



Hysol™ EP 690

High performance soluble metalworking fluid

Description

Castrol Hysol™ EP 690 (previously called Clearedge™ EP 690) is a high performance chlorinated soluble metalworking fluid. It contains a blend of extreme pressure additives and corrosion inhibitors, which helps to enhance machining performance and surface finish, provide excellent product stability, improve system life and lower the overall operations costs.

Hysol EP 690 is suitable for large central systems and single sump machines.

Application

Hysol EP 690 is recommended for use on most general purpose machining applications including milling, drilling, tapping, and reaming. It is a versatile product that can be used for machining of cast iron, low-medium alloyed steel, high alloy-stainless steel and aluminium alloys.

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	ü	ü ü	ü ü	ü ü		ü
Milling, Turning (general Machining)	ü ü	ü ü	ü ü	ü ü		ü
Drilling	ü ü	ü ü	ü ü	ü		ü
Reaming, Tapping	ü ü	ü ü	ü	ü		ü
Broaching	ü ü	ü ü	ü	ü		ü

Advantages

- Phenol and nitrite free to fulfill your local legislation, waste treatment and environmental requirements.
- Long system life which helps to extend fluid life and reduce maintenance and machine downtime.
- Excellent anti-corrosion properties to protect machine tools and parts.
- Advanced extreme pressure additives can help to improve tool life and part quality.
- Excellent wetting properties reduce coolant drag out and deliver clean machine tools and components.
- Can be used on a wide range of metals and operations – an ideal candidate for product rationalization on the shop floor.

Typical Characteristics

Name	Method	Unit	Hysol EP 690
<u>Concentrate</u>			
Appearance	Visual		Amber
Mineral Oil content	Calculated	Wt%	44
<u>Emulsion</u>			
Appearance	Visual		Translucent
pH (5%)	ASTM E70-97 / DIN 51361		9.4
Refractometer Factor			1

Subject to usual manufacturing tolerances.

Recommended Concentrations

Grinding	4-6%
General Machining	4-6%
Drilling	5-7%
Reaming and Tapping	6-10%
Broaching	6-10%

Water Range 50-400ppm CaCO₃

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.

This product was previously called Clearedge EP 90. The name was changed in 2015.

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