

**Product Data Sheet** 

# **Castrol Magnaglide D Range**

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.
- Maganaglide 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**

Name	Method	Units	D 68	D 220
ISO VIscosity Grade	-	-	68	220
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m³	880	890
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm²/s	68	220
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm²/s	8.7	19.2
Viscosity Index	ISO 2909 / ASTM D2270	-	99	98
Pour Point	ISO 3016 / ASTM D97	°C/°F	-12/10	-9/15
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	232/ 450	249/ 480
Rust test - distilled water (24 hrs)	ISO 7120 / ASTM D665A	-	Pass	Pass
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	-	Pass	Pass
Copper corrosion (3 hrs@100°C/212°F)	ISO 2160 / ASTM D130	Rating	1b	1b
Brugger test	DIN 51347	N/mm²	44	-
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr)	ASTM D2266	mm	0.3	0.32
Four Ball Weld Load test - Weld Point	ASTM D2783	kgf	180	200
Stick-slip ratio - Cincinatti Lamb test	Cincinnati Lamb test	Ratio	0.74	0.74
Cincinnati Lamb Specification	-	-	P-47	P-50

Subject to usual manufacturing tolerances.

Castrol Magnaglide D Range 02 Apr 2014

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**Product Data Sheet** 

# Magna™ SW D Range

Slideway oils

### Description

Castrol Magna™ SW D (previously called Magnaglide D Range) 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.

Magna SW 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**

- Magna SW 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.
- Magna SW D meets the exacting demands in the following applications; planers, grinders, horizontal boring machines, shapers, jig borers, and milling machines.
- Magna SW D 32 can be used as a combined hydraulic and slideway oil.
- The Magna SW D range meets the requirements of:
  - O Cincinnati Lamb (Milacron) P-47, P-50 and P-53 (depending on viscosity grade)
  - o DIN 51502 CGLP
  - O DIN 51524 Part II (July 2004) including ISO 13357-1/-2 filtration test
  - O 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**

Name	Method	Units	SW D 68	SW D 220
ISO Viscosity Grade	-	-	68	220
Density @ 15°C	ASTM D4052 / ISO 12185	kg/m³	880	890
Kinematic Viscosity @ 40°C	ASTM D445 / ISO 3104	mm²/s	68	220
Kinematic Viscosity @ 100°C	ASTM D445 / ISO 3104	mm²/s	8.7	19.2
Viscosity Index	ASTM D2270 / ISO 2909	-	99	98
Pour Point	ASTM D97 / ISO 3016	°C	-12	-9
Flash Point - open cup method	ASTM D92 / ISO 2592	°C	232	249
Rust test - distilled water (24 hrs)	ASTM D665A / ISO 7120	-	Pass	
Rust test - synthetic seawater (24 hrs)	ASTM D665B / ISO 7120	-	Pass	
Copper corrosion (3 hrs@100°C)	ASTM D130 / ISO 2160	Rating	1b	
Brugger test	DIN 51347	N/mm²	44	-
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr)	ASTM D2266	mm	0.3	0.32
Four Ball Weld Load test - Weld Point	ASTM D2783	kgf	180	200
Stick-slip ratio - Cincinatti Lamb test	Cincinnati Lamb test	Ratio	0.74	
Cincinnati Lamb Specification	-	-	P-47	P-50

Subject to usual manufacturing tolerances.

This product was previously called Magnaglide D Range. The name was changed in 2015.

Magna™ SW D Range 07 Jul 2016

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