Product Data

Molub-Alloy 6040

Calcium Complex Grease

Description

Castrol Molub-Alloy™ 6040 grease is based on a unique calcium-complex sulfonate thickener containing premium petroleum base oils with select additives for extreme pressure characteristics.

Greases using calcium sulfonate thickeners 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 aluminium bentonites or fumed silica.

Application

Molub-Alloy 6040 is a high-performance, multi-purpose grease that exhibits excellent adhesive and cohesive characteristics, anti wear capabilities and extreme pressure properties which make it suitable for use in:

- Plain / journal or anti-friction bearings in applications operating under extreme environmental conditions such as in rolling mills and continuous casters in steel mill plants, and in forming and press section in paper mills,
- Applications with frequent start-ups, low speeds, or where high loads and shock loading are commonplace, such as in mining heavy duty equipment
- Low speed highly loaded coupling systems used extensively in metal rolling mill applications and in high horsepower transmitting such as in curved tooth couplings.
- Applications where resistance to aggressive process waters and protection against corrosive environments is highly demanded

Advantages

- Exceptional water resistance – the film coating stays on the surface in the presence of water – including hot and chemically active process waters
- Advanced EP and anti-wear properties - protec s equipment against extreme loading and helps minimize bearing wear
- Superior mechanical stability – helps reduce product consumption in high volume applications
- High dropping point – withstands breakdown in high temperature applications
- Resists oxidation and prevents corrosive activity on bearings in aggressive process water environments
- Suitable for applications utilizing both ferrous or non—ferrous metallurgies

Typical Characteristics

Name	Method	Units	6040/150-2	6040/460-1.5
Consistency	ISO 2137 / ASTM D217	NLGI Grade	2	1.5
ISO Viscosity	-	-	150	460
Colour	Visual	-	Amber	Amber
Thickener type	-	-	Calcium Sulfonate	Calcium Sulfonate
Worked Penetration (60 strokes @ 25°C / 77°F)	ISO 2137 / ASTM D217	0.1 mm	290	295
Worked Penetration (100,000 strokes @ 25°C / 77°F) - change from 60 strokes	ISO 2137 / ASTM D217	0.1 mm	+/- 10	+/- 10
Dropping point	ASTM D2265	°C/°F	260/500	288/550
Base Oil Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm^2/s	150	460
Base Oil Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm^2/s	14.4	30.1
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	260/500	288/550
Timken OK Load	ASTM D2509	kg / lbs	22.7 / 50	22.7 / 50
Water Wash-out	ISO 11009 / ASTM D1264	% wt loss	3.2	1.8
Four Ball Weld Load test - Weld Point	ISO 11008 / ASTM D2596	kgf	400	400
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1800 rpm / 1 hr)	ISO 51350 / ASTM D2266	mm	0.55	0.6
Copper Corrosion (24 hrs,100°C / 212°F)	ASTM D4048	Rating	1b	1b
Oil Separation (24 hrs, 0.25 psi, 25°C / 77°F)	ASTM D1742	% wt	2.0	0
Roll Stability test - Shear Stability	ASTM D1831	0.1 mm	+/- 10	+/- 10
Oxidation Stability - Rotating Pressure Vessel test	ASTM D942 / DIN 51808	pressure drop psi	6.5	6.5

subject to usual manufacturing tolerances.

Additional Information

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

Castrol Industrial, Technology Centre , Whitchurch Hill , Pangbourne , Reading , RG8 7QR , United Kingdom

http://msdspds.castrol.com