Eni Aquamet 700 HP ECO

APPLICATIONS

Eni Aquamet 700 HP ECO is a multipurpose cutting fluid with excellent technological features, free from chlorine, boron, secondary amines and bactericides.

It guarantees excellent performance in medium-severe operations like turning, milling, boring and in heavy-duty operations such as threading, deep drilling and tapping.

Suitable for reaming operations with 'Mapal' tools.

Suitable for operations on all ferrous materials, aluminum and alloys, titanium and its alloys both in single and/or central plants. Its use can be extended to work on yellow metals.

The product guarantees low foam formation tendency both in soft and hard water even under high pressure delivery.

CUSTOMER ADVANTAGES

- Cutting fluid that preserve with care the operators and the working environment, thanks to the absence of chlorine, boron, secondary amines and bactericides
- Excellent cutting, cooling and lubricating capacity for a long service life and excellent finishes of the worked surfaces
- Excellent stability and duration of the emulsion in use
- Low foam formation, even under high pressure delivery
- Suitable for cutting operations with a wide range of water hardness (optimal range: 10-50°F)

SPECIFICATIONS & APPROVALS

- ISO 6743/7 MAB

Eni Aquamet 700 HP ECO

CHARACTERISTICS

Properties	Method	Unit of Measure	Typical
Characteristics of the concentrate			
Appearance	-	-	clear
Density at 20°C	ASTM D 4052	kg/m³	950
Characteristics of the emulsion			
Aspetto emulsione al 5%	-	-	milky
pH emuls. 5%	ASTM D 1287	-	9.7
Corrosion on paper	DIN 51360	-	pass at 5%
Corrosion test	IP 125	-	pass at 5%
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	Cast Iron	Steel, Steel Inox	Aluminum and Alloys	Titanium and Alloys	Copper and Alloys
Turning, Milling	6%	7%	7%	7%	6%
Boring, Drilling	6%	7%	8%	8-10%	6%
Deep Drilling, Tapping, Threading	7%	8-10%	8-12%	8-12%	7%
Mapal Boring on Aluminum	7%	8-10%	8-12%	8-12%	7%