

EASycut UNI301

UNIVERSAL WATER-MISCIBLE SEMI-SYNTHETIC FLUID FOR CNC MACHINING

Universal water-miscible semi-synthetic concentrate of lubricating and cooling fluid. UNI301 allows for the machining of alloyed and non-alloyed steels, cast iron, titanium, most aluminum alloys, and limited copper and its alloys. Contains mineral oil.



COMPOSITION FEATURES

- Does not contain boric acid.
- Does not contain formaldehyde.
- Contains secondary amines (DCHA).

PRODUCT PROPERTIES AND ADVANTAGES

- Stable mixing of the emulsion with water hardness from 5° to 30°dH; During operation (accumulation of salts), an increase in water hardness up to 60°dH is allowed.
- High corrosion protection characteristics.
- Low foaming when using water of recommended hardness.
- Good washability (clean equipment).
- A product with a high* pH = increased stability.

TECHNICAL DATA

- Kinematic viscosity of the concentrate at 20°C, mm²/s — 120.
- Approximate mineral oil content, % — 30.
- pH of fresh 5% emulsion: 10.1*.
- Corrosion protection DIN 51360/2 – 4% — corrosion degree 0.
- **Refractometer factor**, %/°Brix — **1.3**.

SHELF LIFE AND STORAGE CONDITIONS

Stable for 12 months when stored at a temperature of 5 to 40 °C in unopened containers.

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The technical data are representative values.
All recommendations are without obligation.

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RECOMMENDATIONS AND FEATURES

- To prepare a high-quality finely dispersed emulsion, it is recommended to use the automatic mixer device.
- For manual preparation, it is recommended to slowly add the concentrate to the water (not water to the concentrate), mixing evenly.
- The recommended concentration depends on the cutting operations and the material being processed. Turning and milling operations: 6-8% (steel, cast iron) / 7-10% (aluminum)|Grinding: 4-6%.
- The concentration of the working emulsion is measured by a manual (LQ20T) or electronic refractometer. To do this, the read value is multiplied by the **refractometer factor of 1.3**.
- EASycut UNI301 coolant can be used for processing most aluminum alloys, and limited of copper alloys. However, the tendency of such alloys to form spots (darkening) should be checked in advance.

*The increased pH in the fresh emulsion may cause a temporary strong odor and temporary darkening on aluminum alloys in the first 1-3 days of operation. Afterward the pH should drop to normal values of 9-9.5.

COMMENTS

Minor variations in color and appearance are possible due to the raw materials chosen. However, these have no influences on the functionality of the product.

All information on safe and proper handling can be found on the MSDS.

DESIGNED IN GERMANY