



## Product Data

# Castrol Molub-Alloy<sup>®</sup> BRB 572 Grease

**Castrol Molub-Alloy BRB 572 Grease** is a proven multiservice grease with an outstanding performance record. This NLGI No. 2 Grease was designed to have the following characteristics:

- **Work-Shear Stability** to match the anticipated service life of antifriction bearings.
- **Controlled Mobility** under "full pack" conditions to act as a seal against contamination without excess "churning" and heat generation.
- **Load Carrying and Antiwear** capabilities beyond conventional greases.

Beyond conventional tests, the Development Qualifications for this unique industrial grease required exceeding these rigorous SKF Performance Tests: R2F, V2F, and Emcor Rust. These tests are used to qualify grease for the most demanding performance and endurance in precision antifriction bearings. This testing would relate to extended service in mills and heavy industry, or many years on a railroad axle.

### Description

**Castrol Molub-Alloy BRB 572 Grease** is manufactured from premium petroleum base oil, contains inhibitors against rust and corrosion, and is fortified against oxidation for very long service life.

This unique grease is outstanding in shear stability and in controlled mobility under shear. This results from selection of a most stable lithium thickening system and special manufacturing techniques.

Load carrying and antiwear capabilities beyond those of conventional greases result from chemical additives working synergistically with select Castrol Molub-Alloy lubricating solids blended uniformly throughout the grease. The lubricating solids are most effective in protecting the machined surfaces of new bearings in critical "running-in" periods. Good bearing surfaces are essential to long service life.

### Applications

**Castrol Molub-Alloy BRB 572 Grease** is an outstanding grease for all types of ball and roller bearings, including precision built. It is also used in general application, including journal bearings.



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**"Full Pack Concept":** Customarily, bearing manufacturers recommend packing bearings only 1/3 to 1/2 full to avoid churning, shear loss of consistency, and overheating. In bearings with minimal grease capacity, **Castrol Molub-Alloy BRB 572 Grease** can occupy 60 percent of this capacity effectively.

In bearings with additional housing capacity, the bearing and reservoir can be filled (see Notes) and operate effectively up to speeds of 200,000 DN. BRB 572 in the region of the rolling elements softens slightly to circulate without harmful temperature increase.

The bulk grease surrounding the action zone remains undisturbed, sealing out contaminants and minimizing "breathing" as a source of oxidation, water vapor, and fine dust.

**The Machine Tool Industry** particularly benefits from the use of **Castrol Molub-Alloy BRB 572 Grease** as bearings are continually subjected to an environment of work heat and flooding by coolants. Many vertical mill head bearings run hot on conventional greases because frequent relubrication causes accumulation and overfilling of bearings.

**Dusty Environments** as in cement mills, can be destructive even to bearings with seals if breathing action occurs. A "full pack" of **Castrol Molub-Alloy BRB 572 Grease** acts as a barrier to the penetration of fine dust.

**Motor Bearings** and bearings in inaccessible places can operate for very long periods without relubrication because of the outstanding physical and chemical stability of **Castrol Molub-Alloy BRB 572 Grease**

**Castrol Molub-Alloy BRB 572 Grease** can be applied by automatic dispensing systems designed for NLGI No. 2 grease consistency.

### Advantages

Improved bearing surfaces for longer service life result from the "running in" effect of Castrol Molub-Alloy lubricating solids. Lower operating temperatures in "full packed" bearings prolong the service life of both grease and bearing.

Extended periods between rebuilding of machine tools and other production equipment.



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Excellent sealing from hazardous environments including dust, water and water vapor. Castrol Molub-Alloy lubricating solids can extend the useful life of metallic and non-metallic seals.

Cost reductions result from the above by increasing parts life, extending lubrication cycles and reducing downtime and production loss.

### Notes

**Castrol Molub-Alloy BRB 572 Grease** is not compatible with sodium or inorganic base greases. Lubrication intervals should be increased gradually to ensure effective removal of previous lubricant and the establishment of Castrol Molub-Alloy solid lubricants on the bearing surfaces.

In packing a bearing to "full pack" some space must remain to allow for grease expansion to operating temperatures. Where reapplications or purging is performed on a sealed bearing, it should operate with relief port opened until grease expansion is complete.

Where excessive vibration persists, "full pack" concept should be reconsidered if grease churning is induced. 50 to 60 percent fill is suggested.



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### Typical Characteristics

NLGI Grade	2
Thickener Type	Lithium
Dropping Point, ASTM D 2265, °C/°F	188/370
Penetration, ASTM D 217,	
Worked 60 Strokes, mm/10	265/295
Worked 100M Strokes, percent change	+5
Base Fluid Properties	
Viscosity, ASTM D 445, D 2161:	
@40°C, cSt	143
@100°C, cSt	14
@100°F, cSt/SUS	162/750
@210°F, cSt/SUS	14/75
Flash Point, ASTM D 92, °C/°F	260/500
Pour Point, ASTM D 97, °C/°F	-15/+5
Oxidation Stability, ASTM D 942:	
Pressure drop @ 100 hrs., kPa/psi	20/3
Pressure drop @ 300 hrs., kPa/psi	7/48
Water Washout, ASTM D 1264:	
@ 100°F/30°C, percent loss	7.7
@ 175°F/79°C, percent loss	9.5
Rust Prevention Properties, ASTM D 1743 rating	Pass
Emcor Rust Test, ASTM D6138, IP 220/85, rating	0/0 (Pass)
Roll Stability, ASTM D 1831, points change	6
Mechanical Stability, SKF-V2F Machine, 500 rpm @ 122°F/50°C	No Leakage
Oil Separation, ASTM D 1742 Percent	3.2
Wheel Bearing Performance, ASTM D 1263:	
Leakage, grams	0.04
Deposits	None
Timken EP Test, ASTM D 2509, OK Value, kg/lbs	16/35
Four Ball EP Test, ASTM D 2596:	
Load Wear Index, kg	63
Weld Load, kg	250
Four Ball Wear Test (1 hr., 40 kg, 1800 rpm, 75°C/167°F), Scar Diameter, mm	0.52
Roller Bearing - Dynamic Performance, DIN 51806 (SKF R2F Machine):	
Room Temperature	Pass
Elevated Temperature	Pass
Molub-Alloy Solids, Grade Classification	Precision Bearing

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.