

# DELO® HEAVY DUTY MOLY 3% EP

## PRODUCT DESCRIPTION

Delo® Heavy Duty Moly 3% EP is designed for plain and anti-friction bearing applications operating under high stress/high load conditions, coupled with high ambient temperatures typically found in heavy duty off-road applications.

## CUSTOMER BENEFITS

Delo Heavy Duty Moly 3% EP delivers value for the offroad construction and mining industries by offering:

- **Corrosion and wear protection**
- **Water resistance** in both submerged and direct pressure spray situations
- **Shock load protection**
- **Performance across a wide temperature range** this unique Heavy Duty EP product delivers when needed most.

## FEATURES

Delo Heavy Duty Moly 3% EP grease is a multipurpose, high performance product specially formulated for plain and anti-friction bearing applications operating under high stress/high load conditions, coupled with high ambient temperatures typically found in heavy duty off-road applications. Developed as a true contractor's product, this grease was specifically designed to lubricate and protect equipment that is subjected to demanding conditions.



## DELO® HEAVY DUTY MOLY 3% GREASE

The product features of 3% moly is sought after by many OEMs in off-road applications. It is formulated using highly refined base oils in a lithium complex thickener system. It also features excellent corrosion resistance, wear control, and shock loading. It provides very good protection over a wide temperature range and the lithium complex thickener elevates the dropping point to approximately 265°C making it excellent for use in applications where sustained high operating temperatures are common.

## APPLICATIONS

Delo Heavy Duty Moly 3% EP grease is not intended for use in high-speed bearing applications such as those found in electric motors due to the greases' high viscosity base stocks formulation. When in doubt, please consult your Caltex representative or OEM maintenance manual for application parameters when considering a switch to this grease.

Delo Heavy Duty Moly 3% EP grease is ideal for a wide variety of Off-Road Construction applications across several industries:

• **Off-Road Construction** — This grease displays outstanding water washout and spray-off resistance properties in wet, off-road environments and offers excellent shock load extreme pressure (EP) protection. Unique additive technology of this product makes it tenacious at adhering to metal surfaces found in this industry while protecting these vital components from rust and corrosion.

Applications for the product include most types of heavy-duty earth moving machinery, including tractors (dozers), excavators, backhoes, shovels, high lifts, articulated loaders, haul trucks, tri-axle dumps and more. It is excellent for heavily loaded machine implement pins and bushings, and other applications operating in severe, high shockload environments where metal to metal contact wear often occurs. Since Delo Heavy Duty Moly EP contains 3% moly it is also able to meet wide off-road OEM application ranges using one common product, thus reducing field inventory.

• **Surface and Underground Mining and Quarry** — Applications appropriate for these greases include those found above plus pins and bushings on buckets, loaders, shovels and continuous miners, shaker screens, crushers, and conveyors.

**Agriculture** — Delo Heavy Duty Moly 3% will serve as an excellent multipurpose heavy duty lubricant for both general and industrial farm and agricultural use, from medium to heavy duty front steer and articulated tractors and loaders to larger new rubber tracked units. It will work well in many applications including three point hitches, high lift pins and bushings and other heavy duty farm related industrial machinery.

• **Heavy Duty On/Off Highway Road Construction and Maintenance Vehicles** — Delo Heavy Duty Moly 3% is well suited for greasing on/off road heavy duty tri-axle dump trucks and cement mixers that also find their way off road as much as on. It is an excellent choice for king pins, bushing and bucket pins, 5<sup>th</sup> wheels and other severe duty applications found on these types of vehicles. It is also ideally suited for on highway heavy duty applications as well as airport fixed ground operation snow and ice removal equipment, such as ploughs, blowers and salt spreaders when the preferred method

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of lubrication is by manual application. These products were formulated using a new rust inhibitor package tested with 0.5% mixtures of magnesium chloride and calcium chloride road de-icers and were proven to reduce rust and corrosion when these corrosive materials were present.

Delo Heavy Duty Moly 3% meets the requirements of the Mack MG-C grease specification. It also meets Caterpillar recommendations for greases containing 3% molybdenum disulphide.

## TYPICAL TEST DATA

	<b>Delo HD Moly 3% EP 2</b>
<i>Product Number</i>	540730
<i>SDS Number</i>	ZE0000501
Molybdenum Disulphide content %	3
Operating Temperature °C Minimum <sup>a</sup> Maximum <sup>b</sup>	-26 177
Penetration, at 25°C Worked (60 strokes)	280
Dropping Point, °C	265
Four Ball Weld Point, kg Wear, scar Diameter, mm	500 0.43
Timken OK Load, lb	70
Load Wear Index, kg	75
Bearing Water Washout, Wt % Loss at 175°F	4
Water Spray-off, % at 100°F	15
EMCOR Dynamic Bearing Rust, 10% Synthetic Sea Water, ASTM D6138	0,0
Lincoln Ventmeter, psig at 30 s, at 75°F 30°F 0°F -22°F	510 1700 1800 †
DIN 51805, psi 20°C 0°C -20°C -30°C	2 4 19 Max pressure
Copper Corrosion	2b
Thickener, % Type	13.0 Lithium Complex
ISO Viscosity Grade Base Oil Equivalent	320

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

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	Delo HD Moly 3% EP 2
Viscosity Kinematic* cSt at 40°C cSt at 100°C	383 25
Viscosity Index	85
Oil Separation, wt %	2
Flash Point, °C*	274
Texture	Stringy
Colour	Grey/ Black

- a Minimum operating temperature is the lowest temperature at which a grease, already in place, could be expected to provide lubrication. Most greases cannot be pumped at these minimum temperatures.
- b Maximum operating temperature is the highest temperature at which the grease could be used with frequent (daily) relubrication.
- † Too stiff this temperature to pump through device.
- \* Determined on mineral oil extracted by vacuum filtration.

Minor variations in product typical test data are to be expected in normal manufacturing.

Product manufactured in the USA.

A Chevron company product.

Data sheet prepared by Caltex Lubricants, New Zealand. For further information Phone 0800 733 835 and choose option 3 or email [lubricants@z.co.nz](mailto:lubricants@z.co.nz) .

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