



LSG SYNTHETIC LITHIUM COMPLEX 100 GREASE NO. 1 &

Premium PAO Synthetic Grease for Extreme High Temperatures, High Speeds, and Extreme Conditions in the Construction Industry.

Superior Protection for Electric Motors, High-Speed Bearings, and General Lubrication on Demanding Job Sites.

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 the construction industry.

Designed for extended service life, optimal performance, and superior protection against harsh elements, this high-performance lubricant delivers outstanding protection for components exposed to extreme temperatures (both hot and cold), high speeds, moderate loads, water, mud, and abrasive dust.

Utilizing a state-of-the-art synthetic base oil and a advanced lithium complex thickener system, **LSG Synthetic Lithium Complex 100 Greases** resist thermal breakdown, water and mud intrusion, and corrosive elements. Its superior mechanical stability and consistency make them ideal for use in high-speed bearings, electric motors, pumps, fans, conveyor systems, and centralized lubrication systems across various construction

LONE STAR
GREASE & LUBRICANTS

Engineered to minimize wear and reduce friction under high-speed and moderate-load conditions, these greases provide long-lasting performance and consistent lubrication even in the most challenging areas of a construction site.

It maintains its structure and performance in demanding environments, preventing wear and/or component failure, even when subjected to intense heat, constant vibration, or frequent washdowns. The availability of NLGI No. 1 and No. 2 allows for versatile application, including excellent pumpability for automated systems (No. 1) or robust performance in high temperature applications.

Recommended for vital construction machinery, **LSG Synthetic Lithium Complex 100 Greases** support equipment reliability, lower maintenance costs, and contribute to safe, smooth, and efficient operations on construction sites.

KEY FEATURES

- **Formulated with PAO synthetic base oil (ISO VG 100)** for exceptional thermal stability, extreme operating temperature ranges (from extreme cold starts to high temperature operations), and extended service life, especially beneficial for **high-speed components** like electric motors and fan bearings on construction equipment.
- **Lithium complex thickener** for robust high-temperature performance and excellent mechanical stability under the shock and vibration typical of heavy machinery.
- **NLGI No. 1 and No. 2** consistency for versatile application, offering excellent pumpability in centralized lubrication systems (important for cold weather operations) and strong adherence in general-purpose bearings and chassis points.
- **Outstanding resistance to contamination from water, mud, and abrasive dust washout**, providing superior protection against common contaminants on construction sites by staying in place.
- **Low bleed and oil separation** to maintain clean operations and provide the lubrication needed for sensitive machinery, such as electric motors and control systems.
- **Reduces friction and wear under high-speed and moderate-load conditions**, prolonging component life and contributing to potential energy efficiency of auxiliary equipment.

CUSTOMER BENEFITS

- ✓ Ensures long-term protection and extended regreasing intervals for valuable construction assets, reducing costly downtime and labor on job sites.
- ✓ Prevents costly wear and corrosion on critical components exposed to extreme temperatures, water, mud, and abrasive contaminants.
- ✓ Potential to improve energy efficiency by reducing friction and operating temperatures in high-speed bearings, motors, and other demanding components.
- ✓ Maintains grease consistency under thermal and mechanical stress, preventing premature failure and leakage.
- ✓ Reliable performance in areas that experience a wide range of conditions such as high heat, extreme cold, and significant water/dust ingress.

APPLICATIONS

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

- Electric motor bearings, pumps, and fans on construction equipment (e.g., concrete mixers, asphalt pavers, portable crushing plants, generators).
- Conveyor systems and their idler bearings used in material handling on job sites.
- Bearings in crushers, screens, and vibratory equipment where ISO 100 viscosity is suitable for optimal performance.
- Light to moderately loaded pins and bushings on excavators, loaders, dozers, and other heavy equipment where ease of pumpability and cleanliness are priorities.
- General chassis lubrication points on construction vehicles and mobile equipment.
- Auxiliary systems and components on construction machinery that benefit from a high-performance synthetic grease with excellent water resistance and wide temperature range.
- Any application in the construction and road building sectors requiring a full synthetic grease with broad temperature range capability, excellent water resistance, and suitability for high speed conditions demanding lower viscosity and reduce friction.

PACKAGING:



Cartridges
14 oz.



Pails
35 lbs.



Kegs
120 lbs.



Drums
400 lbs.

*Custom and Bulk Packaging available upon request.

TYPICAL PROPERTIES

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 (D665B)	Pass (No Rust)	Pass (No Rust)	ASTM D665, Proc. B
Water Spray Off Test	<10%	<10%	ASTM D4049



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.

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 used lubricants. 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>