

## Spheerol™ LMM

Bearing grease

### Description

Castrol Spheerol™ LMM is a multi-purpose lithium grease containing molybdenum disulphide solid lubricant to enhance its load carrying properties under conditions of high or shock loading or to prevent scuffing or fretting. It contains oxidation and corrosion inhibitors, anti-wear additives, has good mechanical stability and can be used in the presence of moisture.

### Application

Spheerol LMM grease is suitable for most types of bearing and a wide range of other industrial applications, which require a molybdenum disulphide grease, including grease lubricated gears. Spheerol LMM may be used in plain and rolling element bearings, including heavily loaded bearings at low and medium speeds, and those subject to shock loading and excessive vibrations. The incorporation of solid lubricant in Spheerol LMM greases makes this grease particularly suited for the lubrication of reciprocating and sliding motion elements, where the prevention of scuffing and fretting is desirable. Typical applications include pivot pins, cams, screws, splined shafts, slides, flexible joints (ball, universal, CV joints etc). It is also useful for the lubrication of chains, swivels and shackles to prevent scuffing.

### Advantages

- Good load carrying capacity – protects equipment against extreme loading and helps prevent damage caused by shock loading and excessive vibration
- Resistance to scuffing and fretting – provides protection against fretting that can occur on splined shafts, pivot pins and other parts subject to reciprocating and sliding motion
- Good water resistance – the grease film remains on the surface even in the presence of water
- Resistant to copper and steel corrosion – helps prevent rust and oxidation on metal surfaces
- High mechanical stability – the grease keeps its consistency in service ensuring long term protection
- Good adhesion – continuous lubrication and reduced consumption as film stays between lubricated surfaces

## Typical Characteristics

Name	Method	Units	Spheerol LMM
Thickener type	-	-	Lithium
Base oil type	-	-	Mineral
Consistency	ASTM D217	NLGI	2
Colour	Visual	-	Dark grey/ black
Base oil viscosity @ 40°C	ASTM D445	mm <sup>2</sup> /s	150-200
Dropping point	IP396	°C	180 min
Worked penetration 60 strokes @ 25°C	ASTM D217	0.1 mm	265-295
Working stability 60/100,000 strokes @ 25°C	ASTM D217	0.1 mm	30 max
Oil separation, 168 hours @ 40°C (%)	IP121 DIN 51817	%wt	6 max
Anti Rust Performacne (Emcor)	IP220	Rating	1/1 max
Copper corrosion, 24 hours @ 100°C	ASTM D4048	Rating	1 b max
4 ball weld point	ASTM D2596	Kg	250 min
Flow pressure @ -20°C	DIN 51805	hPa	<1400

Subject to usual manufacturing tolerances.

## Additional Information

In order to minimise potential incompatibilities when converting to a new grease, all previous lubricant should be removed as much as possible prior to operation. During initial operation, relubrication intervals should be monitored closely to ensure all previous lubricant is purged.

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