

# MOL Emolin 400

## biostable metalworking fluid



MOL Emolin 400 is a universal water-miscible semi-synthetic metalworking fluid, containing boron and having an outstanding biological stability. The product contains about 37 % refined mineral oil, emulsifier, corrosion inhibitor, together with components that modify friction and prevent wear. It is recommended to use a mixing equipment for preparing the emulsion. The concentrate is always to be added to the water during agitation. The concentration of the prepared emulsion should be checked using a calibrated refractometer. Due to its well balanced composition, containing amine and boric acid, the product is resistant to biological contamination, and a long service life can be achieved if handled properly. Refractometer factor: 1,1. Cleanliness of the system is a determining factor in terms of the operating life of the emulsion, so it is recommended to use MOL Netsol SC system cleaner before every change. Resistance to micro organisms can be ensured by maintaining a minimum emulsion concentration of 4-5 % (V/V).

Machining	Application concentration
Grinding	4-5
Turning	5-7
Milling	6-9
Drilling	7-10

### Application



Chip forming and chipless machining of steel, alloys, light and yellow metals

Various cutting technologies (turning, drilling, thread machining, etc.)

High performance heavy-duty chip forming machining

Chip forming machining of spheroidal graphite and grey cast iron

### Features and benefits

Excellent stability against microbial infection

Outstanding temporary corrosion protection

Excellent lubricity

Extremely low foaming tendency

Low maintenance requirements

Long change drain period, pleasant working environment and cost efficiency

Reduced manufacturing and surface treatment costs

Excellent surface quality and high manufacturing precision

Higher productivity, so reduced manufacturing costs

Forms a continuous lubricating film, giving a balanced cooling effect and lubricity, excellent surface quality and high production accuracy

Highly applicable in equipment operating at high pressure

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### Features and benefits (continue)

Universal	Wide range of applicability enables reduction of the number of lubricating oils Suitable for use in both individual and central supply systems
Excellent washing properties	Excellent machined surface quality Clean machine-tool and workpieces, even with cast machining
Good hard water resistance	Forms a stable emulsion even with hard water No separation or sticky residues are formed on machines and workpieces
Ready miscibility with water	Simple and quick emulsion preparation
Excellent filterability	Reduced maintenance costs and environmental impact
Mild odour	More comfortable working environments
Free of nitrites and secondary amines	Beneficial in terms of workplace health requirements
Compatibility with soft water	Optimal foaming tendency in case of soft water (10°dH)
Free of formaldehyde releasers	Reduced occupational health risk

### Specifications and approvals

EMAG  
ISO 6743-7: L-MAF

### Properties

Properties	Typical values
Appearance	brown liquid
Density at 15°C [g/cm <sup>3</sup> ]	1,006
Kinematic viscosity at 40°C [mm <sup>2</sup> /s]	270
Emulsion pH value (5% (V/V) / 12 dH°)	9,4
Anticorrosion effect - Filter-paper test (5% (V/V) / distilled water) [grade]	0
Appearance of emulsion (5% (V/V) / 12dH°)	milky

The characteristics in table are typical values of the product and do not constitute a specification.

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### Storage and handling instructions

Store in the original container in dry, properly ventilated area. Keep away from direct flame and other sources of ignition. Protect from direct sunlight. To preserve the original quality keep the suggested storage temperature. During transport, storage and use of the product follow the work safety instructions and environmental regulations relating to mineral oil products.

In the concentration specified for use and in case of keeping the health safety rules, the emulsions are not harmful to human health and do not cause skin affection.

For further details please read the Material Safety Data Sheet of the product.

In the original container under the recommended storage conditions: 12 months

Recommended storage temperature: +10°C - +30°C

### Ordering information

Custom Tariff Number 34031980

#### SAP code and packaging:

13007347	MOL Emolin 400 10LA	10 l plastic can
13007348	MOL Emolin 400 50KG	60 l steel drum
13009388	MOL Emolin 400 200KG	216.5 l steel drum
13007313	MOL Emolin 400 950KG	(for order only)

#### Order booking:

Please contact your local distributor or sales partner for ordering details.