# EFSSICLT <u>Syn311</u>

WATER-MISCIBLE FULLY SYNTHETIC COOLANT FOR CNC MACHINING

Water-miscible fully synthetic concentrate of lubricating and cooling fluid. SYN311 is designed for grinding cast iron and steels. It can also be used for light-duty and medium cutting operations in lathes and milling machines.

### **COMPOSITION FEATURES**

- Does not contain formaldehyde.
- Does not contain mineral oil.
- Contains amines.
- Contains boric acid.
- Base water.

## **PRODUCT PROPERTIES AND ADVANTAGES**

- Stable mixing of the emulsion with water hardness from 5 °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).

#### **TECHNICAL DATA**

- Kinematic viscosity of the concentrate at 20 °C: 30 mm²/s
- ≈Mineral oil content: 0%
- pH of fresh 5% emulsion: 9.2
- Corrosion protection DIN 51360/2: 5% corrosion degree 0
- Refractometer factor: 1.7 %/°Brix.

## SHELF LIFE AND STORAGE CONDITIONS

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

#### **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: 7-10% (steel, cast iron). 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 1.7

#### 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 SYN311 at www.cncmarket.ca



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.