

# **Hysol EM 400**

High performance Oil Phase-Multipack Soluble Metalworking Fluid

## **Description**

Castrol Hysol <sup>TM</sup> EM 400 is the oil phase of the innovative Castrol Multipack metalworking fluid system. Castrol Multipack combines the effectiveness of advanced metalworking fluid performance with the efficiency to manage fluid systems for maximum sump life. Hysol EM 400 is the vegetable oil phase containing advanced lubricity components to ensure improved tool life and part quality. It is used in conjunction with Boost WP Series which are the available water phases containing fluid management components to ensure bacteria control, pH stability and corrosion protection. Castrol Multipack technology allows for variable concentrations of each phase depending on severity of operation. In addition, lower fluid make-up costs are achieved as only depleted components are added back to the metalworking fluid system.

#### **Application**

Multi-pack vegetable oil base for machining of steel and aluminium alloys. It should be used only in combination with Boost WP water phase.

	Cast Iron	Low-medium alloyed steel	High alloyed - stainless steel	Aluminium alloys	Magnesium alloys	Yellow metals
Grinding	5	5 3	3 3	3 3		5
Milling, Turning (general machining)	3	3 3 3		3 3 3		٥
Drilling	3	3 3 3	3 3 3	3 3 3		3
Reaming, Tapping	3	3 3 3	3 3 3	3 3 3		3
Broaching				3 3 3		

## **Advantages**

- Chlorine and nitrite free to fulfill your local legislation, waste treatment and environmental requirements
- Improved environmental compliance with the use of renewable, vegetable oil technology
- Advanced lubrication to extend tool life and improve part finish
- Versatile fluid suitable for a wide range of applications on multiple metals
- Excellent stability in recommended water conditions
- Excellent foam control
- Developed specifically for Castrol Carelube lubrication technology

### **Typical Characteristics**

Name	Method	Units	Value
Concentrate			
Appearance	Visual		Amber
Mineral oil content	Calculated	Wt%	0
Emulsion (4% Hysol EM 400 + 2% Boost WP Series)			
Appearance	Visual		Milky
рН	DIN 51369 ASTM E70-79		9.3

#### **Recommended Concentrations**

 Grinding
 1-3% Hysol EM 400
 + 1.5-2.0% Boost WP Series

 Machining
 4-8% Hysol EM 400
 + 1.5-2.0% Boost WP Series

Water range 100-300 ppm CaCO<sub>3</sub>

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