common issues in off-road equipment. AMSOIL Synthetic Polymeric Grease

is engineered with excellent water resistance properties and rust preventatives to protect against water washout during cleaning or heavy rains. AMSOIL Grease stays in place to last longer in service and forms a barrier seal to greatly reduce the ability of water and dirt to enter pivot joints.

**4. Question:**

How does AMSOIL Synthetic Polymeric Off-Road Grease provide advanced performance in heavy-duty equipment compared to the AMSOIL GH series?

**Answer:**

The AMSOIL GH series of greases have done an excellent job in the applications they were designed for; however, with the advancement of lubrication technology, AMSOIL Synthetic Polymeric Grease is able to provide clear benefits to the off-road market beyond those delivered by the GH series. These benefits include extended lubrication intervals, improved extreme pressure (EP) protection, enhanced protection from water and contaminants and extreme pound-out resistance.

**5. Question:**

Why did AMSOIL design the Off-Road series with an over-based calcium-sulfonate complex thickener?

**Answer:**

In addition to their inherent EP and anti-wear protection properties, calcium-sulfonate complex thickeners deliver advanced water-washout resistance and exceptional rust prevention, which are critical in the off-road market. Calcium-sulfonate complex thickeners also provide high oxidation stability, a high dropping point and superior oil holding power over competitive thickener types. The oil holding power offered by calcium sulfonate thickeners minimize the potential for grease bleeding and ensure a long product shelf life.

**6. Question:**

What is pound-out?

**Answer:**

Pound-out is a phenomenon that occurs when two metal pieces collide and force the grease out of greased components. When a piece of heavy equipment, such as a front-end loader, is driven into a pile of rocks for a bucket-load, the pivot joints endure tremendous force that pounds out inferior grease. Regardless of how well grease protects against wear, it does no good if it is pounded out. AMSOIL Synthetic Polymeric Grease specifically addresses “pound-out” with outstanding impact resistance. AMSOIL Synthetic Polymeric Grease stays in place during rigorous service when other greases cannot.

**7. Question:**

What is AMSOIL Synthetic Polymeric technology?

**Answer:**

The unique synthetic polymeric technology was designed to provide extreme resistance to impact and water-washout common in off-road applications, while delivering the outstanding level of wear protection consumers expect from every AMSOIL lubricant. This AMSOIL-exclusive technology resists pound-out and allows end-users to extend re-greasing intervals and save money by reducing overall grease usage. This new technology incorporates a unique combination of targeted, synthetically-produced polymeric materials that cling tenaciously to metal surfaces, resulting in a grease that stays in place much longer. Since AMSOIL grease does

not slump or readily pound out in EP service, it provides excellent overall equipment protection and maximum equipment life.

**8. Question:**

How does AMSOIL Synthetic Polymeric Grease keep environmental contaminants from entering greased joints, degrading grease and accelerating wear?

**Answer:**

AMSOIL Synthetic Polymeric Grease provides a grease seal (a barrier) to minimize contaminant ingress. It resists the slumping or running out of bushings that is evident in competitive greases and provides an excellent barrier to effectively extend bushing and component life.

**9. Question:**

How does AMSOIL Synthetic Polymeric Off-Road Grease compare to Caterpillar® Ultra 5 Moly and what is the strategy to sell against it?

**Answer:**

AMSOIL Synthetic Polymeric Grease was designed with 5% moly to eliminate the sales barriers in the off-road heavy equipment market. AMSOIL has produced a product that offers superior performance, protection and cost-efficiency. Selling the performance benefits of this grease in combination with the cost savings that they provide make AMSOIL Synthetic Polymeric Grease a superior choice for Caterpillar® applications. There are several benefits offered through the use of AMSOIL Synthetic Polymeric Grease. A physical property comparison is listed below:

	<b>AMSOIL Synthetic Polymeric Grease*</b>	<b>Caterpillar® Ultra 5 Moly**</b>
<b>NLGI Grade</b>	2	2
<b>Timken OK Load</b>	75+	60
<b>4 Ball Weld</b>	620+	620
<b>4 Ball Wear</b>	<.45	0.50
<b>Dropping Point (°F)</b>	650	550
<b>Ambient Temperature Range (°F)</b>	-10 to +130	-22 to +122
<b>Thickener Type</b>	Calcium-Sulfonate Complex	Calcium-Sulfonate Complex
<b>Moly Content</b>	5%	5%

\* AMSOIL Synthetic Polymeric Grease data was tested and verified by an outside laboratory using ASTM testing methods.

