Eni Aquamet 104 Plus

APPLICATIONS

Eni Aquamet 104 Plus is a new technology multipurpose cutting fluid, free from formaldehyde donor bactericide and secondary amines.

Formulated with anticorrosive, detergent and EP additives.

Specific for medium severe and severe cutting operations on cast iron, mildly alloyed steels, aluminum, yellow metals and their alloys.

Eni Aquamet 104 Plus is suitable for single and centralized plants.

CUSTOMER ADVANTAGES

- Free from bactericide, secondary amines for a lower ecotoxicological impact and better conditions of the working environment
- High emulsion stability with consequent reduction of the maintenance operations
- Excellent EP and anti-wear properties for a better surface finishing of the workpieces and a longer tool life
- Low foaming tendency in a wide range of water hardness (optimal range 15-35°F) and in the presence of high delivery pressure

SPECIFICATIONS - APPROVALS

- ISO 6743/7 MAD

Eni Aquamet 104 Plus

CHARACTERISTICS

Properties	Method	Unit	Typical
<![CDATA[**Characteristics of the concentrate**]]>			
Visual appearance	-	-	clear
Density at 15°C	ASTM D 1298	kg/m³	1000
<![CDATA[**Characteristics of the emulsion**]]>			
Emulsion appearance	-	-	opalescent
pH emuls. 5%	ASTM D 1287	-	9.25
Corrosion on paper	DIN 51360	-	pass at 5%
Refractometric factor	-	-	1.2

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 temperature between +5 and +30°C in order to prevent the 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 is suggested to check always the staining test before any processing.

Processing	Cast Iron	Steel, Steel Inox	Aluminum and Alloys	Copper and Alloys
Grinding	5%	5%		
Turning, Milling	5%	5%	5%	5%
Boring, Drilling	5%	6%	6%	6%
Deep Drilling, Tapping, Threading	6%	8%	8%	6%
Mapal Boring on Aluminum			8-12%	