# **HOCUT 4444**

# Water soluble metalworking fluid

# DESCRIPTION

HOCUT 4444 is advanced, low to medium duty, boron-free and formaldehyde-free emulsion technology giving very long sump-life.

A special additive package gives greatly enhanced machining performance and extends too life, compared to conventional products. HOCUT 4444 is particularly effective on machining aerospace airframe structural components in aluminium alloys or fiber composites.

#### APPLICATIONS

HOCUT 4444 is recommended for low to medium duty machining, including high spee machining, of a wide range of materials including aluminium alloys, fiber composites, but also ferrous alloys.

The product is suitable for both centralised systems and singlesump machines while the advanced boron-free technology extends emulsion life without the need for regular biocide treatments.

The versatile formulation is designed to give low foam and no soaps in soft to hard water ( $10^{\circ}dH - 70^{\circ}dH$  cumulated hardness).

Its operator-friendly EHS profile and its non-staining & corrosion-free properties make HOCUT 4444 particularly efficient on aero structural airframe components. An advanced antiwear additive extends the tool life too.

# **RECOMMENDATION FOR USE**

Low to medium duty machining 8 - 10 %

# **TYPICAL PHYSICAL PROPERTIES**

Concentrate Appearance	pale yellow	
Specific Gravity @ 20°C	0.99	DIN 51757
Refractometer Factor	1.5	HIM 53
Emulsion Appearance	Translucent	
pH in Use	9.5	DIN 51369

# BENEFITS

- **Versatile :** can process very various materials, ranking from fiber composites, to aluminium alloys as well as ferrous alloys
- **High detergency :** leaves clean parts and working environment
- **Extended tool life :** thanks to antiwear additive package tool wear is minimized, saving tooling costs
- **Very long sump-life :** new HOCUT 4000 series emulsion technology extends intervals between clean outs
- Very stable emulsion : fewer additive treatments and lower usage costs
- Inhibits aluminium staining : can be used for sensitive aluminium alloys
- **Very low foaming :** ideal for the highest speeds and pressures in soft to hard water (10°dH 70°dH)
- Excellent EHS profile : boron, formaldehyde, chlorine and phenol-free. Contains only TRGS 611 approved amines

# **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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