Eni Aquamet 700 HP ECO

APPLICATIONS

Eni Aquamet 700 HP ECO is a multipurpose cutting fluid with excellent technological features, free from chlorine, boron, secondary amines and bactericides.

It guarantees excellent performance in medium-severe and severe operations like turning, milling, boring, threading, deep drilling, tapping and reaming with 'Mapal' tools.

Eni Aquamet 700 HP ECO is suitable for operations on all ferrous materials, aluminum, titanium and theirs alloys, yellow metas, both in single and in central plants.

The product guarantees low tendency to form foam both in soft and in hard water even under high delivery pressure.

CUSTOMER ADVANTAGES

- It preserves with care the operators and the working environment, thanks to the absence of secondary amines and biocides
- Excellent cutting, cooling and lubricating capacity for a long service life and an excellent finishing of the workpiece surface
- Excellent emulsion stability, with consequent reduction of the maintenance operations
- Low tendency to foam, even under high delivery pressure
- Suitable in a wide range of water hardness (optimal range: 10-50°F)
- Free from chlorine and boron, lower disposal costs

SPECIFICATIONS - APPROVALS

- ISO 6743/7 MAB

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CHARACTERISTICS

Properties	Method	Unit	Typical
Characteristics of the concentrate	-	-	
Appearance of concentrate	-	-	clear
Density at 15°C	ASTM D 1298	kg/m³	965
Characteristics of the emulsion	-	-	
Emulsion appearance (5%)	-	-	milky
pH emulsion (5%)	ASTM D 1287	-	9.2
Corrosion on paper	DIN 51360/2	-	pass at 5%
Refractometric factor	-	-	1.0

WARNINGS

- Before preparing the emulsion, it is necessary to carry out adequate cleaning of the tanks and the circuits of the machine tool with suitable products
- Prepare the emulsion using possibly an emulsifier
- In case of manual mixing, it is recommended to add the product in the water slowly and shaking the mixture, never vice versa, to avoid problems of emulsion instability
- Store the product in closed warehouse, at temperature between +5 and +30°C in order to prevent product deterioration due to thermal shocks
- Monitoring of the working emulsion is recommended in order to ensure the emulsion performance in time and to prolong its useful life
- More detailed information will be provided by the Eni Technical Assistance Service.

HANDLING INFORMATION

- Here below are reported the recommended concentrations; however the actual

concentration should be determined according to the specific operating conditions.
Due to the complex nature of aluminum alloys, it's suggested to check always the stain test before any processing.

Processing	Cast Iron	Steel, Steel Inox	Aluminum and Alloys	Titanium and Alloys	Copper and Alloys
Grinding	5%	5%			
Turning, Milling	6%	7%	7%	7%	6%
Boring, Drilling	6%	7%	8%	10%	6%
Deep Drilling, Tapping, Threading	7%	8-10%	8-12%	12%	7%
Mapal Boring on Aluminum			8-12%		