Product Data

Molub-Alloy™ OG 9002 Heavy

Open gear lubricant

Description

Castrol Molub-Alloy™ OG 9002 Heavy (previously called Molub-Alloy™ 9002 Heavy) is a solvent-free open gear lubricant based on a highly refined, viscous, paraffinic petroleum derivative with excellent oxidation and thermal stability. It is specifically designed to help maximize protection to open gears and slides on large draglines and shovels while minimising potential pollutants to the environment.

A proprietary blend of Molub-Alloy lubricating solids is included to promote anti-wear and load carrying properties. The lubricating solids also contribute to the texture of the film surface which is resistant to the adherence of dirt and environmental contaminants. Molub-Alloy lubricating solids work synergistically with chemical antiwear and Extreme Pressure (EP) additives to reduce contact temperatures and-wear while providing excellent protection under extreme pressure and shock loading.

Application

Due to the product's special work-shear/viscosity relationship, it may be used on applications where multiple viscosities, from light to heavy, are needed. Historically, this has been required from conventional open gear compounds and greases.

This range may be used on open gears of all sizes, loads and speeds; on slides, guide rails, cams, and wire ropes. Mining applications include the lubrication of shovels and draglines, on all types of open gears, rails and rollers, bushings, racks and pinions, dipper sticks and other slides.

Molub-Alloy OG 9002 Heavy meets the P&H 520 specification for use as multi-purpose mining lubricant.

Advantages

- Low shear, low friction durable film – even under extreme pressures, the semi-dry working film resists erosion from rain or sleet, resists peeling in dusty environments, and resists film destruction by contaminating oils and greases migrating from nearby mechanisms
- Simple and economical application – can be applied via automatic dispensing throughout a wide temperature range
- Excellent rust and oxidation resistance – protects the equipment and the lubricating film against the elements in severe climates
- Pioneering compounding technology – flows readily in the film-forming process yet it resists 'squeeze-out' and clings tenaciously even to gear teeth in vertical orientation

Typical Characteristics

Name	Method	Units	Molub-Alloy OG 9002 Heavy
Appearance	Visual	-	Black, homogenous
Thickener Type	-	-	Lithium
Base oil	-	-	Mineral oil
Consistency	ISO 2137 / ASTM D217 / DIN ISO 2137	NLGI	1
Density	inhouse method	kg/m³	1013
Worked Penetration (60 strokes @ 25°C / 77°F)	ISO 2137 / ASTM D217	0.1 mm	320 - 350
Base Oil Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm²/s	718
Base Oil Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm²/s	38.4
Brookfield Viscosity @ 25°C / 77°F	ISO 9262 / ASTM D2983	cP	128,000
Rust test (destilled water)	ASTM D1743	-	Pass
Copper corrosion	ISO 51350 / ASTM D4048	Rating	1b
Four Ball weld load test - weld point	ISO 11008 / ASTM D2596	kg	800+
Four Ball weld load test - load wear index	ISO 11008 / ATM D2596	-	> 110
Four Ball weld load test - wear scar diameter	ASTM D2266	mm	< 0.65
Timken Ok Load	ASTM D2509	kg/lbs	23/50 +

Subject to usual manufacturing tolerances.

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.

This product was previously called Molub-Alloy 9002 Heavy. The name was changed in 2015.

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BP Lubricants USA Inc., 1500 Valley Road, Wayne, NJ 07470
Telephone: +1-888-CASTROL Product Information: +1-877-641-1600
www.castrol.com/en_us/b2b/home.html