



Product Data

Castrol Molub-Alloy[®] 6780

Bearing Lubricant

Castrol Molub-Alloy 6780 Bearing Lubricant is a wide temperature bearing grease designed for year-round service in both bushings and antifriction bearings. **Castrol Molub-Alloy 6780 Bearing Lubricant** 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 Bearing Lubricant was developed with emphasis on the following performance characteristics:

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

Description

Castrol Molub-Alloy 6780 Bearing Lubricant consists of premium petroleum and synthetic fluids blended to ISO 68 Viscosity Grade and thickened with a Lithium (12-OH) soap. For ease of pumping in cold climates, 6780 is formulated to NLGI Grade Number 1.

Castrol Molub-Alloy 6780 Bearing Lubricant contains a proprietary blend of solid lubricants that includes 5% molybdenum disulfide together with extreme pressure (EP) chemical additives which work synergistically to provide the high degree of antiwear 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, 6780 is further fortified with effective rust and oxidation inhibitors.

Usage

Castrol Molub-Alloy 6780 Bearing Lubricant may be used for bushings and bearings of draglines, shovels, drills, mobile equipment, and various mill applications.

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

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Advantages

The use of **Castrol Molub-Alloy 6780 Bearing Lubricant** as a year-round lubricant can reduce product inventory and minimize risk of misapplication.

The special base fluid properties provide a tough lubricating film over a broad temperature range.

Resistance to water wash and highly effective rust and corrosion inhibitors assure that 6780 will be effective at protecting and lubricating those outside applications exposed to inclement weather such as rain, sleet, and snow.

Notes

For exceptionally cold ambient conditions below -40°F (-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, consult your local Castrol Performance Lubricants' Engineering Department.

For specific terms, conditions, warranty, and availability, refer to Castrol Performance Lubricants' Price List in effect at time of purchase.



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Typical Characteristics

NLGI Grade	1
Thickener Type	Lithium (12-OH)
Specific Gravity, ASTM D1298 @ 60°C/15.6°F	0.93
Worked Penetration, ASTM D217, mm/10	310-340
Dropping Point, ASTM D2265, °C/°F	195°C / 383°F
Base Fluid Properties:	
Viscosity, ASTM D445, D2161	
@40°C/104°F, cSt/SUS	68/316
@98.9°C/210°F, cSt/SUS	12/66
Viscosity Index, ASTM D2270	170
Four Ball Wear, Test (1 hr., 40kg, 1800 rpm, 75°C/167°F)	
Scar Diameter, mm, ASTM D 2266	0.50
Four Ball Weld, ASTM D2596, kg	500
Load Wear Index (LWI)	64.1
Rust Prevention Properties,	
ASTM D1743	Pass
Emcor, IP 220, ASTM D6138, Rating	Pass
Timken Extreme Pressure Test, ASTM D 2509	
OK Load, kg/lbs	20/45
Roll Stability, ASTM D1831, % Change	+ 5
Lincoln Ventmeter psi @	
-10°F (-23°C)	360
-20°F (-29°C)	420
30°F (-34°C)	600
40°F (-40C)	920
Castrol Molub-Alloy Lubricating Solids Grade	Multiservice

Subject to usual manufacturing tolerances

All reasonable care has been taken to ensure that this information is accurate as of the date of printing. Nevertheless, such information may be affected by changes in the blend formulation occurring subsequent to the date of printing. Material Safety Data Sheets are available for all Castrol products. The MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product.