



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

Full Synthetic Lithium Complex Grease for Extreme Loads, High & Low Temperatures and Water Resistance in Agriculture & Forestry.

Premium Synthetic Grease for Uncompromising Performance in Demanding Farm & Forest Environments.

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

**LONE STAR**  
GREASE & LUBRICANTS

Is a full-synthetic PAO, lithium complex multi-purpose grease specifically formulated for the most challenging environments involving high-loads, extreme-temperatures, and high-moisture environments typical of the **agriculture and forestry industry**.

Featuring an ISO VG 220 synthetic base oil, this grease ensures robust lubricant film formation, exceptional thermal stability, extreme low temperature performance, and enhanced resistance to water, mud, abrasive dust, crop residue, and severe shock loads encountered in fields and forests.

The availability of NLGI No. 1 and No. 2 makes it an ideal choice for different lubrication systems on agricultural and forestry machinery where superior adhesion, load-carrying capacity, and corrosion resistance are critical.

When exposed to intense operational heat, constant water or mud, heavy impact loads from tillage or logging, or abrasive dirt and debris, **LSG Synthetic Lithium Complex 220** offers long-lasting protection and can help you reduce your maintenance cycles, maximizing uptime during critical seasons.

This grease is meticulously designed to resist high temperature oxidation, water washout, lubricate under extreme cold and provide wear protection under extreme conditions—making it an optimal choice for demanding applications across wheel bearings, universal joints, heavily loaded pins and bushings, axles, and pivot points on farm and forest equipment that require superior performance and extended lubricant life.

## KEY FEATURES

- **Full synthetic ISO VG 220 base oil viscosity** for robust lubricant film formation, excellent load-carrying capacity, and broad temperature performance, for critical heavy-duty agricultural and forestry machinery operating in varied climates.
- **Lithium complex thickener** for superior thermal and mechanical stability, maintaining consistent performance in extreme operating temperatures encountered in fields and forests.
- **NLGI No. 1 and No. 2 consistency** for various applications, ensuring excellent pumpability in centralized lubrication systems on large equipment (e.g., tractors, combines, feller bunchers) and robust adherence for manual greasing points.
- **Outstanding resistance to water, mud, and abrasive washouts**, providing critical stay in place protection against common field and forest contaminants like dirt, dust, and moisture.
- **Exceptional anti-wear and extreme pressure (EP) properties**, safeguarding components under severe loads, ongoing system wear, and continuous operations typical of harvesting, tillage, and logging.
- **Potential to extend regreasing intervals under severe conditions**, significantly reducing maintenance frequency and operational costs during peak seasons and increasing equipment availability.

## CUSTOMER BENEFITS

- ✓ Provides long-lasting protection in extreme heat, severe cold, high humidity, and water/mud-present environments, safeguarding valuable farm and forestry equipment.
- ✓ Reduces gear wear, bearing wear and friction in enclosed systems and exposed components, enhancing efficiency and extending component lifespan.
- ✓ Extends bearing and component life under heavy loads, minimizing costly repairs and unplanned downtime during critical planting, harvesting, or logging periods.
- ✓ Delivers consistent performance across broad temperature ranges, from cold starts to high operating heat, ensuring reliable machinery function in varied climates and seasons.
- ✓ Compatible with centralized and manual lube delivery systems, ensuring thorough lubrication for agricultural and forestry fleets.
- ✓ Resists contamination from dirt, dust, mud, crop residue, and debris, minimizing internal damage to lubricated parts and improving equipment reliability.

## APPLICATIONS

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

- **Tractors:** Wheel bearings, universal joints, axles, pivot points, drivelines, and hitches.
- **Combines, Balers, Planters, Cultivators, Sprayers, and Tillage Equipment:** Heavily loaded bearings, pins, bushings, and pivot points on headers, threshing units, baler knotters, and other implements.
- **Forestry Equipment:** Feller bunchers, skidders, de-limbers, mulchers, log loaders, chippers, and their associated heavily loaded pins, bushings, and pivot points.
- **Irrigation Pivots:** Bearings and gearboxes where grease is specified.
- **Wheel hubs, U-joints, and chassis lubrication points** on all heavy agricultural and forestry vehicles.
- Any heavy-duty application in the agriculture and forestry sectors requiring an ISO VG 220 synthetic, water-resistant grease with high load-carrying 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
Water Spray Off Test	<10%	<10%	ASTM D4049
Corrosion Protection	Pass (No Rust)	Pass (No Rust)	ASTM D665, Proc. B



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>