eni

eni Unimet SR

eni Unimet SR is a cutting fluid soluble in water, fully synthetic, free of mineral oil, chlorine, and bactericide, recommended for grinding and light cutting operations on ferrous metals, aluminium, copper and theirs alloys.

CHARACTERISTICS (TYPICAL VALUES)

Product Characteristics

Appearance/Colour	-	Liquid amber
Density at 20°C	Kg/l	1.112

Emulsion Characteristics

Appearance	-	Transparent
pH at 5% in demineralised water	-	9.3
Corrosion test at 2% - IP 125	-	Pass
Refractometer factor	-	1.9

PROPERTIES AND PERFORMANCES

- Excellent antirust property.
- High emulsion stability.
- Low formation of foam with a wide range of water hardness (optimal range: 15-40°F) even under high pressure delivery.
- Absence of sticky residues on machinery.

APPLICATIONS

eni Unimet SR is mainly recommended for grinding operations on ferrous metals.

It can also be used in light cutting operations like turning and milling on ferrous metals, on aluminium and copper and theirs alloys.

The percentages of use can vary from 4 to 8%, depending on 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

	MATERIAL PROCESSED			
MACHINING	Cast Iron Steel	Stainless Steel	Aluminium and alloys	Copper and alloys
Grinding	4%	5%		
Turning, milling	6 %	7 %	7 %	6 %



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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 blendor, 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.