

Technical Data Sheet:

Engol Grease EP3

Lithium Grease EP3 (120cSt, Tan) 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 light loads and medium speeds are typical.

Lithium Grease EP3 (120cSt, Tan) is manufactured using a lithium thickener resulting in a buttery appearance with excellent shear stability characteristics. In addition, this type of thickener is easy to pump & has an excellent resistance to heat and water. The optimal operating conditions for this grease in terms of temperature, is from -40 to 150 degrees celcius, however short periods of elevated temperatures can be tolerated without severe damage to the product.

Lithium Grease EP3 (120cSt, Tan) is manufactured to a NLGI 3 grade resulting in a grease of medium consistency. The product contains a blend of synthetic tackifiers, increasing it's ability to resist water and adherence with all surfaces.

Lithium Grease EP3 (120cSt, Tan) is tan 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.

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

Constant velocity joints (CV), prop-shafts, universal / ball joints, pivot pins, cams, screws, splined shafts, slides, flexible joints, etc.

Chassis lubrication, hinges, winding mechanisms, suspension, steering linkage systems, etc.

Ball & roller bearings, conveyor bearings, plain bearings, slides - general industrial lubrication needs.

General purpose lubrication of all automotive and agricultural equipment.

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).

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: aluminium complex, barium, bentonite clay, calcium complex and polyurea. There is a borderline compatibility 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		3
Thickener Type			Lithium
Colour	Visual		Tan
Penetration	ASTM D 217	0.1mm	235
Dropping Point	ASTM D 2265	°C	190
Viscosity of Oil @ 40°C	ASTM D 2983	cSt	120
4-Ball Wear Test Scar	ASTM D 2266	mm	0.5
4-Ball Weld Load	ASTM D 2596	kg	315
Timken OK Load	ASTM D 2509	lb	45
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