

# LSG SYNTHETIC LITHIUM COMPLEX 100 GREASE NO. 1 & 2

PREMIUM PAO SYNTHETIC GREASE FOR ELECTRIC MOTOR BEARINGS.

OPTIMIZED FOR HIGH-SPEED, HIGH-TEMPERATURE, AND LONG-LIFE

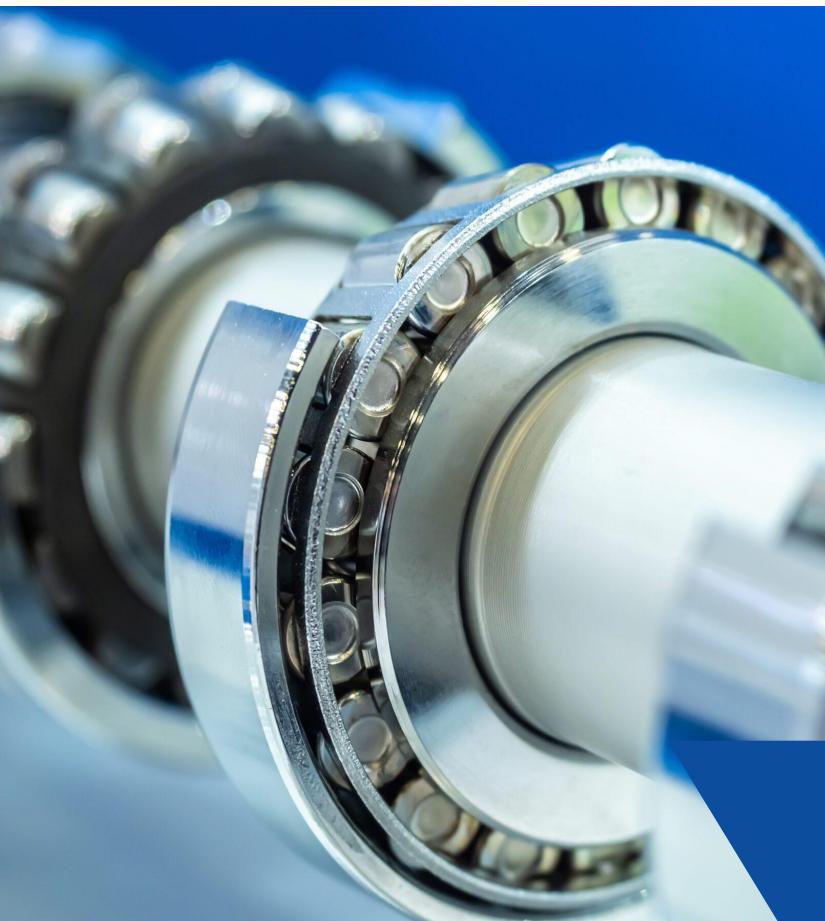
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PRODUCT DATA SHEET

# LSG SYNTHETIC LITHIUM COMPLEX 100 GREASE NO. 1 & 2

Premium PAO Synthetic Grease for Electric Motor Bearings.  
Optimized for High-Speed, High-Temperature, and Long-Life Electric Motor Applications.

**LONE STAR**  
GREASE & LUBRICANTS



## PRODUCT DATA

**LSG Synthetic Lithium Complex 100 Grease No. 1 & 2** is a premium synthetic (PAO) grease engineered with an ISO 100 synthetic base oil to meet the rigorous demands of electric motor bearings. Designed for extended service life, optimal performance, and superior protection, this high-performance lubricant delivers outstanding stability for components exposed to high speeds, variable temperatures, and critical operational loads common in electric motors.

Utilizing a state-of-the-art synthetic base oil and a precision lithium complex thickener system, **LSG Synthetic Lithium Complex 100 Grease No. 1 & 2** resists thermal breakdown, minimizes fluid friction, and prevents oil migration into motor windings, which can cause insulation damage. Its superior mechanical integrity and stable consistency make it ideal for use in high-speed, precision motor bearings, ensuring low noise and vibration.

Engineered to minimize wear and reduce friction under high-speed and moderate-load conditions, this grease provides long-lasting performance and consistent lubrication even in demanding motor applications.

It maintains its structure and position in motor bearings, preventing leakage or premature bearing failure, even when subjected to intense heat and continuous operation. The availability of NLGI #1 and #2 allows for versatile application, including excellent pumpability for automated re-lubrication systems (No. 1) or robust adherence for permanently lubricated and general-purpose motor bearings (No. 2).

Recommended for vital electric motors across all industries, **LSG Synthetic Lithium Complex 100 Grease No. 1 & 2** supports equipment reliability, lowers maintenance requirements by extending re-lubrication intervals, and contributes to safe, smooth, and energy-efficient motor operations.

