



## APPLICATIONS

**Eni Aquamet 104** is a multipurpose EP cutting fluid with excellent technological characteristics.

It is suitable for high severity operations such as tapping, threading and deep drilling on all ferrous metals, on aluminium and its alloys as well as on yellow metals both in the workshop and in single centralized plants. It is also suitable for tape blade cutting operations.

It can be used for grinding.

## CUSTOMER ADVANTAGES

- Suitable for cutting operations with a wide range of water hardness (optimal range: 15-40°F)
- Low foam formation, even under high pressure delivery
- Outstanding corrosion resistance
- Excellent stability and duration of the emulsion in use

## SPECIFICATIONS & APPROVALS

- ISO 6743/7 MAD





## CHARACTERISTICS

Properties	Method	Unit of Measure	Typical
<b>Characteristics of the concentrate</b>			
Visual aspect	-	-	clear
Density at 20°C	ASTM D 1298	kg/m <sup>3</sup>	970
<b>Characteristics of the emulsion</b>			
Aspect of emulsion (3%, water 20 °F)	-	-	opalescent
pH emuls. 3%	ASTM D 1287	-	9.4
Corrosion on paper	DIN 51360	-	pass at 3%
Corrosion test	IP 125	-	pass at 2%
Refractometric factor	-	-	1.2

## 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	Copper and Alloys
Grinding	4%	4%	5%	5%
Turning, Milling	4%	5%	5%	5%
Boring, Drilling	5%	6%	6%	6%
Deep Drilling, Tapping, Threading	6%	8%	8%	6%



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