



APPLICATIONS

Eni Aquamet 500 FG Plus is a new technology cutting fluid, free of formaldehyde donor bactericide, chlorine and secondary amines, formulated with special additives, detergent and anticorrosive agents.

Specific for grinding and for medium severe cutting operations on medium alloyed steels and cast iron, it can be extended to machining on aluminum and its alloys after the staining test.

Very low tendency to foam in a wide range of water hardness and with high pressure delivery.

Eni Aquamet 500 FG Plus is suitable for single and centralized plants.

CUSTOMER ADVANTAGES

- Free from bactericide and secondary amines for a lower ecotoxicological impact and better conditions of the working environment
- Low tendency to foam in a wide range of water hardness (optimal range 5-40°F) and at very high delivery pressure
- Excellent cooling and lubricating properties for a long tool life
- Outstanding emulsion stability with consequent reduction of the maintenance operations
- Chlorine-free, lower disposal costs
- The high detergency and anti-rust properties guarantee excellent performance in grinding operations in particular on cast iron

SPECIFICATIONS - APPROVALS

- ISO 6743/7 MAE





CHARACTERISTICS

Properties	Method	Unit	Typical
Characteristics of the concentrate		-	
Appearance	-	-	limpido
Density at 15°C	ASTM D 1298	kg/m ³	1021
Characteristics of the emulsion		-	
Emulsion appearance	-	-	translucent
PH (5% Emulsione)	ASTM D 1287	-	9.15
Corrosion on paper	DIN 51360	-	pass at 5%
Refractometric factor	-	-	1.5

WARNINGS

- Before preparing the emulsion, it is necessary to carry out adequate cleaning of the tank and the circuits of the machine tool with suitable products
- Prepare the emulsion using preferably 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 in order to avoid problems of emulsion instability
- Store the product in closed warehouses 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 the 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 in accordance with the specific operating conditions.

- Due to the complex nature of aluminum alloys, it's suggested to check always the staining test before any processing.

Processing	Cast Iron	Steel, Steel Inox	Aluminum and Alloys
Grinding	5%	5%	
Turning, Milling	6%	7%	7%
Boring, Drilling	8%	8-10%	8-10%



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