

Technical Data Sheet:

Engol High Load Moly

Lithium Complex Grease EP2 (380cSt, Grey) is manufactured using highly refined mineral base oils which are carefully selected and then fortified with synthetic polymers, producing a highly shear stable foundation for the grease. This base oil foundation allows the product to perform in applications where medium to high loads are typical.

Lithium Complex Grease EP2 (380cSt, Grey) is manufactured using a lithium complex thickener resulting in a buttery appearance with excellent shear stability characteristics. In addition, this type of thickener is easy to pump and has an excellent resistance to heat and water. The optimal operating conditions for this grease in terms of temperature, is from -40 to 175 degrees celcius, however short periods of elevated temperatures can be tolerated without severe damage to the product.

Lithium Complex Grease EP2 (380cSt, Grey) is manufactured to a NLGI 2 grade resulting in a grease of medium to soft consistency. The product contains a blend of synthetic tackifiers, increasing it's ability to resist water and adherence with all surfaces.

Lithium Complex Grease EP2 (380cSt, Grey) is grey in colour and whose formulation includes a full treat of extreme pressure (EP) and corrosion preventative additives enabling the grease to meet or exceed internationally recognised performance standards. In addition this product is fortified with molybdenum disulfide making it suitable for boundary lubrication at high temperatures and/or heavy loads. In the case of accidental overheating, the presence of this material will still guarantee good lubrication and avoid any jamming or sticking.

Key Advantages

Thermal stability	Very good thermal stability allowing the grease to perform for short periods of time under extreme temperatures, regaining its original texture after cooling to ambient temperature.
Mechanical stability	Allows for long periods of storage or non-use in the application without and mechanical breakdown of the grease thickener (e.g. oil separation).
Water resistant	The thickener has very good natural attributes which displace and resist water ingress.
Heat resistant	Exhibits excellent resistance to heat.
Excellent reversibility	After being subject to high temperatures, the grease has excellent reversal characteristics allowing the re-absorption of oil released after periods of high temperature.

Typical Applications

Ball & roller bearings, conveyor bearings, plain bearings, slides - general industrial lubrication needs.
Multipurpose industrial applications with heavier loads and slower speeds. Sliding machine elements (cams and ways).
Construction equipment bearings, earthmoving plant, agricultural equipment, pins & bushes, heavy-duty applications experiencing slow speeds and heavy loads.
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For the lubrication of 5th wheels, king pins, tractor-trailer turnables, shackle pins, etc.

Mixing greases in a system can cause issues with thickener systems reacting with each other, changing the physical and chemical structure of the grease, causing an inability to hold or release base oil. Proper care must be taken to ensure compatibility when changing from one grease system to another. This grease is not compatible with greases making use of the following thickener types: barium, bentonite clay, aluminium complex and polyurea. There is a borderline compatibility with calcium and sodium thickeners. Care must be taken to ensure the application is properly cleaned before using this product if a borderline or non-compatible product has been used before.

Environment, Health and Safety

This product is classified under the OECD 301B Modified Sturm, ASTM D-5864, and CEC L-33-T-82 standards as being inherently biodegradable (i.e. 20-70% biodegradable in 28 days). Information is available on this product in the Material Safety Data Sheet (MSDS). Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. This product contains no PCB's (Polychlorinated Biphenyls).

Typical Technical Characteristics

DESCRIPTION	METHOD	UNITS	RESULT
NLGI Grade	ASTM D 217		2
Thickener Type			Lithium Complex
Colour	Visual		Grey
Penetration	ASTM D 217	0.1mm	280
Dropping Point	ASTM D 2265	°C	280
Viscosity of Oil @ 40°C	ASTM D 2983	cSt	380
4-Ball Wear Test Scar	ASTM D 2266	mm	0.5
4-Ball Weld Load	ASTM D 2596	kg	>400
Timken OK Load	ASTM D 2509	lb	65
Corrosion Prevention	ASTM D 1743		Pass
Copper Strip Corrosion	ASTM D 4048		1B
Appearance	Visual		Buttery, Tacky

The above are average values. Minor variations which do not affect product performance are to be expected in normal manufacturing.

Specifications

- ASTM D-5864 / CEC L-33-T-82
- KP3N-40 (DIN 51825)
- ISO-L-X-DDIB3 (ISO 6743-9)

Packaging

- 15kg Steel pails
- 18kg Plastic pails
- 50kg Steel drums
- 180kg Steel open top drums