



# eni Estramet

**eni Estramet** is an high performance water miscible cutting fluid formulated with synthetic esters, particularly suitable for machining aluminium and its alloys, alloy steels and cast iron. It is free of mineral oil, chlorine, sulphur compounds and bactericide.

## CHARACTERISTICS (TYPICAL FIGURES)

### Product Characteristics

Appearance	-	Liquid amber
Density at 20°C	kg/m <sup>3</sup>	981

### Emulsion Characteristics

Appearance	-	Translucent
pH at 5% in demineralised water	-	9.3
Corrosion test at 2.5% DIN 51360/1	-	Pass
Corrosion test at 4% DIN 51360/2	-	Pass
Refractometer factor	-	1.2

## PROPERTIES AND PERFORMANCES

- High lubricant properties even at low concentration.
- Suitable for standard to heavy machining applications including deep drilling, Mapal reaming and broaching.
- Long sump life due to high stability formulation.
- Very good cooling, antirust and detergent properties.
- Low formation of foam with a wide range of water hardness (optimal range: 15-40 °F) and even under high pressure delivery.
- Easy maintenance by tramp oil separation.

## APPLICATIONS

**eni Estramet** is a cutting fluid particularly suitable to machining aluminium and its alloys and alloy steels in medium and severe cutting operations like: deep drilling, threading, Mapal reaming and broaching.

It is suitable for grinding on ferrous metals especially hard-to-machine steels and cast iron.

Emulsion strengths range from 4 to 10%, depending on the severity of the operation.

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## WAY TO USE

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

MACHINING	MATERIAL PROCESSED		
	Cast Iron - Steel	Stainless Steel	Aluminium and alloys
Grinding	4%	5%	
Turning, milling	5%	6%	6%
Medium severe operations: boring, light drilling	6%	7%	8%
Severe operations: deep drilling, threading, Mapal reaming, broaching.	8%	8-10%	10%

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

## 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.

For more details about health and safety, please read the information on the safety data sheet.