Product Data

Molub-Alloy™ OG 8031-2200 & 3000

Open gear lubricant

Description

Castrol Molub-Alloy™ OG 8031/2200 and Molub-Alloy™ OG 8031/3000 are high viscosity gel formulated lubricants designed to lubricate large heavily loaded open gears. The gel technology adds body to the base fluid to form an ultra-high viscosity lubricant (@40ºC/104ºF 18,500 and 19,000 mm2/s respectively) to withstand heavy loads and cushions shock loadings commonly found in open gear applications.

A proprietary blend of Molub-Alloy solids working synergistically with chemical reactive extreme pressure (EP) and anti-wear (AW) additives combine to reduce contact temperatures and wear while providing excellent anti-weld protection under extreme pressure and shock loading.

The thixotropic nature of Molub-Alloy OG 8031 allows friction to be reduced to a minimum and aids in its ability to be applied by standard spray systems or used in splash or idler immersion systems.
Once applied to the gear surface the Molub-Alloy OG 8031 forms a thick tenacious semi-transparent film on the gear tooth that can be inspected by strobe light during operations.

Application

Molub-AIloy OG 8031 is designed to lubricate heavily loaded, low speed open gears, screw type actuators, and low to moderate velocity bushings and bearings operating in the most severely loaded applications equipped with centralised or sump type lubrication systems.

This range is recommended for use in open gear applications in cement, mining and any other industries requiring anti-scuff and anti-wear protection, and where no product build up is desired. It is also suited for units containing bushings, bearings and/or gears where straight fluid lubricants can leak out.

Advantages

- Formulated to minimise distribution line plugging tendency – minimises the potential for eventual plugging of the lubricant distribution lines commonly associated with conventional greases
- Readily pumpable and slumpable for good lubricant distribution – good lubricant distribution in enclosed and semi-enclosed applications, and drainable for ease of removal from surrounding guards
- Specifically formulated to flush contaminants from gear and pinion flanks, and to resist accumulation in the roots of gear teeth
- Highly thixotropic – exhibits a stable form at rest but becomes a fluid when agitated therefore will not run off the gear teeth. However, it will still spread easily and evenly since the gel-like lubricant liquefies when pressure is applied, carrying away both heat and contaminants
- Formulated to address environmental concerns - free of solvents, lead, antimony and barium

Typical Characteristics

Name	Method	Units	8031/2200-00	8031/3000-00
Appearance	Visual	-	Dark and Opaque	Dark and Opaque
Thickener Type	-	-	Inorganic	Inorganic
Base Oil Type	-	-	Mineral Oil	Mineral Oil
NLGI Grade	-	-	00	00
Density at 20°C/68°F	ASTM D 1475	-	0.937	0.941
Base Fluid Flash Point	ASTM D92/ ISO 2592	°C/°F	225/437	218/425
Worked Penetration, 60 Strokes at 25°C/77°F	ASTM D217/ ISO 2137	0.1mm	400-430	400-430
Product Viscosity @ 40ºC/104ºF DSR*	DIN EN 13702	mm²/s approx	18500	19000
Product Viscosity @ 100ºC/212ºF DSR*	DIN EN 13702	mm²/s approx	9400	8500
Base Oil Viscosity at 40°C/104°F	ASTM D445/ ISO 3104	mm²/s	2200	3000
Copper Corrosion, 24hrs 100°C/212°F	ASTM D4048/ ISO 2160	Rating	1b	1b
Four Ball EP Test, Load Wear Index	ASTM D2596	kg	66	88
Four Ball EP Test, Weld Load	ASTM D2596	kg	400	400
Brookfield Viscosity, Spindle No.7, 10 rpm at 25°C/77°F	-	cP	76000	80000
FZG Test, A/2.76/50 Method, Failure Stage	DIN 51354	Rating	>12	>12
Pumpability by Lincoln Ventmeter, at -1°C/30°F	US Steel	Psi	180	210
Pumpability by Lincoln Ventmeter, at -7°C/20°F			350	440
Pumpability by Lincoln Ventmeter, at -12°C/10°F			830	840
DIN Classification	DIN 51826	-	-	OGPF 00 K-20
ISO Classification	ISO 6743/9	-	L-XCBFB 00	L-XBCGB-00

*DSR: **Dynamic shear rheometer**
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 8031. The name was changed in 2015.

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

http://msdspds.castrol.com