Product Data

Molub-Alloy™ OG 936 SF Heavy

Open gear compounds (solvent free)

Description

Castrol Molub-Alloy™ OG 936 SF Heavy (previously called Molub-Alloy 936 SF Heavy) is an open gear lubricant developed specifically for use on heavy duty equipment in mining and industrial service. Molub-Alloy OG 936 SF Heavy is compounded to give maximum protection to 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. These lubricating solids work synergistically with chemical anti-wear and Extreme Pressure (EP) additives to reduce contact temperatures while providing excellent anti-weld protection under extreme pressure and shock loading.

The structural integrity and strength of the lubricating film is particularly valuable in the critical process of seating new gears because of the natural occurrence of high spots (asperities) in newly machined surfaces. The lubricating film must separate the mating surfaces sufficiently to cushion the effect of the impact of asperities, and therefore minimise initial pitting which could lead to progressive and destructive pitting later.

A highly refined, viscous, paraffinic petroleum derivative is the foundation of a blended base fluid with excellent natural chemical and thermal stability. Molub-Alloy OG 936 SF Heavy is compounded to flow readily in the film-forming process; yet it resists "squeeze-out" and clings tenaciously even to gear teeth in vertical orientation. Rust and oxidation inhibitors are included in the formulation to protect the equipment and the lubricating film against the elements in severe climates.

Application

Molub-Alloy OG 936 SF Heavy is suitable for use on all types of open gears, racks and pinions and sliding or skidding applications such as draglines and shovels. It can be applied either manually or by heavy duty automatic systems.

This product is used extensively in mining, construction, onshore drilling operations and on offshore installations, facilitating effective lubrication and protection on:

- Rack and pinion jacking mechanisms
- Cantilever skidding systems
- Mooring winch open gearing and slides
- FPSO offloading systems
- Crane slew ring & pinion
- Exposed threads on penstock valves
- Heavy duty top dressing for the ultimate protection of wire ropes

Molub-Alloy OG 936 SF Heavy complies with the Bucyrus International SD 4713 specification (CAT) and Komatsu specifications for Open Gear Lubricants.

Advantages

- Formulated to address environmental concerns - it is free of solvents, lead, antimony and Barium
- Forms a tough durable film with a "cushioning" effect, even under extreme pressures and at very slow speeds
- The film resists erosion from rain or sleet, and resists peeling in dusty environments
- The film resists destruction by contaminating oils and greases migrating from nearby mechanisms

Berreteaga N°6, A, 48150, Sondika (Bizkaia) · mendoza@comercialmendoza.es

Expertos en lubricación industrial y automoción

Experts in industrial and automotive lubrication

Typical Characteristics

Name	Method	Units	Molub-Alloy OG 936 SF Heavy
Density @ 20°C / 59°F	ASTM D4052 / ISO 12185	kg/m³	1002
Consistency	ASTM D217 / ISO 2137	NLGI Grade	0
Worked Penetration (60 strokes @ 25°C / 77°F)	ASTM D217 / ISO 2137	0.1 mm	345-360
Brookfield Viscosity	ASTM D2983 / ISO 9262	cP	144,000
Base Oil Viscosity @ 40°C / 104°F	ASTM D445 / ISO 3104	mm²/s	2030
Base Oil Viscosity @ 100°C / 212°F	ASTM D445 / ISO 3104	mm²/s	57
Four Ball Weld Load test - Load Wear Index (27°C / 1770 rpm)	ASTM D2596 / ISO 11008	-	130
Four Ball Weld Load test - Weld Point	ASTM D2596 / ISO 11008	kgf	800
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr)	ASTM D2266 / ISO 51350	mm	<0.75
Rust Test (distilled water)	ASTM D1743	Pass	Pass
Copper Corrosion (24 hrs,100°C / 212°F)	ASTM D4048	Rating	1b
Grease Pumpability test - Lincoln Ventmeter	in-house method	psi	500
Lubricating solids, particle size	-	microns	nominal 15,maximum 45

Subject to usual manufacturing tolerances.

Additional Information

Molub-Alloy OG 936 SF Heavy is not intended for general use in bushings and bearings except in slow moving, heavily loaded applications. Please contact your Castrol Technical Services team to discuss new applications of OG 936 SF in bearings.
This product was previously called Molub-Alloy 936 SF Heavy. The name was changed in 2015.

Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

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

http://msdspds.castrol.com