

EASYCUT BVR451

UNIVERSAL WATER-MISCIBLE SEMI-SYNTHETIC COOLANT FOR HEAVY DUTY CNC MACHINING



Universal water-miscible semi-synthetic concentrate of lubricating and cooling fluid. BVR451 is designed for high performance 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).
- Contains bactericides.
- Polar lubricity improves for better aluminium performance.

PRODUCT PROPERTIES AND ADVANTAGES

- Stable mixing of the emulsion with water hardness from 10 °dH 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).
- High performance machining of hard materials.
- Polar lubricity improves and tight control of the in-use pH achieve optimum results when machining aluminium.

TECHNICAL DATA

- Kinematic viscosity of the concentrate at 20 °C: 220 mm²/s
- ≈Mineral oil content: 45%
- pH of fresh 5% emulsion: 9.7*
- Corrosion protection DIN 51360/2: 6% — corrosion degree 0
- Refractometer factor: 1%/°Brix.

RECOMMENDATIONS AND FEATURES

- To prepare a high-quality finely dispersed emulsion, it is recommended to use the automatic mixer device ZH-30.
- 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: light to medium duty machining from 6% , heavy duty machining from 8%.
- 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.
- EASYCUT BVR451 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. Afterwards the pH should drops 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.

EASYCUT BVR451 at www.cncmarket.ca

SHELF LIFE AND STORAGE CONDITIONS

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



Designed in Germany

Import to Canada: CNCmarket.ca, 1144 Legacy Cir SE, Calgary, AB, Canada

The technical data are representative values. All recommendations are without obligation. We reserve the right to change the contents of this document without prior notice.