



Molub-Alloy OG 8031/6000-00

Open Gear Lubricant

Description

Castrol Molub-Alloy™ OG 8031/6000 is a high viscosity gel formulated lubricant designed to lubricate large heavily loaded open gears. The gel technology adds body to the base fluid to form an ultra-high viscosity lubricant (@ 40°C/ 104°F 10,200 mm²/s approx.) 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.

Molub-Alloy™ OG 8031/6000 has a good pumpability properties at lower temperatures compared to other grades within the range.

Application

Molub-Alloy 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	Molub-Alloy OG 8031/6000
Appearance	Visual	-	Dark and Opaque
Thickner Type	-	-	Inorganic
Base Oil Type	-	-	Mineral
Consistency	ISO 2137/ ASTM D217	NLGI	00
Density @ 20°C/68°F	ASTM D 1475	-	0.942
Base Fluid Flash Point	ASTM D92/ ISO 2592	°C/°F	232/450
Worked Penetration, 60 Strokes @ 25°C/77°F	ASTM D217/ ISO 2137	0.1 mm	400-430
Product Viscosity @ 40°C/104°F DSR*	DIN EN 13702	mm ² /s approx	10193
Product Viscosity @ 100°C/212°F DSR*	DIN EN 13702	mm ² /s approx	1102
Base Oil Viscosity @ 40°C/104°F	ASTM D445 ISO 3104	mm ² /s	6000
Copper Corrosion, 24 hrs, 100°C/212°F	ASTM D4048 ISO 2160	Rating	1b
Four Ball EP Test Load Wear Index	ASTM D2596	kg	70
Four Ball EP Test Weld Load	ASTM D2596	kg	800
Brookfield Viscosity Spindle No. 7, 10 rpm @ 25°C/77°F	-	cP	48,000
FZG Test, A/2.76/50 Method, Failure Stage	DIN 51354	Rating	>12
Pumpability by Lincoln Ventmeter @ -1°C/30°F @ -7°C/20°F @ -12°C/10°F	US Steel	psi	200 380 790

*DSR: **Dynamic shear rheometer**

Subject to usual manufacturing tolerances.

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