



## Product Data

# Castrol Magnaglide D

Slideway oils

## Description

Castrol Magnaglide™ D is specially formulated for the lubrication of slideways on machine tools. These oils are fortified with selected oiliness, extreme pressure additives and a special material to impart tackiness and adhesiveness. Magnaglide D lubricants are noted for their usual ability to overcome the stick-slip motion ordinarily associated with slow moving tool parts. They reduce machine tool carriage chatter and possess the necessary adhesive characteristics to prevent squeezing out of the lubricant.

## Application

- Magnaglide D can be used on all horizontal and vertical slideways where a high quality demulsifying lubricant is required for slideway protection and to maximize coolant life; the outstanding frictional characteristics of the products prevents stick-slip, improving surface finish and tolerances of machined components and reducing rejection rates.
- Magnaglide D meets the exacting demands in the following applications; planers, grinders, horizontal boring machines, shapers, jig borers, and milling machines.
- Magnaglide D 32 can be used as a combined hydraulic and slideway oil.

The Magnaglide D range meets the requirements of:

- Cincinnati Lamb (Milacron) P-47, P-50 and P-53 (depending on viscosity grade)
- DIN 51502 – CGLP
- DIN 51524 Part II (July 2004) – including ISO 13357-1/-2 filtration test
- Suitable for Müller Weingarten equipment as hydraulic oil

## Advantages

- Outstanding demulsifying properties – helps prevent soluble oil emulsions on plastic slideway surfaces. Avoids downtime and expensive slideway repair or replacement.
- Exceptional resistance to stick slip – helps to ensure highly accurate and repeatable machining. High quality output is maintained.
- Protects metals against staining and corrosion.
- Oil-wetted surfaces remain in good condition. Avoids downtime and expensive slideway repair or replacement.
- Highly filterable – filters in oil supply remain unblocked.

## Typical Characteristics

Test	Method	Units	D 32	D 68	D 220
ISO viscosity grade	-	-	32	68	220
Density @ 15°C	ISO 12185 / ASTM D4052	g/ml	0.87	0.88	0.89
Viscosity @ 40°C	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	32	68	220
Viscosity @ 100°C	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	5.4	8.7	19.2
Viscosity Index	ISO 2909 / ASTM 2270	-	102	99	98
Pour point	ISO 3016 / ASTM D97	°C/°F	-15/5	-12/10	-9/15
Flash point, COC	ISO 2592 / ASTM D92	°C/°F	206/403	232/450	249/480
Rust test Procedure A (Distilled Water) Procedure B (Synthetic sea water)	ISO 7210 / ASTM D665B	-	Pass Pass	Pass Pass	Pass Pass
Copper corrosion (3 hrs @ 100°C)	ISO 2160 / ASTM D130	-	1b	1b	1b
Brugger value	DIN 51347	N/mm <sup>2</sup>	-	44	-
Four Ball Wear Test (40 kg, 75°C/167°F, 1800 rpm, 1 hr), scar diameter	ASTM D2266	mm	0.3	0.3	0.32
Four Ball Extreme Pressure Test weld load	ASTM D2783	kg	170	180	200
Stick-slip ratio	(Cincinnati Lamb)	-	0.74	0.74	0.74
Cincinnati Lamb specification			P-53	P-47	P-50

Subject to usual manufacturing tolerances.

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