



**LONE STAR**  
GREASE & LUBRICANTS



# LSG SYNTHETIC LITHIUM COMPLEX 220 GREASE NO. 1 & 2

Premium Full Synthetic Lithium Complex Grease for Extreme Loads, High Temperatures & Water Present in the Construction Industry.

Optimized Synthetic Grease for Uncompromising Performance in Demanding Heavy Equipment and Job Site Conditions.

# LSG SYNTHETIC LITHIUM COMPLEX 220 GREASE NO. 1 & 2

Is a full-synthetic, lithium complex grease specifically formulated for the most challenging high-load, high-temperature, and high-moisture environments typical of the construction industry.

Featuring a synthetic base oil with **ISO VG 220 viscosity**, this grease ensures robust lubricant film strength, exceptional thermal stability, and enhanced resistance to water, mud, abrasive dust, and severe shock loads encountered on job sites.

The availability of NLGI No. 1 and No. 2 consistency provides excellent mechanical stability and versatility, making it an ideal choice for **heavy construction machinery** where superior adhesion, load-carrying capacity, and corrosion resistance are critical.

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Whether exposed to intense operational heat, constant water or mud presence, heavy impact loads from excavation, or abrasive dirt and debris, **LSG Synthetic Lithium Complex 220** Greases offer long-lasting protection and significantly reduces maintenance cycles and maximizing equipment uptime in continuous operations.

This grease is meticulously designed to resist oxidation, water washout, and wear under extreme mechanical stress, making it an optimal choice for demanding applications across a wide range of applications such as pins and bushings, slew bearings, bucket linkages, kingpins, and other critical articulation points on heavy construction equipment that require superior performance and extended lubricant life.

## KEY FEATURES

- **Full synthetic base oil with ISO VG 220 viscosity** for robust lubricant film strength, excellent load-carrying capacity, and broad temperature performance, critical for heavy-duty construction machinery.
- **Lithium complex thickener** for high dropping point for superior thermal stability and maintaining consistency in extreme operating temperatures encountered on demanding job sites.
- **NLGI No. 1 and No. 2 consistency** for versatile application, ensuring excellent pumpability in centralized lubrication systems on large equipment and robust adherence for manual greasing points like pins and bushings.
- **Outstanding resistance to water, mud, and abrasive contaminants**, providing critical protection against common construction site elements like dirt, dust, and water ingress by staying in place to protect your equipment.
- **Exceptional anti-wear and extreme pressure (EP) properties**, safeguarding components under severe loads, high impact, and continuous heavy operation.
- **Suitable for extended drain intervals under severe conditions**, significantly reducing maintenance frequency and operational costs, maximizing equipment availability on site.

## CUSTOMER BENEFITS

- ✓ Provides long-lasting protection in extreme heat, severe cold, high humidity, and water-present environments, safeguarding valuable construction equipment.
- ✓ Reduces wear and friction on pins, bushings, bearings, and other heavily loaded components, enhancing efficiency and extending component lifespan.
- ✓ Delivers exceptional performance across broad temperature ranges, from extreme cold starts on site to high operating heat, ensuring reliable machinery function in varied climates.
- ✓ Highly compatible with centralized and manual lube delivery systems, simplifying application and ensuring thorough lubrication for construction fleets.
- ✓ The excellent adhesion features resists contamination from dirt, dust, mud, and water, minimizing internal damage to lubricated parts and improving equipment reliability.

## APPLICATIONS

**LSG Synthetic Lithium Complex 220 Grease No. 1 & 2** is recommended for:

- Heavy excavators, wheel loaders, dozers, articulated dump trucks, motor graders, and compaction equipment.
- Bucket pins and bushings, boom pivot points, slew rings, and chassis articulation points.
- Kingpins and fifth wheels on construction heavy haul trucks.
- Track rollers and idlers on tracked machinery.
- Drum bearings on asphalt pavers and soil compactors.
- Cranes, concrete pumps, and other heavy lifting or material handling equipment.
- All general lubrication points on construction machinery exposed to high loads, water, and contamination.
- Any heavy-duty application in the construction and road building sectors requiring an ISO VG 220 synthetic multi-purpose, water-resistant grease with high load-carrying wear protection capabilities.

# 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)	220	220	ASTM D445
Four Ball Weld Load (kg)	400	400	ASTM D2596
Four Ball Wear (mm)	0.45	0.45	ASTM D2266
Timken OK Load (lbs)	45	45	ASTM D2509
Water Washout, % @ 175°F	<2	<2	ASTM D1264
Rust Test	Pass	Pass	ASTM D1743
Color	Red	Red	Visual
Texture	Smooth / Tacky	Smooth / Tacky	Visual
Corrosion Protection	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>