



Molyplex 500+

Multi-purpose Lithium Complex Grease with Moly

General Description

Molyplex 500+ is a premium, heavy duty multi-purpose lithium complex grease recommended for automotive, industrial and agricultural use. Molyplex 500+ contains 1.3% moly (Molybdenum Disulfide), one of the most effective dry film lubricating substances available. Moly is added to protect against extreme pressures and shock loading. This combination provides excellent performance and protection in all types of extreme pressure (EP) applications and shields against extreme pressures and heavy shock loading.

Molyplex 500+ is formulated with high quality base oils combined with a lithium complex thickener for high-temperature performance, and a carefully balanced additive package for superior rust control, oxidation control and wear protection. Its excellent low-temperature capabilities, water resistance and superior oxidation control allow for long service.

Molyplex 500+ qualifies for the highest performance level of automotive chassis and wheel-bearing grease, GC-LB.

Features and Benefits

- **Extreme Pressure Performance:** Extreme pressure properties and anti-wear additives reduce wear and maintenance costs.
- **Long Life:** Enhanced oxidative and thermal stability lead to longer grease life.
- **Moly Content:** Molyplex 500+ contains the Molybdenum Disulfide (“Moly”) as recommended by some manufacturers.
- **Shock Loading:** The moly additive exhibits excellent resistance to wear from shock loading and provides extra protection in heavily loaded components with slower moving, sliding or oscillating motions.
- **High Dropping Point:** A dropping point over 500°F demonstrates Molyplex 500+’s ability to handle high-temperatures.
- **Rust and Corrosion Protection:** Excellent rust and corrosion prevention leads to prolonged equipment life.
- **Seal Compatibility:** Excellent seal compatibility decreases degradation and swelling of seal materials.

Expect Superior Performance In

- High-temperature applications
- Moisture environments
- Heavy shock load conditions
- Chassis lubrication
- Wheel bearings

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Typical Applications

Molyplex 500+ is recommended for:

- NLGI Service GC-LB
- High-temperature operations
- Severe load applications
- Shock loading applications
- Equipment requiring medium moly content
- Slower and medium speed severe load applications

Typical Customers

- Agricultural Equipment Operators & Shops
- Truck Service Shops
- Auto Service Shops
- Mining Service Companies
- Construction Companies
- Industrial Equipment Operators

Typical Properties

Properties	Molyplex 500+ #2	Molyplex 500+ #1
NLGI Grade	2	1
NLGI Service Classification	GC-LB	GC-LB
Thickener	Lithium Complex	Lithium Complex
Molybdenum Disulfide, Weight %	1.3	1.3
Color	Grey	Grey
Penetration, 60 strokes (range)	265-295	310-340
Dropping Point, Minimum °F	>500	>500
Base Oil Viscosity, cSt @ 40°C	220	220
Base Oil Viscosity, cSt @ 100°C	18	18
Base Oil Viscosity Index	89	89
Base Oil Group	Mineral	Mineral
Timken Load	60	50
Four Ball Wear Scar	0.6 max	0.6 max
Four Ball EP Weld	400	400
Four Ball Load Wear Index	56	56
Rust Protection	Pass	Pass
Copper Corrosion	1b	1b
Oxidation Stability @100 hrs	<5	<5
Oil Separation % Separated	2	2
Water Washout % Loss @ 175°F	<5	<10
High Temp Wheel Bearing Life, hrs	>80	>80
Low Temperature Torque @ -40°F, N-m	<15.5	<15.5
Operating Temperature Range °F	-20 to 280°F	-20 to 280°F
Operating Temperature Range °C	-30 to 140°C	-30 to 140°C

The data can vary within given tolerances. Temperature range is given as a guideline only.

The typical properties listed reflect the general characteristics of the product, and are not manufacturing specifications. Normal batch-to-batch variations should be expected.

Health & Safety

A complete safety data sheet is available by calling 1-651-355-8438 or visit cenex.com/sds-library.