PRODUCT INFORMATION

EMULCUT 6501 M

WATER DILUTABLE METALWORKING FLUID

DESCRIPTION

EMULCUT 6501 M is a boron, formaldehyde and amine-free coolant. It is developed for machining operations on yellow metals, aluminium, steel and cast iron. EMULCUT 6501 M contains inhibitors to avoid alloys' staining.

BENEFITS

- free from boron and amines
- very good filterability
- excellent flushing effect
- stable emulsion
- low foam tendency only

The product has been composed with a mineral content of approx. 45 % along with efficient ester combinations. Thanks to raw materials well chosen, EMULCUT 6501 M emulsions provide excellent surface finish. The absence of amines makes this coolant correspond to the TRGS 611 regulations.

We suggest to make-up the EMULCUT 6501 M emulsion with an appropriate blending tool. Fill in water with a hardness range from 80 to 370 ppm CaCO3 and at room temperature then, while stirring, add slowly the concentrate. The working temperature of the emulsion should be maximum at 40 °C.

For cleaning the machined parts we recommend a mild alkaline cleaner from our FEROCLEAN series.
EMULCUT 6501 M is well compatible with plastic slideway coatings. Best machining results are achieved using EMULCUT 6501 M along with PETROFER slideway oils from the WAYLUBRIC range and ISOLUBRIC-series hydraulic oils.

An emulsion of 9 % or more must be classified as H319 in countries that follow EU regulations. This may necessitate a hazard analysis of the workplace. This results in the creation/supplementation of an operating instruction with a possibly necessary adaptation of protective measures.

TECHNICAL DATA

Foam behaviour	low
Storage temperature	5 - 35 °C avoiding frost
Shelf life	observe the use by date on the container

PHYSICAL DATA

Appearance/20 °C (visual)	light brown, clear – slightly hazy liquid
Density/20 °C (ASTM D 7042)	approx. 0.988 g/cm³
Viscosity/20 °C (ASTM D 7042)	approx. 133 mm²/s
pH value/5 % in water with 20 °dH/20 °C (DIN 51369)	approx. 9.3

FACTORS FOR THE DETERMINATION OF CONCENTRATION

Refractometer: 1.1
Acid split method: 1.4

USUAL APPLICATION CONCENTRATIONS

Drilling, turning, milling: 7 – 10 %
Reaming, sawing: 8 – 15 %
Tapping : 10 – 15 %