



Molub-Alloy 6040/460-1 1/2

Heavy-duty greases

Description

Molub-Alloy™ 6040 grease is based on a unique calcium-complex sulphonate thickener containing premium petroleum base oils with select additives for extreme pressure characteristics and thin-film, high-pressure, anti-wear protection.

Thickeners using calcium sulphonate have inherent anti-oxidant and rust-inhibiting properties, along with high dropping points and extreme pressure (EP) /anti-wear characteristics. The use of this complex thickener offers advantages over other organic grease thickeners such as polyurea. It also works better than inorganics like clay or silica, and simple or complex soaps such as lithium or aluminium.

Application

Molub-Alloy 6040 is a high performance multi-purpose grease that operates effectively in all bearings.

It exhibits excellent adhesive and cohesive characteristics. The extreme pressure properties are most evident in applications with frequent start-ups, slow speeds or where high or unexpected heavy loads are commonplace. Molub-Alloy 6040 grease is particularly suitable in applications with extreme conditions such as Curved tooth couplings transmitting high horsepower.

Advantages

- Exceptional water resistance – the film coating stays on the surface even in the presence of water.
- Advanced EP and anti-wear properties – protects equipment against extreme loading and helps minimise bearing wear.
- Superior mechanical stability – helps reduce product consumption in high volume applications.
- High dropping point – withstands breakdown in high temperature applications.
- Resists centrifugal fling out due to its adhesive and cohesive characteristics.
- Resists oxidation and prevents corrosive activity on bearings in aggressive environments.
- Suitable for applications utilising both ferrous and non-ferrous metallurgies.

Typical Characteristics

Name	Method	Units	Molub-Alloy 6040/460-1 1/2
Appearance	Visual		Dark Amber
Thickener Type			Calcium-complex Sulphonate
Base Oil Type			Mineral Oil
NLGI Grade			1½
Density @ 20°C	ASTM D1475	g/ml	0.951
Worked Penetration, 60 Strokes @ 25°C	ISO 2137 ASTM D217	0.1 mm	290 - 320
Worked Penetration, 100,000 Strokes @ 25°C, Change from 60 Strokes	ISO 2137 ASTM D217	0.1 mm	-3
Dropping Point	ISO 2176 ASTM D2265	°C	260+
Base Oil Viscosity @ 40°C	ISO 3104 ASTM D445	mm ² /s	460
Base Oil Viscosity @ 100°C	ISO 3104 ASTM D445	mm ² /s	30.1
Rust Test, 48hrs @ 52°C	ASTM D 1743	Rating	Pass
Copper Corrosion, 24hrs @ 100°C	ISO 2160 ASTM D4048	Rating	1b
Four Ball Wear Test (1hr, 40kg, 1200rpm, 75°C), Scar Diameter	ASTM D2266	mm	0.4
Four Ball EP Test, Weld Load	ASTM D2596	kg	500
Timken EP Test, OK Load	ASTM D2509 IP 326	kgs/lbs	65 / 29.5
Water Washout @ 79°C	ASTM D1264	% loss	1.8
Bomb Oxidation @ 99°C, Pressure Drop @ 100h	ASTM D942 DIN 51808	kPa/psi	45 / 6.5
Roll Stability, 2hrs, 25°C, Penetration Change	ASTM D1831	% change	0
Oil Separation, 24hrs, 0.25 Psi @ 25°C	ASTM D1742	%	0
ISO Classification	ISO 6743 / 9		L - XBEBB 1.5

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

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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