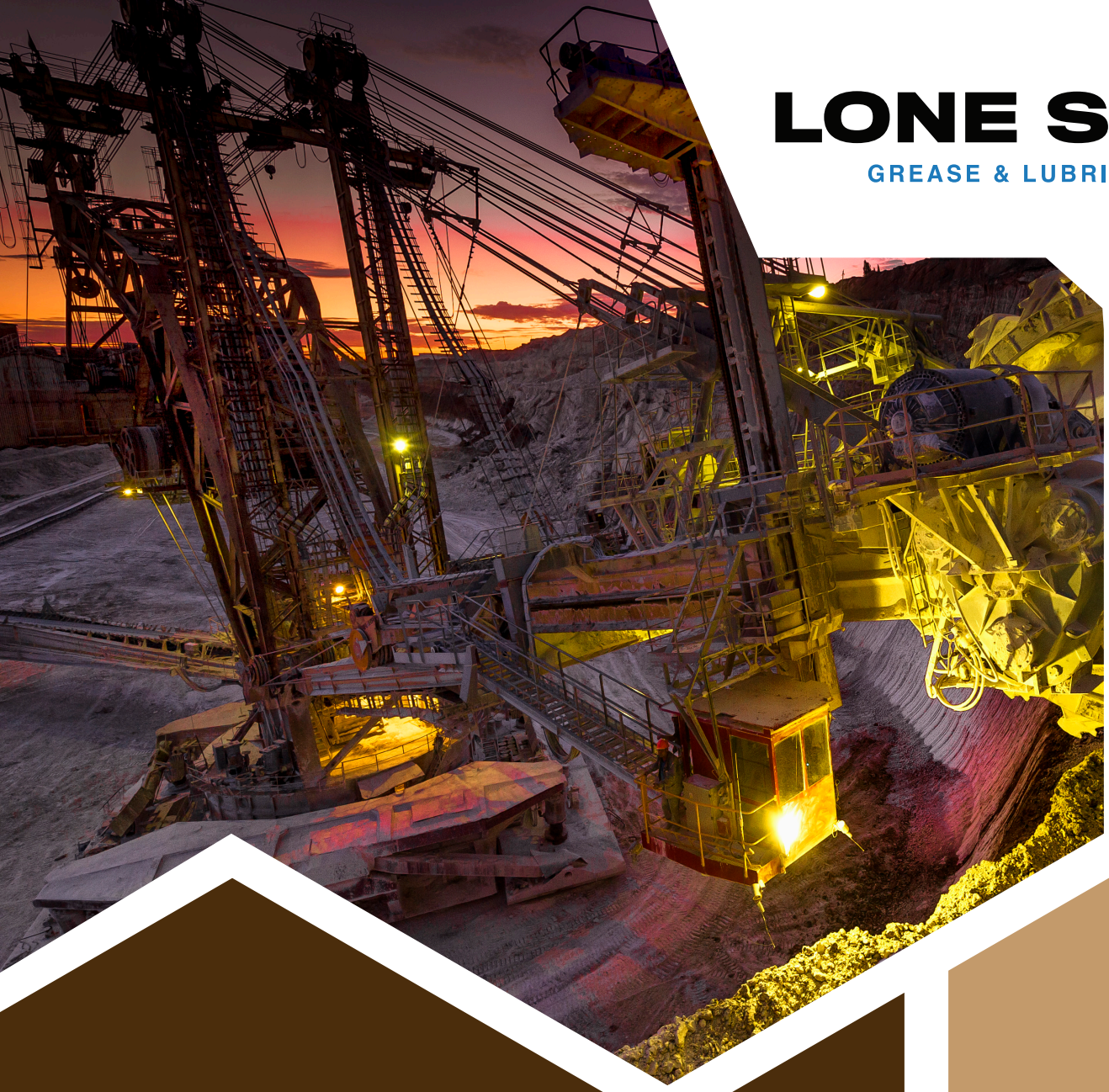
LONE STAR
GREASE & LUBRICANTS



LSG SYNTHETIC LITHIUM COMPLEX 100 GREASE NO. 1 & 2

High Performance PAO Synthetic Grease for Extreme Temperatures, High Speeds, and Corrosion Protection in Mining & Frack Operations

Superior Protection for High-Speed Bearings and General Lubrication in Demanding Mining and Drilling Environments.

