

Eni aquamet LMK – STO Plus

Eni aquamet LMK-STO Plus is a water-emulsifiable metalworking fluid concentrate, specially developed for general machining of cast iron as well as alloyed and unalloyed steels. Thanks to the incorporated inhibitors, Eni aquamet LMK-STO Plus can also be used for machining of aluminum.

Physical properties (typical values):

| Eni aquamet LMK- STO Plus | Value | Unit | Test procedure |
|---------------------------|-----------------------------|--------------------|----------------|
| Total oil content | ca. 20 | % | |
| Viscosity (20°C) | ca.170 | mm ² /s | DIN 51 562 |
| Density (15°C) | 991 | kg/m ³ | Din 51 757 |
| pH-value (5%) | 10,5 (Decrease with use) | | DIN 51369 |
| Corrosion test (4%) | 0-0 | Korr.- Grad | DIN 51360 T.2 |

Quality features:

- Free from boric acid and formaldehyde-releasing substances
- Low-foaming metalworking fluid emulsion with selected EP additives
- Very good wetting and flushing properties, highly effective corrosion protection
- Complies with TRGS 611
- Long service life due to permanent buffering, outstanding pH stability
- In accordance with the latest occupational medical findings

Possible uses:

Eni aquamet LMK-STO Plus is a universal metalworking fluid for all medium-duty and heavy-duty machining operations of cast iron, alloyed and unalloyed steels, as well as for machining of aluminium. This latest-generation product meets all requirements for a high-performance, stable metalworking fluid.

Recommended use concentrations depending on application and materials:

- General machining operations: 8.0% ± 1%
- Difficult machining operations, depending on requirements: 8.0% – 10.0%
- Grinding from: 5%
- Refractometer factor: 1.3

Notice:

The product complies with the requirements of TRGS 611, Section 4. For application, please observe the applicable VDI guidelines 3035 and 3397 (1–3) as well as the specifications of TRGS 611, Section 5. When preparing the emulsion, always add the concentrate to the pre-filled mixing water; a more homogeneous emulsion can be achieved by using mixing devices. To maintain the functionality of the metalworking fluid concentrate, frost-free storage is required.

The product is a liquid hazardous to water.

Occupational medical preventive measures must be taken in accordance with the German Hazardous Substances Ordinance (GefStoffV), Sections 15 and 16 and Annex V. DGUV Regulation 109-003 – Activities involving metalworking fluids (formerly BGR/GUV-R 143) – must be applied to ensure safe handling.

Further information is available from our application engineering department.