# **HOCUT 3220**

# Water soluble metalworking fluid

### **DESCRIPTION**

HOCUT 3220 is a boron and formaldehyde-free, semisynthetic, metalworking fluid forming a stable micro-emulsion based on high quality mineral oil and polar lubricity additives.

#### **APPLICATIONS**

**HOCUT 3220** is designed for surface grinding of bearing rings and is suitable for use in both single sump machines and central systems. The product can also be used for light duty machining and grinding of cast iron and low to medium alloyed steels.

The general purpose emulsion is designed with excellent detergency and high wetting properties for a clean working

The product is designed for a wide range of water hardness, typically 5-20 German degrees.

#### **RECOMMENDATION FOR USE**

General machining 5 - 7 %Ferrous grinding 4-6%

#### TYPICAL PHYSICAL PROPERTIES

Concentrate Appearance	Hazy brown oil
Specific Gravity @ 20°C	0.99
Refractometer Factor	1.6

**Emulsion Appearance** Translucent pH in Use 8.7-9.2

#### **BENEFITS**

- **Excellent detergency:** cleaner parts, machine tools and working environment
- Very stable emulsion: long fluid life between new fills, fewer additive treatments and lower usage costs
- Good corrosion protection: fewer rejects and lower
- **Very low foaming:** ideal for high pressures and flow rates in a wide range of water hardness
- Boron-free: no SVHC classification under REACh
- Very good EHS profile: Exempt of Boron, chlorine, phenol, secondary amine (conforms to TRGS 611) and formaldehyde

# **RELATED PRODUCT**

Water soluble coolants are complemented by our full range of high quality, speciality production fluids including energy saving wash chemicals, low misting neat cutting oils, non-VOC rust preventives and long life heat treatment fluids. Fluidcare services complete our value added portfolio with a range of expert services and equipment to help reduce costs and improve productivity. For more information, please contact your local Houghton representative.

# **STORAGE**

Please refer to section 7 of Safety Data Sheets for handling and storage information, including product shelf life. Product should be stored under cover in clean, dry conditions and protected from frost. Recommended storage temperature is usually between 5°C and 40°C unless otherwise specified. Use stock in delivery rotation.

#### **HEALTH AND SAFETY**

Safety data sheets are available in accordance with Regulations (EC) No 1907/2006 Annex II and (EC) No 1272/2008.

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