## **INDUOIL HL 4**

Product description: Low-residue stamping, cutting and shaping coolant with excellent lubricating properties.

**Application:** During light-duty shaping operations, such as stamping, bending, shaping, drawing, deep drawing and tapering but also during metal-cutting machining such as milling, turning, drilling, sawing and threading, and during internal cooling for MQL.

Suitable materials: Non-ferrous metals (Al), non-ferrous heavy metals, non-alloy/alloy steels (ST, V2A), electric contact materials, wooden materials

Environmental compatibility: AS 13 02 06; WGK 1

**Application**: Non-diluted by spraying, rolling, daubing, shaping or in drop lubrication. Not suitable for cyclic or mechanical lubrication!

**Recommendation:** For optimum, inductive and wear-free applications, we recommend mist-free <a href="MS Minimum Quantity Cooling and Lubricating systems">MS Minimum Quantity Cooling and Lubricating systems</a> with a dual air jacket and the <a href="MNDUTEC® MS Internal Cooling systems">MNDUTEC® MS Internal Cooling systems</a>.

**Advantages**: INDUOIL® HL 4 offers the following benefits in minimum quantity lubrication:

minimal residues

dry work pieces, machinery and chippings no disposal of the cooling lubricant required

improvement to tool life improvement in performance virtually odour-neutral

Degreasing options: Evaporates leaving virtually no residue when used as intended.

Colour: colourless

Odour: odourless or weak odour Viscosity at 40°C: 2.5mm²/s Density at 20°C: 790kg/m³ Pour point: < - 20°C Flash point: 105°C

Relative evaporation rate: approx. 3,900 Aromatic compound content: < 0,1 %

## This high performance oil is

free of PVB/PCT free of phenol free of chlorine free of silicon

free of heavy metals

non-toxic