



Product Information Flyer

DESCRIPTION

CIMPERIAL 1073 is a premium soluble oil.

APPLICATION

CIMPERIAL 1073 was developed for use in moderate to heavy-duty operations for use on aluminum, carbon steels, high speed steel, cast steels, alloy steels, tool steel, stainless steel, titanium, cast iron, and magnesium*.

FEATURES & BENEFITS

LUBRICITY:

CIMPERIAL 1073 provides excellent lubricity for a variety of machining applications on magnesium, aluminum, and steel. An exceptional product for form tapping aluminum.

LOW FOAMING:

CIMPERIAL 1073 can be used in high turnover, high-pressure applications where foam control is required.

MAGNESIUM COMPATIBILITY*:

CIMPERIAL 1073 for machining magnesium results in minimal hydrogen evolution. Reduces magnesium dust creation.

CORROSION PROTECTION:

CIMPERIAL 1073 provides good corrosion control on ferrous and nonferrous metals, including magnesium.

MICROBIAL CONTROL:

CIMPERIAL 1073 contains a microbial control package which extends fluid life for a long lasting, trouble-free performance.

RECOMMENDED STARTING DILUTIONS

CIMPERIAL 1073 is to be mixed with water for use. Always add concentrate to water. Fluid may be more difficult to mix when water temperature is below 55°F. Add no other materials to the concentrate or mix unless approved by your CIMCOOL® District Manager.

Grinding	5% - 10%	(1:20 to 1:10)
Machining	5% - 10%	(1:20 to 1:10)

CONCENTRATION

Non-solvent Titration, Total Alkalinity, CIMCHEK™ Test Strip or Refractometer can be used.

The Refractometer Factor is 0.9

A refractometer is only recommended for use in checking the concentration of a fresh charge. Multiply the scale reading obtained on your CIMCOOL® Refractometer by this factor to obtain the mix concentration in percent. Calibrate the refractometer so that it reads 0.0 with water before testing the sample mix. Remove gross contaminants from the sample mixes before testing.

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Solubility in water: 100% miscible

Viscosity (SUS) @ 100°F: 290

pH Concentrate: NA

Total Chlorine/Chloride, wt%: 0.0/<50ppm

Silicones: Yes

Appearance and Odor: Hazy/Chemical

Weight, lb/gal, 60°F (15.6 °C): 7.8

Flash Point /Sp.Gr./Boiling Point: SEE MSDS

pH Mix 5%, Typical Operating: 8.5

Total Sulfur, wt%: 0.5

HANDLING AND STORAGE

If frozen, thaw completely at room temperature prior to use. Inside storage is recommended.

SAFETY DATA SHEET

Available at www.cimcool.com

For additional information refer to its OSHA MSDS, website or contact your local CIMCOOL TECHNICAL SPECIALIST OR DISTRICT MANAGER, or you may contact CIMCOOL® Technical Services at 1-513-458-8199.

Limitation of Liability: Under no circumstances, shall we or any affiliate of ours have any liability whatsoever for loss of use, or for any indirect or consequential damages. Minor formulation changes or normal variations in the manufacture of this product may cause slight variances in the data presented on this sheet.

* - **OTHER PRECAUTIONS:** When using this product on magnesium or alloys of magnesium proper safety procedures must be followed. These include: 1) providing ample flooding of the part with the metalworking fluid; 2) minimizing magnesium chip accumulation in machines, sumps and tanks; 3) promptly separating magnesium chips from the fluid; and 4) providing ventilation for hydrogen gas. For more information on machining of magnesium with water based metalworking fluids, please refer to the "Hydro Magnesium" website, <http://www.hydromagnesium.com>, in their brochure section under "Machining Magnesium" or the International Magnesium Association brochure "Safe Machining And Handling Of Magnesium Chips, Turnings & Grindings" that can be found in their "Publication and Video" section of their website, <http://www.intlmag.org/brochures.aspx>