

Technical Data Sheet

Zubora 20 M Ultra BNL FF

Product description

- water-miscible high performance cooling lubricant
- on the basis of mineral oil
- free of formaldehyde separators
- with high content of polar additives
- with EP additives
- long-term stable
- excellent corrosion protection
- increased stability due to synergistic effect of selected raw materials

As the product does not contain any secondary amines, there is no risk of formation of nitrosamines according to the current state of knowledge.

Furthermore, **Zubora 20 M Ultra BNL FF** is inhibited against the formation of nitrosamines, i.e. that even if there are any secondary amines and nitrites (e. g. through foreign carry-over) no stable N-nitrosamines can be formed. Therefore, when exceeding the limit value for nitrite according to TRGS 611 a partial or complete change of the emulsion is not necessary.

Characteristics

Density/15°C / DIN EN ISO 12185:	980 kg/m ³
Viscosity/20°C / DIN 51 562:	135 mm ² /s
pH-value (5 % in H ₂ O) / DIN 51 369:	9.3
Cast iron chips test (1:20) / DIN 51 360/T2:	Corrosion degree 0
Mineral oil content:	34 %
Water hazard class, concentrate:	2
Water hazard class, emulsion:	(< 33 %) 1
Correction factor for determination of the concentration - refractometer:	1.1

3001V2

02/2018-3001V2-0

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Application

Due to selected highly effective EP additives **Zubora 20 M Ultra BNL FF** is suitable for cutting processes of most difficult demand.

The product can be used for machining steel, cast iron and aluminium and also for aluminium alloys as AL 2024 and 7075. The EP-additives effect a longer tool life and enable the working with high cutting speeds. Thus, a high process security can be guaranteed even for very difficult working operations. This advantage guarantees high flexibility for different cutting processes mainly in central systems and working centres.

Due to selected ingredients **Zubora 20 M Ultra BNL FF** shows a low tendency to foam in water of soft up to medium hardness. The recommended hardness of the preparation water is between 4 and 12° dH.

The necessary working concentration depends on the difficulty of the operation and the material.

Working concentration

drilling/milling etc	approx. 5 %
reaming/sawing etc.	approx. 10 %

Storage

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

Miscellaneous

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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