



# LSG CALCIUM SULFONATE COMPLEX 220 GREASE NO. 2

Calcium Sulfonate Complex Grease for Steel Mill Applications

Extreme Protection Against Wear, Corrosion, and High Water Contamination

Manufacturing Environments.

# LSG CALCIUM SULFONATE COMPLEX 220 GREASE NO. 2

**LONE STAR**  
GREASE & LUBRICANTS

Is a high-performance, over-based calcium sulfonate complex grease engineered for versatile, heavy-duty applications within steel mills. Built to endure the harsh working environments of steel production, it offers unmatched film strength, excellent high-temperature performance, and superior resistance to water washout, rust, and wear.

**LSG Calcium Sulfonate Complex 220 Grease No. 2** delivers exceptional resistance to intense heat, oxidation, and mechanical breakdown, ensuring optimal performance in critical components like roll neck bearings, continuous caster segments, mill stand bearings, and other high loaded points. Its enhanced tackiness and mechanical stability help it stay in place under extreme shock loads, constant vibration, and the presence of water, steam, or contaminants, significantly reducing the risk of metal-to-metal contact and pre-mature wear in applications needing extreme protection.

**LSG Calcium Sulfonate Complex 220 Grease No. 2** has been refined to deliver exceptional mechanical stability, thermal resilience, and load-bearing capability.

## KEY FEATURES

- Calcium sulfonate complex thickener for superior EP and anti-wear performance, ideal for high loads and corrosion resistance.
- Exceptional water resistance — does not emulsify or wash out easily from high-pressure washdowns, or prolonged moisture exposure.
- Excellent mechanical stability and high dropping point, maintaining integrity under the demanding mechanical and thermal stress of field work.

## CUSTOMER BENEFITS

- ✓ Withstands heavy loads and water exposure in demanding steel mill manufacturing plants.
- ✓ Delivers excellent adhesion to metal surfaces, reducing grease loss from vibration and harsh conditions.
- ✓ Protects against rust and corrosion caused by moisture and high water exposure.
- ✓ Reduces downtime by maintaining integrity under severe mechanical and thermal stress, crucial for long workdays and production demands.
- ✓ Extends relubrication intervals, saving labor and material cost during busy plant operations.

Its proprietary formulation incorporates premium base oils, high performance polymers, and a unique calcium sulfonate thickener system—creating a robust lubricant that adheres securely to metal surfaces, even under vibration, heat, or mechanical shear from demanding manufacturing operations.

Unlike conventional lithium greases, this grease performs reliably at elevated temperatures and does not soften excessively, preventing loss of lubrication. Its water resistance is outstanding, making it the preferred choice in applications with frequent exposure to high-pressure water washdowns, or components exposed to high temperatures. Whether lubricating machinery in hot rolling mills, cold finishing lines, or continuous casting operations, this grease offers consistent and reliable protection during long hours of operation and high production cycles.

**LSG Calcium Sulfonate Complex 220 Grease No. 2** ensures optimal protection and extended equipment life across the wide spectrum of operating conditions, delivering confidence in uptime and significantly reduced maintenance costs during critical seasons.

- Rust and Corrosion Inhibited for long service in wet or corrosive environments, protecting against moisture and environmental contamination.
- NLGI No. 2 consistency ideal for general purpose and severe-duty use across steel mill operations.

## APPLICATIONS

**LSG Calcium Sulfonate Complex 220 Grease No. 2 is suitable for:**

- **Continuous Casters:** Roller bearings, segment bearings, and guides exposed to heat and water.
- **Hot Rolling Mills:** Mill stand bearings, roll neck bearings, screw-down mechanisms.
- **Cold Rolling Mills:** Bearings and general lubrication points.
- **Blast Furnace Equipment:** Bearings and mechanisms in high-temperature, dusty areas.
- **Overhead Cranes:** Wheel bearings, sheaves, and trolley systems.
- **Basic Oxygen Furnaces (BOF) / Electric Arc Furnaces (EAF):** Trunnion bearings and tilt mechanisms.
- **General lubrication of bearings, pins, bushings, and linkages throughout the steel production process.**
- Industrial components operating under high heat, heavy load, and continuous stress.
- **Centralized lubrication systems and enclosed gearboxes where softer greases are required.**

# PACKAGING:



\*Custom and Bulk Packaging available upon request.

## TYPICAL PROPERTIES

Property	Value	Test Method
NLGI Grade	2	ASTM D217
Worked Penetration (60X)	265–295	ASTM D217
Dropping Point (°C)	>260	ASTM D2265
Base Oil Viscosity @ 40°C (cSt)	220	ASTM D445
Four Ball Weld Load (kg)	500	ASTM D2596
Four Ball Wear (mm)	0.40	ASTM D2266
Timken OK Load (lbs)	60	ASTM D2509
Water Washout, % @ 175°F	<1	ASTM D1264
Rust Test	Pass	ASTM D1743
Color	Amber	Visual
Texture	Smooth / Tacky	Visual
Copper Corrosion	1B	ASTM D4048



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://lonestargrl.com>