



eni Unimet

eni Unimet is a multipurpose water miscible cutting fluid designed for grinding and for medium severe cutting operations.

CHARACTERISTICS (TYPICAL VALUES)

Product Characteristics

Appearance	-	Liquid amber
Density at 20°C	kg/l	0.980

Emulsion Characteristics

Appearance	-	Translucid
pH at 5% in demineralised water	-	9.4
Corrosion test at 2% - IP 125	-	Pass
Refractometer factor	-	1.1

PROPERTIES AND PERFORMANCES

- Good antirust and detergent properties.
- High emulsion stability.
- Low formation of foam, even under high pressure delivery.
- Suitable for water with a wide range of hardness (optimal range: 20-40 °F).

APPLICATIONS

eni Unimet is a product designed for universal use. It has high lubricant properties and it is especially well suited for medium severity machining involving cast iron and steels, as well as for grinding, and it can also be used for copper and aluminium alloys. The percentages of use can vary from 4 to 10%, according to the severity of the operation.

WAY TO USE

Here below are reported the suggested concentrations; adjustment can be necessary on the base of the working conditions.

In the case of aluminium, copper and their alloys, always perform the stain test before processing.

MACHINING	MATERIAL PROCESSED			
	Cast Iron - Steel	Stainless Steel	Aluminium and alloys	Copper and alloys
Grinding	4 %	5 %		
Turning, milling	5 %	6 %	6 %	6%
Medium severe operations: boring, drilling	6%	7%	8%	6%



NOTE

To obtain the best possible results, follow the procedures indicated below:

- before preparing the emulsion, clean the tank and the circuits with a suitable product;
- prepare the emulsion using a blender, if possible;
- in the case of manual mixing, it is always best to add the product to the water, in order to avoid problems of emulsion instability;
- to prevent deterioration of the product due to sudden changes in temperature or as a result of outdoor display of the containers, it is best to store the product in closed settings, at temperatures between +5 and +30°C.

Detailed information shall be supplied by the **eni** Technical Assistance Service.