



Molub-Alloy 936 SF Heavy A

Open gear grease

Description

Castrol Molub-Alloy™ 936 SF Heavy A is a uniquely compounded solvent free open gear lubricant developed specifically for use on heavy duty equipment in the extremes of environments. It is compounded to give maximum protection whilst minimizing potential pollutants to the environment. A highly refined, viscous, paraffinic mineral oil is the foundation of a blended base fluid with excellent natural chemical and thermal stability.

A proprietary blend of Molub-Alloy lubricating solids is included to promote anti-wear and load carrying properties beyond those of conventional lubricants. 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 minimize initial pitting which could lead to progressive and destructive pitting later.

Application

Molub-Alloy 936 SF Heavy A is suitable for use on all types of open gears, racks and pinions and sliding or skidding applications, 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.

Advantages

- Forms a tough durable film with 'cushioning' effect - even under extreme pressures and at very slow speeds, 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.
- Excellent rust and oxidation resistance - protects the equipment and the lubricating film against the elements in severe climates.
- Unique compounding technology - flows readily in the film-forming process yet it resists 'squeeze-out' and clings tenaciously even to gear teeth in vertical orientation.
- Good pumpability and set-back resistance - pumpable in heavy automatic lubricating systems and does not heavy up over time.
- Formulated to address environmental concerns - it is free of solvents, lead, antimony and barium.

Typical Characteristics

Name	Method	Units	Molub-Alloy 936 SF Heavy A
Appearance	Visual		Black, free of lumps or agglomerates
Thickener Type			Lithium
Base Oil Type			Mineral Oil
NLGI Grade	DIN 51818		0.5
Density @ 20°C	ASTM D1475	g/ml	1.014
Worked Penetration, 60 Strokes @ 25°C	ISO 2137 / ASTM D217	0.1 mm	330 - 360
Base Oil Viscosity @ 40°C	ISO 3104 / ASTM D445	mm ² /s	1890
Base Oil Flash Point	ISO 2592 / ASTM D92	°C	194
Rust Test, 48hrs @ 52°C	ASTM D1743	Rating	Pass
Copper Corrosion, 24hrs, 100°C	ISO 2160 / ASTM D4048	Rating	1b
Four Ball EP Test, Load Wear Index	ASTM D2596	kg	120
Four Ball EP Test Weld Load	ASTM D2596	kg	800
Four Ball Wear Test (1hr, 40kg, 1200rpm, 75°C), Scar Diameter	ASTM D2266	mm	0.7
Pumpability by Lincoln Ventmeter @ -1°C	US Steel	Psi	500
Lubricating Solids, Particle Size		Microns	<15
DIN Classification	DIN 51826		OGPF 0 G-10
ISO Classification	ISO 6743/9		L-XABEB-0

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

Additional Information

In order to minimize 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.

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

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