

Ultraplex[®] EP Greases

Premium Multi-Purpose Lithium Complex Grease

Ultraplex[®] EP is a premium multi-purpose grease formulated for heavy-duty applications where superior mechanical stability and excellent protection over a wide range of operating temperatures and conditions is required. The grease is available in four grades; **Ultraplex[®] EP 1 & 2, Moly EP 1 & Moly EP 2.**

Ultraplex[®] EP grease is specially formulated with extreme pressure additives, oxidation and corrosion inhibitors to provide superior performance over conventional multi-purpose lithium greases. Ultraplex greases offer higher temperature stability, superior adhesion properties, and extreme load carrying properties.

Conventional lithium greases have dropping points ranging from 150 °C to 170°C while lithium complex greases have dropping points in excess of 300°C.

Applications

Ultraplex[®] EP greases are recommended for a full range automotive and industrial applications, including:

- Highway transportation
- Construction
- Mining and mineral processing
- Farming
- Forestry operations
- Industrial plants

Ultraplex[®] EP Greases are particularly suited for use in mining & smelting operations, steel industry, and pulp & paper mills. It is specially recommended for any applications where heavy duty loads and wide temperatures are encountered.

Ultraplex[®] EP 1 and **EP 2** grades are approved as NLGI GC-LB greases for wheel bearing and chassis lubricant requirements, thus meeting the needs for automotive and heavy-duty transportation equipment. **Ultraplex[®] EP 1** can be used, with confidence, as the grease for

virtually every application on a tractor-trailer all year long. **Ultraplex[®] EP 1** and **2** are also recommended for lubrication of double spherical roller bearings, both gear and grid-type flexible couplings.

Ultraplex[®] Moly EP 1 and **EP 2** are designed specifically for heavy duty truck, resource, and construction applications. The high viscosity base oil in combination with extreme pressure additives plus the 3% solid lubricant molybdenum disulfide has the ability to minimize friction and reduce wear in applications where heavy loads and intermittent forces are encountered. Major manufacturers of heavy construction equipment (Caterpillar, Komatsu) recommend using grease containing 3% molybdenum disulfide. For enhanced performance, **Ultraplex[®] Moly EP** greases are recommended for applications such as sliding surfaces on trucks, off-highway vehicles, kingpins, shackle pins, hinge pins, fifth wheels, guide ways and telescoping booms.

Ultraplex[®] EP and **Moly EP** greases are approved by the Canadian Food Inspection Agency (CFIA) for use in registered plants and food processing establishments where no food contact may occur. They are listed as Category N1 General Lubricants.

Performance Benefits

- **Outstanding High Temperature Performance** - the EP 2 grade has a normal maximum continuous operating temperature of 180 °C, which is significantly higher than conventional soap greases.
- **Outstanding Mechanical Stability** - it resists hardening or softening while in service, thus providing long grease life and dependable component protection.
- **Excellent Load Carrying Ability** - these greases incorporate "state-of-the-art" extreme pressure and anti-wear additives to protect against heavy duty and shock

loading conditions. These additives minimize wear and damage to contact surfaces which translates into longer equipment life.

- **Wide Temperature Performance** - special formulation provides performance over a wide range of operating and dispensing temperatures. This feature allows for easier pumping than conventional lithium greases at low temperatures.
- **Excellent Resistance to Water Washout and Rust Protection** - provides “*stay in place*” performance under wet conditions. Designed to provide protection against rust and corrosion on machinery components.

Compatibility

Compatibility of different grease types can occasionally cause a problem. Incompatibility usually results in reduced consistency due to the breakdown of the grease structure, which alters the properties and performance features. Where demands on the grease are moderate (medium speeds, moderate loads, average temperatures), the performance of the grease mixture may still be adequate. Proper lubrication practice requires that the old grease be completely removed and the bearing cleaned. This is not always practical. Adequate removal of the old grease can be accomplished by purging repeatedly with new grease while the bearing is rotating.

Typical Properties

PROPERTIES	Ultraplex® EP		Ultraplex® Moly EP	
	1	2	1	2
NLGI Grade	1	2	1	2
Colour	Green	Green	Grey	Grey
Appearance	Smooth & Tacky	Smooth & Tacky	Smooth & Tacky	Smooth & Tacky
Dropping Point, °C	293	300	320	300
Normal Operating Range, °C	-30 to 175	-20 to 180	-25 to 175	-20 to 180
Minimum Gun Dispensing, °C	-25	-15	-20	-15
Worked Penetration 60 strokes @ 25°C	325	280	325	280
Base Oil Viscosity, cSt @ 40 °C	163	220	163	220
Mobility @ -18 °C, g/min	13.1	0.84	6.0	0.84
Timken OK Load, Kg	27	27	27	27
Four Ball EP				
- Weld Point, Kg	400	400	400	400
- Load Wear Index	61	65	61	65
Four Ball Wear				
- scar diameter, mm	0.45	0.40	0.45	0.40
Water Washout, % @ 79°C	8	5.2	8	5.2
Copper Corrosion	1b	1b	1b	1b
Oil Separation, % Loss	2.5	0.5	2.5	0.5

The values quoted are typical of normal production. They do not constitute a specification.

Package Availability	Ultraplex® EP		Ultraplex® Moly EP	
	1	2	1	2
180 Kg Drum	•	•		
55 Kg Keg	•	•	•	•
17 Kg Pail	•	•		•
400 g Tube	•	•	•	•

Due to continuing research and development, the information contained herein is subject to change without notification

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For Material Safety Data requests, production line information & technical assistance:
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www.ultramar.ca/lubricants/