

# TECHNICAL DATA SHEET

## HOCUT® 3740

### HIGH PERFORMANCE SEMI-SYNTHETIC METALWORKING FLUID

HOCUT® 3740 is an economical soluble cutting fluid intended for a broad range of applications in both ferrous applications and aluminum. This product is highly biostable, compatible in very soft water and hard water delivering a resilient emulsion and high quality surface finish on aluminum.

#### Applications

Machining in 50ppm to 500ppm hardness water where system emulsion stability and resistance to biological growth are important for manufacturers not using treated water. HOCUT® 3740 does not stain aluminum, offers clean operation forming very little soap, low foaming in soft water and solid lubricity.

On the ALE-2 CNC work center, HOCUT® 3740 effectively drilled holes and reamed to surface roughness of <0.6um at varying speeds. Tapping performed under an internal procedure resulted in HOCUT® 3740 successfully tapping 36 holes at 5% coolant concentration in DI water. Evaluations were performed on 356-T6 and 380 cast alloys.

#### Recommendation for Use

Recommended starting concentration of 5 to 10% for machining.

HOCUT® 3740 should be added to water creating an emulsion for use as a machining coolant.

#### Benefits

- A lubricant formulation delivering excellent surface finish and long tool life
- Reliable resistance to metal staining
- A stable emulsion up to 1500ppm hardness conditions. Can compensate for the effects of modern high magnesium containing aluminum alloys and house hard water
- Runs clean and doesn't form residues & soap associated with non-ferrous machining
- Resistance to biological growth for extended sump life and recycling programs

#### Health, Safety and Handling

Please consult the Safety Data Sheet (SDS) for information on storage, safe handling and disposal. The conditions or methods of handling, storage, use and disposal of the product are beyond our reasonable control - we assume no liability for any ineffectiveness of the product or any injury or damage, arising out of or in connection with these conditions.

#### Properties

PROPERTY	TYPICAL VALUE	UNIT
Appearance	Amber liquid	
Bulk Density	8.401	lbs/gal
Typical pH in 5% water	9.6 - 9.7	
Refractometer factor	1.5	Brix

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