



APPLICATIONS

Eni Aquamet 700 HP is a multipurpose cutting fluid with excellent technological features.

It guarantees excellent performance in medium and severe applications such as turning, milling, boring and heavy duty applications such as threading, deep drilling and tapping.

Suitable for all ferrous materials, aluminum and its alloys, titanium and its alloys, on yellow metals, both in single and/or centralized plants.

Prime characteristic of the product is the absence of foam formation in a wide range of water hardness, even in the presence of high dispersion pressures.

CUSTOMER ADVANTAGES

- Excellent cutting, cooling and lubricating capacity.
- Excellent stability of the emulsion in use
- Very low foam formation, even under high pressure delivery
- Suitable for cutting operations with a wide range of water hardness (optimal range: 5-50°F)
- Excellent detergent and protective properties guaranteed for the machine tool, the equipment and machined parts.

SPECIFICATIONS & APPROVALS

- ISO 6743/7 MAB





CHARACTERISTICS

Properties	Method	Unit of Measure	Typical
Characteristics of the concentrate			
Appearance	-	-	clear
Density at 20°C	ASTM D 4052	kg/m ³	950
Characteristics of the emulsion			
Aspect of emulsion (3%, water 20 °F)	-	-	milky
pH emuls. 3%	ASTM D 1287	-	9.0
Corrosion on paper	DIN 51360	-	pass at 4%
Corrosion test	IP 125	-	pass at 3%
Refractometric factor	-	-	1.3

WARNINGS

- Before start the emulsification operation, it is necessary to carry out adequate cleaning of the tanks and cooling circuits with suitable products.
- Prepare the mixture using an emulsifier, if possible.
- 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.
- To prevent the product deterioration, due to the heat changes for the exposure of the outdoor containers, storage in closed environments at temperatures between +5 and +30° C, is recommended.
- Periodical monitor of the lubricant cooler status is recommended. This is in order to ensure the steady state of the operating parameters and the useful life of the emulsion over time.
- In order to obtain the best results, it is recommended to always follow the above indicated instruction.
- More detailed information will be provided by the Eni Technical Assistance Service.





HANDLING INFORMATION

- Here below are reported the recommended concentrations; However, adjustment of effective concentration is necessary according to the specific operational conditions. Given 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	4%	5%			
Turning, Milling	4%	5%	6%	7%	6%
Boring, Drilling	5%	6%	8%	8-10%	6%
Deep Drilling, Tapping, Threading	6%	8%	8%	8-10%	6%

