# **Technical Data Sheet**

# Zubora 30 FD

## **Product description**

- water-miscible cooling lubricant
- on the basis of mineral oil
- free of boron and amine
- free of formaldehyde releasers
- with polar EP additives
- long-term stable due to components from the cosmetic industry
- REACH-compliant substances
- resistance of plastics as well as of paints and coatings according to VDI 3035

As this product does not contain any amines the formation of nitrosamines from the ingredients of this product is excluded.

# Characteristics

Density/15°C / DIN EN ISO 12185:	970 kg/m³
Viscosity/20°C / ASTM D 7042:	93 mm²/s
pH-value (5 % in H2O) / DIN 51 369:	9.5
Cast iron chips test (1:20) / DIN 51 360/T2:	corrosion degree 0
Mineral oil content:	40 %
Water hazard class, concentrate:	1
Correction factor for determination of the concentration - refractometer:	1.0

## Application

**Zubora 30 FD** is a finely dispersed, water-miscible cooling lubricant on the basis of mineral oil. The product is particularly suitable for sensitive aluminium alloys as well as for general metal cutting operations of cast iron, steel and non-ferrous heavy metals. Very good results can be reached for medium to difficult cutting operations and especially for grating and thread forming processes of aluminium materials.

By using **Zubora 30 FD** a very high surface roughness below 3 µm can be achieved.

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Furthermore, high metal removal rates are possible whilst having a low tool wear. The product offers a newly improved long-term stability.

#### Recommended hardness of the preparation water:

4 to 24° dH.

### Dosage

#### Working concentration:

Metal cutting of cast iron	5 - 7 %
Metal cutting of steel	5 - 10 %
Metal cutting of aluminium	7 - 10 %

#### Storage

Recommended storage temperature: +5 °C up to max. +40 °C.

### Miscellaneous

This product is dermatologically tested. An Epicutan-test confirms the good skin compatibility. We will send you the test certificate on request.

Zubora cooling lubricants and our guide and slide way oils Divinol T 3 EP ISO 32 / Divinol T 6 EP ISO 68 / Divinol T 8 EP ISO 100 / Divinol T 12 EP ISO 220 are optimally compatible with each other. The combined use shows excellent de-emulsification properties, i.e. mixtures of emulsions and slide way oils separate quickly. Black stains can be excluded to a great extent.

If there are increased demands on **corrosion protection**, e. g. for external transport, we recommend our anti-corrosion agents containing hydrocarbons **(Multicor dewatering fluids)**. They are optimally adapted to our water-miscible cooling lubricants.

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