

Technical Data Sheet:

Engol Grease High Load

Engol Grease High Load 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 heavy duty loads are typical.

Engol Grease High Load is manufactured using a lithium calcium thickener resulting in a buttery appearance with excellent shear stability characteristics. In addition, this type of thickener is easily pumped, has a moderate resistance to heat and exhibits excellent water resistance. The optimal operating conditions for this grease in terms of temperature, is from -30 to 130 degrees celcius, however short periods of elevated temperatures can be tolerated without severe damage to the product. Lithium Calcium Grease EP2 (430cSt, 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.

Engol Grease High Load 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 both molybdenum disulfide and graphite making it suitable for boundary lubrication at high temperatures and/or heavy loads. In the case of accidental overheating, the presence of these materials 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 any mechanical breakdown of the grease thickener (eg. oil separation).
Anti-corrosive properties:	Exhibits very good to excellent anti-rust and anti-corrosion properties.
Water resistant:	The thickener has very good natural attributes which displace and resist water ingress.
Heat resistant:	Exhibits excellent resistance to heat.

Typical Applications:

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

Light automotive and trailer wheel bearings. Good corrosion protection, thermally and mechanically stable, specially suitable for wheel bearings and hub units in cars and light trailers.

Ball & roller bearings, conveyor bearings, plain bearings, slides - general industrial lubrication needs. General purpose lubrication of all automotive and agricultural equipment.

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.

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 Calcium
Colour	Visual		Grey
Appearance	Visual		Buttery, Tacky
Penetration	ASTM D 217	0.1mm	280
Dropping Point	ASTM D 2265	°C	190
Viscosity of Oil @ 40°C	ASTM D 2983	cSt	430
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	60
Corrosion Prevention	ASTM D 1743		Pass
Copper Strip Corrosion	ASTM D 4048		1B

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
 KP2M-30 (DIN 51825)
 ISO-L-X-CCIB2 (ISO 6743-9)

Packaging:

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