



Product Data

Castrol Molub-Alloy 6780

Bearing Lubricant

Description

Castrol Molub-Alloy® 6780 is a wide temperature bearing grease designed for year-round service in both bushings and antifriction bearings. Castrol Molub-Alloy 6780 matches the tough service requirements of mining applications, including bearings and bushings of excavating equipment subjected to broad service temperature ranges as well as off-road mobile equipment general lubrication.

Castrol Molub-Alloy 6780 was developed with emphasis on the following performance characteristics:

- Broad service temperature application range for year-round service.
- Low temperature pumpability
- Work-shear stability to be effective in severe mining and off-road mobile equipment applications.
- Resistance to the washing action of water.

Molub-Alloy 6780 contains a proprietary blend of solid lubricants that includes 5% molybdenum disulfide (<10 micron) together with extreme pressure (EP) chemical additives which work synergistically to provide the high degree of anti-wear and EP characteristics required in heavy duty off-road service.

To provide corrosion protection in wet seasons and protection from aging in long service at high temperatures, Molub-Alloy 6780 is further fortified with effective rust and oxidation inhibitors.

Applications

Molub-Alloy 6780 may be used for bushings and bearings of draglines, shovels, drills, mobile equipment, and various mill applications. It is certified to Bucyrus International SD 4711 multi-purpose bearing grease specification.

Molub-Alloy 6780 is recommended for use in an ambient temperature operating range of -40°F (-40°C) to 150°F (60°C).

Advantages

- Exceptional water resistance – coating film stays on the surface even in presence of water
- Excellent EP and anti-wear properties – easier startup and protects equipment against extreme/shock loading and helps minimize bearing component wear and hence extends equipment life
- Excellent mechanical stability and adhesion – grease keeps its consistency in service ensuring long term protection and reduced consumption as film stays between lubricated surfaces
- Outstanding oxidation/thermal stability – provides reliable performance and extended lubricant life
- Excellent pumpability– remains pumpable down to -40°F(-40°C)
- Formulated to address environmental concerns - it is free of antimony, barium, lead, and zinc

Typical Technical Characteristics

	Unit	Test Method	Value
NLGI Grade	-	ASTM D 217	1
Thickener Type	-	-	Lithium
Base Oil Type	-	-	Mineral/PAO Blend
Base Oil Viscosity @ 40°C	cSt	ASTM D 445	130
Dropping Point	°C	ASTM D 2265	201
Four ball wear, scar diameter	mm	ASTM D 2266	0.43
Four Ball EP Load Wear Index Weld Load	kg	ASTM D 2596	67.9 400
Timken OK Load	kg	ASTM D 2509	23
Roll Stability	% change	ASTM D 1831	None
Water Washout @ 38°C @ 80°C	% loss	ASTM D 1264	3.9 7.8
Pumpability by Lincoln Ventmeter @ 0°C	psi	US Steel Method	520

* subject to usual manufacturing tolerances

Additional Information

For exceptionally cold ambient conditions below -40°C, where pumping lines are excessively long, contain numerous turns, or are restrictive, heating of the product may be necessary. For information or assistance regarding these applications, please consult you local sales representative.

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