

Castrol Molub-Alloy 6080 Range

High-performance Grease

Description

Castrol Molub-Alloy™ 6080 grease is a High Performance multi-service lubricants designed to give outstanding performance in a wide variety of applications. It may be used in either journal or antifriction bearings in the most demanding industrial applications under extreme environmental conditions.

Molub-Alloy 6080 is manufactured from the highest quality petroleum oil and thickened with a unique calcium complex sulphonate unsurpassed for mechanical shear stability.

Molub-Alloy 6080 grease is compounded with chemical additives for EP characteristics and with select Molub-Alloy lubricating additives for thin-film, high-pressure anti-wear protection. These additives are dispersed evenly throughout the grease and provide superior protection against component wear, resulting in long service life.

It is also inhibited against high temperature oxidation and corrosion, and blended and compounded to withstand the heavy loads and shock loading commonly found in the steel/primary metals, construction, mining, and forest products industries.

The lubricating solids work synergistically with chemical anti-wear and extreme pressure (EP) additives to reduce contact temperatures and wear whilst providing the ultimate in extreme pressure and shock load anti-weld protection.

Application

Typical applications for Molub-Alloy 6080 grease is bearings that are under heavy water or aggressive process fluid contamination.

Advantages

- The load carrying and anti-wear capabilities of Molub-Alloy 6080 exceed conventional complex greases.
- Excellent friction reduction characteristics due to Molub-Alloy solid lubricants – easier start-up, reduced heat, and reduced energy leading to longer bearing life.
- Molub-Alloy 6080 multi-service greases offer excellent oxidation resistance and resist washing out, even under adverse water contamination. This product has been designed to work with aggressive process waters.
- Reduced friction due to the effect of the Molub-Alloy additives is most evident under boundary and mixed-film lubrication conditions. This benefit is most pronounced where frequent start up, slow speeds or high and unexpected heavy loads are encountered.
- Overall savings are derived from the above and result from less labor and downtime, smoother, more efficient operation with longer parts life and extended lubrication cycles.

Typical Characteristics

Name	Method	Units	typical data
Colour	Visual	-	Dark grey
Thickener Type	-	-	Calcium Sulphonate Complex
Base Oil Type	-	-	Mineral oil
NLGI Grade	-	-	1.5
Worked Penetration, 60 strokes @ 25°C/77°F	ISO 2137 / ASTM D217	0.1 mm	301
Worked Penetration, 100,000 Strokes @ 25°C/77°F, Pen. Change From 60 Strokes	ISO 2137 / ASTM D217	0.1 mm	17
Dropping Point	ISO 2176 / ASTM D2265	°C	295
Base Oil Viscosity, ISO Grade	ISO 3104 / ASTM D445	-	ISO 460
Emcor, distilled water	DIN 51802	Rating	0 / 0
Copper Corrosion, 24 hrs, 100°C/ 212°F	ISO 2160 / ASTM D4048	Rating	1a
Four Ball Wear Test, Scar Diameter	ASTM D 2266	mm	0.45
Four Ball EP test, Weld Load	ASTM D 2596	kg	620
Water Washout: @ 79°C/175°F	ASTM D1264	% Loss	1.1
Water Spray off: @ 38°C/100°F	ASTM D4049	% Loss	30
Roll Stability, 2 hours, 25°C/77°F, Penetration Change	ASTM D1831	% Change	0.5
Roll Stability, 2 hours, 25°C/77°F, 10% distilled water, Penetration Change	ASTM D1831	% Change	2
Oil Separation, 168 hours, 40°C	IP 121 / DIN 51817	%	0.1
Flow Pressure at -20 °C	DIN 51805	hPa	535

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

Additional Information

- At temperatures above 121°C/250°F, regular reapplications of MA6080 must be considered.
- At temperatures near 177°C/350°F, weekly reapplications of MA6080 are suggested.
- For continuous service near 204°C/400°F, reapply MA6080 daily or once each shift.
- Molub-Alloy MA6080 greases can be used above 232°C/450°F. However, frequent reapplication of grease is necessary to prevent deterioration of the petroleum base oil. Reapply before the grease in the bearing stiffens.
- 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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