



# innocool 440

Pioneering - Sustainable - Tried and tested

# 440



**innocool 440**  
*The chlorine-free,  
universally applicable  
cooling lubricant for up  
to medium machining.*

## Properties:

- ▶ can be mixed with water
- ▶ based on mineral oil
- ▶ free of formaldehyde releasers
- ▶ long-term resistance
- ▶ high corrosion protection, even at low concentrations
- ▶ excellent resolubility and greater machine cleanliness as a result
- ▶ resistant to nitrosamine formation
- ▶ REACH-compliant ingredients
- ▶ neutral towards plastics, as well as lacquers and coatings according to VDI 3035

## Application range:

- ▶ universally applicable cooling lubricant
- ▶ especially for machining
- ▶ suitable for steel and cast iron
- ▶ very well suited for grinding
- ▶ can be used for up to medium machining operations



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**innocool 440** is protected against nitrosamine formation, i.e. no stable N-nitrosamines can be formed in the presence of secondary amines and nitrite from foreign sources, for example. According to TRGS 611, if the limit value for nitrite is exceeded, partial or complete replacement of the working emulsion is not necessary.

**innocool 440** is suitable for use in both individually filled machines and centralised systems.

**Technical data**

	Specific value	Unit	Testing method
<b>Density 15 °C:</b>	990	kg/m <sup>3</sup>	DIN EN ISO 12185
<b>Viscosity 20 °C:</b>	200	mm <sup>2</sup> /s	ASTM D 7042
<b>pH value:</b>	9.5	5% in H <sub>2</sub> O	DIN 51 369
<b>Casting chip test (1:20):</b>	corrosion level 0		DIN 51 360/T2
<b>Mineral oil content:</b>	42 %		
<b>Water hazard class:</b>	2 concentrate		
<b>Water hazard class:</b>	1 emulsion (< 22.2 %)		
<b>Correction factor:</b>	1.1		Refractometer
<b>Application concentration:</b>	<b>Machining</b> approx. 5 – 7 per cent <b>Grinding</b> approx. 3 – 4 per cent		
<b>Recommended hardness:</b>	<b>of the mixing water</b> 12 to 24° dH		
<b>Recommended storage temperature:</b>	+5 °C to max. +40 °C.		

This information has been carefully compiled and reflects the current state of technical development. We reserve the right to make changes in the interest of progress. No liabilities of any kind can be derived from it.

**Ordering information**

	Single unit	Container form*	Order No.
<b>20 litres</b>		Plastic canister	20-440020
<b>204 litres</b>		Drum	20-440204

\*other containers available on request

