Eni Aquamet 205

APPLICATIONS

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

Specific product for automatic turning machine, taps and chip removal, also heavy on yellow alloys, alloy steels, lead-acid steel (AVP), aluminum and its alloys; Is not suitable for cast iron machining .

Usable for 'step stamping' of brass tapes (conc: 5-10%).

CUSTOMER ADVANTAGES

- Excellent cutting, cooling and lubricating capacity.
- Excellent stability of the emulsion in use
- Low foam formation (optimal range: 15-30°F)
- Excellent detergent and protective properties for machine tool, equipment and machined parts

SPECIFICATIONS & APPROVALS

- ISO 6743/7 MAB

Eni Aquamet 205

CHARACTERISTICS

Properties	Method	Unit of Measure	Typical
Characteristics of the concentrate			
Appearance	-	-	clear
Density at 20°C	ASTM D 1298	kg/m³	950
Characteristics of the emulsion			
Aspect of emulsion (3%, water 20 °F)	-	-	milky
pH emuls. 3%	ASTM D 1287	-	9.3
Corrosion on paper	DIN 51360	-	pass at 4%
Corrosion test	IP 125	-	pass at 2%
Refractometric factor		-	1.0

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.

HANDLING INFORMATIONS

- 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	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%