



Molub-Alloy™OG 3710-0/00

Mill lubricant

Description

Castrol Molub-Alloy™OG 3710-0/00 (previously called Castrol Molub-Alloy 3710-0/00) is a heavy-duty lubricant formulated for open gear mill applications. It may be used in both raw and finish mill operations such as those found in coal, cement, copper and phosphate mills as well as in ball or rod mills. Formulated to address environmental concerns Castrol Molub-Alloy OG 3710-0/00 is free from lead, antimony, barium, bitumen and chlorinated solvents. The synthetic and petroleum oils used in Castrol Molub-Alloy OG 3710-0/00 are selected for their physical and chemical stability and for their exceptional serviceability over a wide temperature range. These fluids are compounded to flow readily in the film forming process, yet resist “squeeze out” and cling tenaciously even to gear teeth that mesh vertically. A proprietary blend of Castrol Molub-Alloy OG 3710-0/00 lubricating solids of selected grade and size distribution promote antiwear and load carrying properties beyond the capacity of conventional lubricants. The blend of synthetic and petroleum base fluids ensures excellent pumpability even at low temperatures. The high base oil viscosity assures sufficient film thickness at low speeds and high loads.

Application

- Castrol Molub-Alloy 3710-0/00 may be used from -30°C to $+100^{\circ}\text{C}$. This is a general guideline and may be altered depending on application and conditions.
- Castrol Molub-Alloy 3710-0/00 is particularly suitable for service in the most severe conditions of dust as found in mill applications. It is designed to resist packing or hardening in the roots of gear teeth and in semi- enclosed gear cases.

Advantages

- Castrol Molub-Alloy 3710-0/00 does not harden in gear tooth roots and facilitates easy removal from semi- enclosed gear cases.
- Can be used year-round for the climate range encountered.
- The light color of Castrol Molub-Alloy 3710-0/00 promotes cleanliness and ensures that the gear teeth can be easily inspected at all times.

Typical Characteristics

Name	Method	Units	Molub-Alloy OG 3710-0/00
Thickener type	-	-	Lithium
Worked Penetration (60 strokes @ 25°C / 77°F)	ASTM D217 / ISO 2137	0.1 mm	380-410
Appearance	Visual	-	Beige/smooth
Base Oil Viscosity @ 40°C / 104°F	ASTM D445 / ISO 3104	mm ² /s	2100
Base Oil Viscosity @ 60°C / 140°F	ASTM D445 / ISO 3104	mm ² /s	640
Base Oil Viscosity @ 100°C / 212°F	ASTM D445 / ISO 3104	mm ² /s	115
Viscosity Index	ASTM D2270 / ISO 2909	-	139
Flash Point - open cup method	ASTM D92 / ISO 2592	°C/°F	>200/>392
Water Resistance	DIN 51807-1	Rating	0
Rust Test - EMCOR (distilled water)	ASTM D6138 / ISO 11007	Rating	0/0
Copper Corrosion (24 hrs, 100°C / 212°F)	ASTM D4048	Rating	1
Four Ball Weld Load test - Weld Point	ASTM D2596 / ISO 11008	kgf	611.8
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr)	ASTM D2266 / ISO 51350	mm	0.45
Timken OK Load	ASTM D2509	kg / lbs	>23/50
FZG Gear Scuffing test - A/2.76/5	ISO 14635-3	Failure Load Stage	>12
FZG Gear Scuffing test - A/0,8/50	ISO 14635-1 (modified)	Failure Load Stage	>12
Flow pressure @ -20°C / -4°F	DIN 51805	mBar	<300

Additional Information

Castrol Molub-Alloy 3710-0/00 exceed the minimum requirements of Escom specification GGSS 0587 (1996)

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This product was previously called Castrol Molub-Alloy 3710-0/00. The name was changed in 2015.

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