



## APPLICATIONS

**Eni Aquamet 700 EXTREME** is an EP cutting fluid with excellent technological characteristics, free of bactericide and boron.

Low tendency to foam formation in a wide range of hardness of water even under high pressure delivery.

The product is particularly suitable for heavy machining such as tapping, MAPAL boring and deep drilling on various types of steel, stainless steel, aluminum and alloys, yellow metals; it is not suitable for cast iron machining.

## CUSTOMER ADVANTAGES

- Excellent cutting, cooling and lubricating capacity.
- Low foam formation, even under high pressure delivery and in a wide range of water hardness (optimal range: 15-40°F)
- Excellent stability of the emulsion in use
- Very good performance for applications on aluminium and its alloys
- Excellent detergent properties guaranteed for machine tool, equipment and machined parts.

## SPECIFICATIONS & APPROVALS

- ISO 6743/7 MAD





## CHARACTERISTICS

Properties	Method	Unit of Measure	Typical
<b>Characteristics of the concentrate</b>			
Appearance	-	-	clear
Density at 20°C	ASTM D 1298	kg/m <sup>3</sup>	950
<b>Characteristics of the emulsion</b>			
Aspect of emulsion (3%, water 20 °F)	-	-	milky
pH emuls. 3%	ASTM D 1287	-	9.0
Corrosion on paper	DIN 51360	-	pass at 5%
Corrosion test	IP 125	-	pass at 5%
Refractometric factor	-	-	1.0

## 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.



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## 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	Steel, Steel Inox	Aluminum and Alloys	Copper and Alloys
Turning, Milling	5%	6%	5%
Boring, Drilling	6%	6%	6%
Deep Drilling, Tapping, Threading	8%	8%	8%
Mapal Boring	8%	8%	8%

