



## APPLICATIONS

**Eni Aquamet 205** is a cutting fluid with high lubricity properties, free of secondary amines, boron and chlorine.

Recommended for fittings industries, for automatic turning machines and particularly suitable for machining yellow alloys, alloyed steels, aluminum and its alloys; it is not suitable for machining cast iron.

**Eni Aquamet 205** can be used for step moulding of brass strips (conc: 5-10%).

## CUSTOMER ADVANTAGES

- Excellent cutting, cooling and lubricant capacity for an excellent finishing of the workpieces and less tool wear
- High emulsion stability with consequent reduction of the maintenance operations
- Low tendency to form foam,( optimal range: 15-30°F)
- Excellent detergent and anticorrosive properties to protect the machine tool and the workpieces
- Free from chlorine and boron, lower disposal costs

## SPECIFICATIONS - APPROVALS

- ISO 6743/7 MAB





## CHARACTERISTICS

Properties	Method	Unit	Typical
<![CDATA[Characteristics of the concentrate]]>			
Appearance	-	-	clear
Density at 20°C	ASTM D 1298	kg/m <sup>3</sup>	950
<![CDATA[Characteristics of the emulsion]]>			
Emulsion appearance (3%, water 20°F)	-	-	milky
pH emuls. 3%	ASTM D 1287	-	9.3
Corrosion on paper	DIN 51360	-	pass at 4%
Corrosion	IP 125	-	pass at 2%
Refractometric factor	-	-	1.0

## 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 possibly using 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.



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## 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	Steel, Steel Inox	Aluminum and Alloys	Copper and Alloys
Turning, Milling	5%	5%	4%
Boring, Drilling	6%	7%	5%
Deep Drilling, Tapping, Threading	8%	8%	6%