## CUSTOMER BENEFITS

- ✓ **Ensures long-term protection and extended regreasing intervals** for valuable electric motors, reducing costly downtime and maintenance.
- ✓ **Prevents costly bearing wear and corrosion** in motors exposed to temperature fluctuations, moisture, and contaminants.
- ✓ **Improves energy efficiency** by significantly reducing friction and operating temperatures in electric motor bearings.
- ✓ **Maintains grease consistency** under high centrifugal and thermal stress, preventing premature bearing failure and lubricant leakage.
- ✓ **Minimizes risk of oil leakage or contamination of motor windings**, supporting operational safety and reliability standards.
- ✓ **Reliable performance** in areas with high ambient temperatures, vibration, and potential water ingress, crucial for continuous motor

## KEY FEATURES



**Fully PAO synthetic base oil (ISO VG 100)** for exceptional thermal stability, wide operating temperature range, and inherently low fluid friction, crucial for energy-efficient motor operation.



**Lithium complex thickener** for robust high-temperature performance and excellent mechanical stability under the constant shear of motor bearings.



**NLGI #1 and #2 consistency** for versatile application methods, offering excellent pumpability in centralized lubrication systems and firm adherence in sealed or open motor bearings.



**Outstanding resistance to water washout and moisture ingress**, providing superior protection against common industrial contaminants and wet environments.



**Extremely low bleed and oil separation** to prevent oil migration into motor windings, ensuring clean operation and protecting electrical insulation.



**Reduces friction and wear** under high-speed and moderate-load conditions, prolonging motor bearing life and improving overall motor efficiency.

# APPLICATIONS

LSG Synthetic Lithium Complex 100 Grease No. 1 & 2 is specifically recommended for:



All types of electric motor bearings: AC motors, DC motors, servo motors, generator bearings, and high-speed spindles.



Bearings (ball, roller) in critical power-driven components: Pumps, fans, blowers, and general machinery where electric motors are the primary drive.



Sealed-for-life or permanently lubricated motor bearings.



Motor applications requiring low-noise and low-vibration performance.



Equipment operating under wide temperature ranges, particularly those with high-speed or continuously running electric motors.



Components where long lubricant life and minimal re-lubrication are desired.

This product is developed to meet the functional requirements of electric motors, generators. For best performance and longevity, always follow the equipment manufacturer's relubrication guidelines.

# PACKAGING



Cartridges  
14 oz.



Pails  
35 lbs.



Kegs  
120 lbs.



Drums  
400 lbs.

\*Custom and Bulk Packaging available upon request.

# TYPICAL PROPERTIES

Typical properties reflect the expected results within normal production tolerances but do not constitute a specification. Minor variations that do not impact product performance may occur during standard manufacturing processes or at different blending locations. The information provided here is subject to change without notice.

Property	No. 1	No. 2	Test Method
NLGI Grade	1	2	ASTM D217
Worked Penetration (60X)	310–340	265–295	ASTM D217
Dropping Point (°C)	>260	>260	ASTM D2265
Base Oil Viscosity @ 40°C (cSt)	100	100	ASTM D445
Four Ball Weld Load (kg)	315	315	ASTM D2596
Four Ball Wear (mm)	0.45	0.45	ASTM D2266
Timken OK Load (lbs)	40	40	ASTM D2509
Water Washout, % @ 175°F	<2	<2	ASTM D1264
Color	Blue	Blue	Visual
Texture	Smooth / Buttery	Smooth / Buttery	Visual
Oil Separation (24 hr @ 100°C), %	<3	<3	ASTM D1742
Corrosion Protection (ASTM D665, Proc. B)	Pass (No Rust)	Pass (No Rust)	ASTM D665, Proc. B
Water Spray Off Test	<10%	<10%	ASTM D4049

## HEALTH AND SAFETY

When used as intended, this product is not expected to pose any health risks or safety concerns. To minimize exposure, avoid direct skin contact and wear resistant gloves when handling greases. If contact occurs, wash the affected area immediately with soap and water. For comprehensive guidelines on safe handling and detailed product information, please refer to the Material Safety Data Sheet (MSDS) available on our website: <https://lonestargl.com>

## EXPLORE THE LONE STAR DIFFERENCE. GET IN TOUCH WITH US TODAY

**LONE STAR**  
GREASE & LUBRICANTS

### LET'S WORK TOGETHER

We're more than a supplier—we're a partner in your operation. Whether you need a custom solution, dependable logistics, or technical guidance, we're here for you every step of the way.

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