



Atlas 600 Grease

Synthetic Lithium Complex Grease — Extreme Duty, High Temperature, NLGI GC-LB

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DESCRIPTION

TRIAX Atlas 600 Grease is an ultra-high-performance synthetic NLGI 2 grease built on a lithium complex thickener and high-viscosity synthetic base oils, engineered for the most demanding multi-purpose and severe-service applications. The formulation leverages a top-tier additive package — extreme-pressure agents, tackifiers, corrosion inhibitors, and oxidation inhibitors — to deliver exceptional load-carrying capacity, mechanical stability under heavy load and high torque, and superior corrosion protection against both fresh and salt water. Designed for an operational temperature range of -40 °F to 400 °F in continuous service, the synthetic chemistry handles extreme temperatures, water washout, and sustained mechanical shear, prevents metal-to-metal contact under heavy load, and delivers 2–3× the service life of conventional lithium soap greases.

PERFORMANCE HIGHLIGHTS

- 2–3× the service life of conventional lithium soap greases under equivalent operating conditions
- **-40 °F to 400 °F** continuous operating temperature range with **> 590 °F (310 °C)** dropping point for sustained high-temperature service in disc-brake wheel bearings
- **Outstanding EP performance** — Timken OK Load **80+ lbs** and Four-Ball Weld Point **600+ kgf** for severe-duty heavy-load applications in mining, agriculture, and construction equipment
- **Virtually waterproof** — less than 2% water washout in direct contact; passes both fresh and salt water corrosion tests (ASTM D1743 / D5969)
- **Exceptional adhesion and tackiness** keeps grease in place under high-speed rotation, vibration, and water exposure; near-zero oil separation
- **Extraordinary mechanical stability** under high loads and torque; minimal penetration change after 10,000 strokes (±15) and roll stability change of ±5
- **Excellent oxidation stability** — only 3 psi pressure drop in ASTM D942 oxidation testing, supporting long-term durability and extended re-greasing intervals
- **NLGI GC-LB classified** for automotive chassis and wheel bearing service; suitable for disc-brake wheel bearings and high-ambient-temperature applications

Performance properties verified per the ASTM and ISO test methods listed in the Typical Properties table.

SPECIFICATIONS & APPLICATIONS

TRIAX Atlas 600 Grease is purpose-built for the full range of automotive, industrial, marine, and heavy-duty off-road grease applications, including wheel bearings, U-joints, fifth-wheel couplings, roller bearings, pinions, suspension and ball joints, and extreme-pressure or continuously loaded components.

Classified and suitable for the following grease applications and service categories:

- NLGI GC-LB — automotive chassis and wheel bearing service
- Disc-brake wheel bearings (automotive and heavy-duty)
- U-joints, fifth-wheel couplings, and semi-truck driveline components
- Roller and ball bearings (automotive and industrial)
- Pinions, suspension components, and ball joints
- Extreme-pressure locations and continuously heavy-loaded components
- Severe-service mining, agriculture, and construction equipment
- Marine applications with fresh and salt water exposure
- High-ambient-temperature and elevated-operating-temperature service
- General-purpose multi-application grease for fleet and shop use

TYPICAL PROPERTIES

Parameter (Test Method)	Typical Value
NLGI Grade (ASTM D217)	2
Thickener Type	Lithium Complex
Base Oil Type	Synthetic
Base Oil Viscosity @ 40 °C, mm ² /s (ISO 3104)	180
Base Oil Viscosity @ 100 °C, mm ² /s (ISO 3104)	19.6
Cone Penetration, Worked, 0.1 mm (ISO 2137)	265–295
Dropping Point, °C (°F) (ISO 6299)	> 310 (> 590)
Timken OK Load, lbs (ASTM D2509)	80+
Four-Ball EP Weld Point, kgf (ASTM D2596)	600+

These are typical values. There may be small differences in actual values which are a normal part of production and do not affect product performance.