\*\* Caterpillar® grease data was derived from the published Caterpillar® data sheet found at [www.cat.com](http://www.cat.com).

AMSOIL provides better overall financial value compared to Caterpillar® Ultra 5 Moly through a reduction in overall grease consumption.

	Cat Ultra 5 Moly	AMSOIL Synthetic Polymeric Grease
Price Per Tube	\$6.48*	\$5.85**
Typical Greasing Interval	Daily	Day and a Half
Daily Cost to Grease Equipment	\$6.48	\$3.90
Total Cost for Week (Per Application)	\$32.40	\$19.50
One Application Annually	\$1,685	\$1,014
Savings Using AMSOIL	---	<b>\$671</b>

Annual Fleet Savings Using AMSOIL				
Fleet Size	1	5	10	25
AMSOIL vs. Cat	\$671	\$3,355	\$6,710	\$16,775

Cost savings are calculated using actual grease savings associated with AMSOIL Synthetic Polymeric Grease NLGI #2 (GPOR2). Improved wear protection benefits, reduced maintenance costs and lower labor expenses are not quantified but would further increase savings.

\*Caterpillar commercial price

\*\*AMSOIL commercial price

**10. Question:**

What are the targeted applications for AMSOIL Synthetic Polymeric Off-Road Grease?

**Answer:**

AMSOIL Synthetic Polymeric Off-Road Grease is ideal for heavy-duty, heavy-load-bearing applications that are subject to the adverse operating conditions common to agricultural, construction, landscaping, logging and mining environments. Applications include power shovels, draglines, 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 Grease is the ideal choice for Caterpillar® equipment requiring 5% moly for pin and bushing applications.

**11. Question:**

Does AMSOIL Synthetic Polymeric Grease extend lubrication intervals over competitive brands?

**Answer:**

Due to its advanced synthetic polymeric chemistry, AMSOIL Grease has the ability to cling tenaciously for extended periods in a full range of components, including kingpins, ball joints, bucket pins and bushings. Field testing has shown that AMSOIL Synthetic Polymeric Grease is capable of extending lubrication intervals and reducing grease consumption by up to 50 percent over the interval attained by competitive products, without jeopardizing wear protection. By extending lubrication intervals up to 50% over competitive products, equipment owners and operators realize the benefits of reduced costs and time commitments associated with frequent

equipment lubrication, while concurrently gaining improved wear protection benefits that provide optimal equipment life.

**12. Question:**

What financial incentives do Dealers have to sell AMSOIL Synthetic Polymeric Grease?

**Answer:**

The benefits of selling AMSOIL Grease for Dealers are two-fold. First, grease is a low switching-cost item that new accounts are more willing to try. Many potential accounts are apprehensive of extended-drain oils because they maintain equipment under the assumption that engine oil needs to be changed often because of the dirty environment in which they operate. By promoting the performance benefits of AMSOIL grease initially, Dealers can build relationships that often present opportunities to sell other AMSOIL products that provide exceptional benefits in these applications. Secondly, the AMSOIL commercial program provides outstanding Dealer profit potential, which should be an excellent motivator to approach businesses in these markets.

**13. Question:**

Does AMSOIL Synthetic Polymeric Grease provide any environmental or safety benefits?

