



Product Data

Castrol Molub-Alloy® MWO 50 A LP

Description

Castrol Molub-Alloy MWO 50 A LP Lubricant is a high performance slide and way lubricant. The MWO 50 A LP was developed specifically to lubricate the rails of travelling pallets and the ways of work stations in automatic transfer machines used in high precision, high volume manufacturing.

Automatic transfer machines have been widely adopted by the automotive industry for machining automatic transmission housings and similar components.

Demands for increased production have led to the design of higher and higher speed automatic transfer machines. Increased operating speeds have also spawned new metal cutting fluids and coolants which are highly surface active to increase the speed of tool wetting and the removal of heat.

The surfactant additives used in these modern coolants have a detergent and cleansing action on oil and can rapidly displace lubricants used to protect the pallet guide rails and the ways at work stations.

The special formulation of Molub-Alloy MWO 50 A LP Lubricant resists the cleansing action of surface-active coolants so that wear on the rails and way is minimized, and motion is smooth and accurate.

With the Molub-Alloy MWO 50 A LP Lubricant, positive lubrication can be achieved to control wear and promote machining accuracy without excessive reapplication or high lubricant consumption.

Molub-Alloy MWO 50 A LP Lubricant is part of Castrol Performance Lubricants' Eco-Solution™ product offering. Formulated to address environmental concerns, they are free of lead, chlorinated solvents, and barium. They contain less than 2 ppm of phenol.

The base oils in MWO 50 A LP Lubricant is of the highest quality and is selected for its ability to sustain a lubricating film despite sudden changes in load or shearing forces. The formulation includes select polymer additives for both adhesive and cohesive characteristics.

A select blend of Molub-Alloy lubricating solids is uniformly dispersed throughout the oil in a very stable suspension. Under the extreme operating conditions, the lubricating solids provide positive lubrication even when the film is reduced to minimum thickness or where boundary conditions prevail. The value of the lubricating solids is reflected in the antiwear performance of the oils.

A carefully balanced treat rate of rust and oxidation inhibitors offers maximum rust protection for parts and long service life from the oil. Molub-Alloy MWO 50 A LP Lubricant is not corrosive to ferrous or nonferrous metals

Application

Molub-Alloy MWO 50 A LP Lubricant is developed primarily to lubricate the pallet guide rails and the ways at work stations of automatic transfer machines.

Advantages

- This oil effectively controls "stick-slip," and is also ideally suited to lubricate the sliding way tables of most machine tools.
- Because this oil is highly resistant to the washing action of water, the MWO 50 A LP Lubricant is a very effective chain lubricant in car wash lines and on wire ropes and other applications exposed to showers containing detergents.

Characteristics

	Unit	Test Method	Value
Specific Gravity	@ 15.6°C/60°F	ASTM D 1298	0.9153
API Gravity	@ 15.6°C/60°F	ASTM D 1298	23.1
Viscosity	@40°C, cSt	ASTM D 445, D 2161	406
Viscosity	@100°C, cSt	ASTM D 445, D 2161	26.3
Viscosity	@100°F, SUS	ASTM D 445, D 2161	2,179
Viscosity	@210°F, SUS	ASTM D 445, D 2161	130
Flash Point	°C/°F	ASTM D 92, COC	227/440
Pour Point	°C/°F	ASTM D 97	-15/+5
Rust Test	-	-	-
Procedure A	Distilled Water	ASTM D 665	Pass
Procedure B	Synthetic Sea Water	ASTM D 665	Pass
Conradson Carbon Residue	Base Oil, wt %	ASTM D 189	0.08
Timken EP Test	OK Load, kg/lbs	ASTM D 2782	27/60
Four Ball Wear Test	40 kg, 75°C/167°, 1800 rpm, 1 hr	Scar Diameter, mm	.40
Four Ball EP Test	Load Wear Index, kg	ASTM D 2783	55
Four Ball EP Test	Weld Load, kg	ASTM D 2783	315
Falex Wear Test	Stick-Slip (Cincinnati Milacron)	ASTM D 2670, Wear teeth	<.8
Phenol Content	4 AAP, Weck Laboratory	Phenolic by 4-Amino Antipyrine Method	<2.0
Molub-Alloy Solids	-	Grade Classification	Fluid Lubricant

Subject to Usual Manufacturing Tolerances.

Additional Information

Notes

For specific terms, conditions, warranty and availability, refer to Castrol Performance Lubricants' Price List in effect at time of purchase.

Castrol Molub-Alloy MWO 50 A LP
03.15.2005, Version Number 2.0
Molub-Alloy MWO 50 A LP and Castrol are trademarks of Castrol limited, used under licence.

All reasonable care has been taken to ensure that the information contained in this publication is accurate as of the date of printing. However, such information may, nevertheless, be affected by changes in the blend formulation occurring subsequent to the date of printing. Material Safety Data Sheets are available for all Castrol Ltd products. The MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product.

Castrol Industrial North America Inc. 150 West Warrenville Road, 605 3E Naperville, IL 60563
Tel: (877) 641 1600 Fax: (877) 648 9801

www.castrol.com/industrial