LSG SYNTHETIC LITHIUM COMPLEX 220 GREASE NO. 1 & 2

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is engineered with advanced PAO synthetic base oils to meet the rigorous demands of the **mining and frack industry.** Designed for extended service life, optimal performance, and superior protection against harsh elements, this high-performance lubricant delivers outstanding stability for components exposed to extreme temperatures (both hot and cold), high speeds, moderate loads, water, mud, abrasive dust, and process fluids.

Utilizing a state-of-the-art synthetic base oil and a precision lithium complex thickener system, **LSG Synthetic Lithium Complex 100 Greases** resist thermal breakdown, water and mud intrusion, and corrosive elements. Its superior mechanical integrity and stable consistency make it ideal for use in high-speed bearings, electric motors, pumps, conveyor systems, and centralized lubrication systems across various mining, quarrying, and hydraulic fracturing processes.

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 the most challenging areas of a mine site or drilling pad. It maintains its structure and position in demanding environments, preventing leakage or component failure, even when subjected to intense heat, constant vibration, or frequent washdowns. Available in NLGI #1 and #2 grades for versatile applications, including pumpability in automated systems or robust adherence for general-purpose bearing lubrication.

Recommended for vital mining and frack machinery, **LSG Synthetic Lithium Complex 100 Grease No. 1 & 2** supports equipment reliability, lowers maintenance requirements, and contributes to safe, smooth, and efficient operations within open-pit and underground mines, drilling sites, and other critical areas.

KEY FEATURES

- **Fully PAO synthetic base** oil for exceptional thermal stability, wide operating temperature range (from extreme cold starts to high operating heat), for extended service life, designed for high-speed components in mining/frack environments.
- **Lithium complex thickener** for robust high-temperature performance and excellent mechanical stability under the shock and vibration typical of heavy machinery.
- NLGI #1 and #2 consistency for multipurpose application, offering excellent pumpability in centralized lubrication systems (important for cold weather) and firm adherence in general-purpose bearings and chassis points.
- Outstanding resistance to water, mud, abrasive dust ingress, and process fluid washout, providing superior protection against common contaminants in mining, quarrying, and drilling operations.
- Low bleed and oil separation to maintain clean operation and ensure reliable lubrication parts, such as electric motor bearings.
- Reduces friction and wear under high-speed and moderate-load conditions, prolonging component life and contributing to energy efficiency.

CUSTOMER BENEFITS

- ✔ Ensures long-term protection and extended regreasing intervals for valuable mining and frack assets, reducing costly downtime and labor in remote locations.
- ✔ Prevents costly wear and corrosion on critical components exposed to extreme temperatures, water, mud, and 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.
- ✔ Minimizes risk of leakage or contamination, supporting operational efficiency and safety standards in challenging environments.
- ✔ Reliable performance in areas with high heat, extreme cold, and significant water/dust ingress, crucial for continuous production.

APPLICATIONS

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

- **Electric motor bearings, pumps, and fans** on mining, quarrying, and hydraulic fracturing equipment.
- **Conveyor systems, idler bearings, and stackers.**
- **Crushers, screens, and vibratory equipment bearings** where ISO 100 viscosity is suitable.
- **Drilling rig components** such as blowers, auxiliary motors, and other high-speed or moderately loaded bearings.
- **Light to moderately loaded pins and bushings** on mobile earthmoving equipment.
- General lubrication points on heavy machinery in surface and underground mining.
- Any application in the **mining, quarrying, or oil & gas (upstream) sectors** requiring a premium synthetic grease with broad temperature capability, excellent water resistance, and suitability for higher speeds.

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
Water Spray Off Test	<10%	<10%	ASTM D4049

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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