



APPLICATIONS

Eni Aquamet 500 FG is a semisynthetic cutting fluid with excellent technological characteristics, guarantees excellent performance in heavy-duty applications such as grinding, turning and milling on ferrous materials in single and/or centralized plants.

The primary characteristic of the product is the absence of foam formation in a wide range of water hardness even under high pressure delivery.

It may be extended to aluminium and its alloys after staining tests.

CUSTOMER ADVANTAGES

- Very low foam formation tendency, even under high pressure delivery
- Suitable for operations with a wide range of water hardness (optimal range: 5-50°F)
- High stability of the emulsion in use
- High detergent and anti-rust properties guarantee excellent performance in grinding and chip removal on ferrous metals, especially on cast iron

SPECIFICATIONS & APPROVALS

- ISO 6743/7 MAE





CHARACTERISTICS

Properties	Method	Unit of Measure	Typical
Characteristics of the concentrate			
Visual aspect	-	-	clear
Density at 20°C	ASTM D 1298	kg/m ³	1020
Characteristics of the emulsion			
Aspect of emulsion (3%, water 20 °F)	-	-	traslucent
pH soluz. 3%	ASTM D 1287	-	9.2
Corrosion test	IP 125	-	pass at 2%
Refractometric factor	-	-	1.7

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	Cast Iron	Steel, Steel Inox	Aluminum and Alloys
Grinding	3%	4%	
Turning, Milling	4%	6%	6%
Boring, Drilling	6%	8%	8%