**Answer:**

AMSOIL Synthetic Polymeric Grease provides significant environmental benefits through extended re-greasing intervals and lower overall grease usage. AMSOIL advanced synthetic polymeric technology helps grease stay in place much longer than Caterpillar® Ultra 5 Moly and other competitive products. In addition, AMSOIL Grease reduces the buildup of ejected grease that can create slip hazards on equipment or landing in environmentally-sensitive construction areas. AMSOIL has also incorporated the use of polyethylene liners for drums and kegs designed for ease of cleanup and reduced grease loss.

**14. Question:**

Do the disposable LDPE (low density polyethylene) liners in drums and kegs have any other benefits?

**Answer:**

The incorporation of LDPE liners in drums and kegs improves the product's ease of use. The drum liners also decrease the costs and mess associated with drum cleaning and provide environmental benefits attributed to reduced waste. The liner is a 15-mil, low-density polyethylene sleeve designed to fit directly into drums and is proven to maintain the shape of the drum; ensuring no blockage/stoppage when using drum-mounted grease pumps.

**15. Question:**

What package sizes will be available for AMSOIL Synthetic Polymeric Off-Road Grease and what are their product codes?

**Answer:**

	<b>NLGI #1</b>	<b>NLGI #2</b>
✓ 15-oz. Cartridge.....	GPOR1CR-EA.....	GPOR2CR-EA
✓ 15-oz. Cartridge (case of 10).....	GPOR1CR-CA.....	GPOR2CR-CA
✓ 15-oz. Cartridge (pack of 40).....	GPOR1CR-PK.....	GPOR2CR-PK
✓ 35-lb Lug.....	GPOR135-EA.....	GPOR235-EA
✓ 120-lb Keg.....	GPOR199-EA.....	GPOR299-EA
✓ 400-lb Drum.....	GPOR140-EA.....	GPOR240-EA

**16. Question:**

Why is the new grease cartridge filled to 15 oz. instead of the traditional 14 oz.?

**Answer:**


Since AMSOIL Synthetic Polymeric Grease is so highly fortified, each cartridge contains 15 ounces by weight. The density of this design allows AMSOIL to offer more grease (by weight) per cartridge than competitive products.

**17. Question:**

Are calcium-sulfonate complex greases compatible with other types of greases?

**Answer:**

AMSOIL Synthetic Polymeric Grease is compatible with several grease thickener types. For detailed recommendation questions, please use the chart below:

												
Grease Compatibility Chart												
	Aluminum Complex	Barium Complex	Calcium 12-Hydroxy	Calcium Complex	Calcium Stearate	Calcium Sulfonate Complex	Clay (Non-Soap)	Lithium 12-Hydroxy	Lithium Complex	Lithium Stearate	Polyurea [Conventional]	Polyurea [Shear Stable]
<b>C = Compatible</b>												
<b>N = Not Compatible</b>												
<b>B = Borderline</b>												
Aluminum Complex	--	N	C	N	N	B	N	N	C	N	N	C
Barium Complex	N	--	C	N	N	C	N	N	N	N	N	B
Calcium 12-Hydroxy	C	C	--	B	C	B	C	C	C	C	N	C
Calcium Complex	N	N	B	--	N	N	N	N	C	N	C	C
Calcium Stearate	N	N	C	N	--	C	C	B	C	C	N	C
Calcium Sulfonate Complex	B	C	B	N	C	--	N	B	C	B	N	C
Clay (Non-Soap)	N	N	C	N	C	N	--	N	N	N	N	B
Lithium 12-Hydroxy	N	N	C	N	B	B	N	--	C	C	N	C
Lithium Complex	C	N	C	C	C	C	N	C	--	C	N	C
Lithium Stearate	N	N	C	N	C	B	N	C	C	--	N	C
Polyurea [Conventional]	N	N	N	C	N	N	N	N	N	N	--	C
Polyurea [Shear Stable]	C	B	C	C	C	C	B	C	C	C	C	--

\*This chart is a meant to be used as a reference guide only. Different greases may contain unique characteristics which may alter compatability. Check with grease manufacturer/owner's manual/testing to determine specific compatability.