



Product Data

Hysol MG

High performance soluble metalworking fluid

Description

Castrol Hysol™ MG is a high performance soluble metalworking fluid, which is boron and chlorine free. It contains an additive package that helps to enhance machining performance and surface finish, provide excellent product stability and lower the overall operations costs.

It has been formulated to overcome problems normally associated with the machining of magnesium alloys with soluble oil emulsions such as unstable emulsions, staining and hard deposits.

Hysol MG is suitable for large central systems and single sump machines.

Application

Hysol MG is especially designed for machining of magnesium and aluminium alloys.

Hysol MG is not recommended for aerospace aluminum alloys, so before use Hysol MG on aerospace aluminum alloys, please contact a Castrol sales representative.

ü ü suggested core application ü possible application, please consult Castrol representative prior to use

	Cast Iron	Low-medium alloyed steel	High alloyed - stainless steel	Aluminium alloys	Magnesium alloys	Yellow metals
Grinding						
Milling, Turning (general machining)		ü ü	ü	ü ü	ü ü	ü
Drilling		ü ü		ü ü	ü ü	ü
Reaming, Tapping		ü		ü	ü ü	ü
Broaching				ü	ü ü	ü

Advantages

- Boron free to meet boron free waste requirements
- Chlorine and nitrite free which may help you to fulfill aspects of legislative requirements and waste treatment requirements that specify that these chemicals are excluded
- Low foam in recommended water conditions (see details below)
- Lubrication package designed to try to help to enhance tool life and improve surface finish on magnesium alloy machining
- Good wetting properties can help reduce coolant drag out and help deliver cleaner machine tools and components
- Excellent hard water stability helps to reduce soap formation, tacky residues and dirty machines
- Stable fluid suitable for a wide range of water conditions

Typical Characteristics

	Test Method	Unit	Value
<u>Concentrate</u>			
Appearance	Visual		Amber
Mineral oil content	Calculated	Wt%	47
<u>Emulsion</u>			
Appearance	Visual		Translucent - Milky
pH (5%)	DIN 51369 ASTM E70-97		9.5
Refractometer Factor			1.1

Subject to usual manufacturing tolerances.

Recommended Concentrations

General Machining	4-6%
Drilling	6-10%
Reaming and Tapping	8-10%
Broaching	8-10%

Water range 150-1000 ppm CaCO₃

Additional Information

	Boron	Formaldehyde releasing agent	EP-Ester	Amines	Chlorine
Additives		ü	ü	ü	

Storage

To avoid product deterioration always keep the container/drum tightly sealed. Store the product in a cool, dry place away from direct sunlight. Prevent exposure to frost and avoid water ingress. For optimum product stability, it is preferable to store the product indoors between 5°C and 45 °C / 41°F and 113°F.

For more details, please refer the product safety data sheet.

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Castrol Industrial, Technology Centre, Whitchurch Hill, Pangbourne, Reading, RG8 7QR, United Kingdom

<http://msdspds.castrol.com>