

# Eni aquamet LMX - 1024

**Eni aquamet LMX - 1024** is a water-emulsifiable metalworking fluid concentrate specifically developed for the machining of aluminum. A new additive technology ensures outstanding cutting performance combined with exceptionally long emulsion life across a wide range of applications. Carefully selected additives deliver excellent performance in both soft and hard water conditions.

## Physical properties (typical values):

Eni aquamet LMX - 1024		Unit	Test procedure
Total oil content	ca. 30	%	
Viscosity (20°C)	150	mm <sup>2</sup> /s	DIN 51 562
pH-value (5%)	9,4		DIN 51 369
Corrosion test (4%)	0-0	Korr.- Grad	DIN 51 360 T.2

## Quality features:

- Boron-free, amine-containing metalworking fluid
- Free from formaldehyde-releasing agents
- Polar lubricity enhancers enable efficient aluminum machining
- Stable emulsions with make-up water hardness from 5 °dH to 30 °dH
- Hard-water stable in use up to approx. 100 °dH
- Low-foaming emulsion in the recommended make-up water range
- Excellent cooling and flushing performance
- Very good technical stability, resulting in long emulsion life and reliable corrosion protection properties

## Possible uses:

**Eni aquamet LMX-1024** is suitable for general to heavy-duty machining operations such as turning, milling, and drilling.

Thanks to its new additive technology and excellent lubricating components, **Eni aquamet LMX-1024** can be used for machining aluminum, unalloyed steels, and cast iron. The product performs successfully in both soft and hard make-up water.

According to current knowledge, **Eni aquamet LMX-1024** is suitable for machining most aluminum alloys. However, as a precaution, the staining tendency of the specific aluminum alloy should be verified prior to use.

Recommended in-use concentration depending on application and materials:

- General machining: from 5,0%
- Heavy machining: from 10%
- Refractometer factor: 1,1

## Notice:

The product complies with the requirements of TRGS 611, Section 4.

For application, please observe the applicable guidelines VDI 3035 and VDI 3397 (Parts 1–3), as well as the specifications of TRGS 611, Section 5.

When preparing the emulsion, always add the concentrate to the pre-filled make-up water. A more homogeneous emulsion can be achieved by using appropriate mixing equipment. To maintain the functionality of the metalworking fluid concentrate, frost-free storage is required.