Eni Aquamet 500 FG ECO

APPLICATIONS

Eni Aquamet 500 FG ECO is a semisynthetic cutting fluid with excellent technological features, free of chlorine, boron, secondary amines and bactericides.

Formulated with special additives, detergent and anticorrosive agents.

Eni Aquamet 500 FG ECO has excellent performance in grinding and in medium severe cutting operations on medium-alloyed steels and cast iron, its applications can be extended to aluminum and its alloys after the staining tests.

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

Suitable for single and centralized plants.

CUSTOMER ADVANTAGES

- Cutting fluid that preserve the operators and the working environment, because of absence of secondary amines and bactericides
- Low foam formation, even under high pressure delivery
- Suitable for cutting operations with a wide range of water hardness (optimal range: 10-50°F)
- High stability and durability of the emulsion in use, reducing the frequency of maintenance operations
- Excellent machining performance on steels and in particular on cast iron
- The high detergency of the product guarantees excellent performance in grinding operations
- Free of chlorine and boron, low disposal costs
- Excellent cooling and lubricating properties for a long tool life

SPECIFICATIONS - APPROVALS

- ISO 6743/7 MAE

Eni Aquamet 500 FG ECO

CHARACTERISTICS

Properties	Method	Unit	Typical
<![CDATA[**Characteristics of the concentrate**]]>			
Appearance	-	-	clear
Density at 15°C	ASTM D 1298	kg/m³	990
<![CDATA[**Characteristics of the emulsion**]]>			
Aspetto emulsione al 5%	-	-	traslucida
pH emuls. 5%	ASTM D 1287	-	9.7
Corrosion	IP 125	-	pass at 5%
Refractometric factor	-	-	1.7

WARNINGS

- Before preparing the emulsion, it is necessary to carry out an adequate cleaning of the tanks and the circuits of the machine tool with suitable products
- Prepare the emulsion using possibly 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, to avoid problems of emulsion instability
- Store the product in closed warehouse at a 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	6%	6%	
Turning, Milling	7%	7%	7%
Boring, Drilling	8%	8-10%	8-10%