



## Product Information Flyer

### DESCRIPTION

CIMPERIAL 1880M metalworking fluid is a premium soluble oil designed for machining magnesium, but can also be used on other materials, including aluminum.

### APPLICATION

CIMPERIAL 1880M is for moderate to heavy duty machining and grinding applications and can be used on Magnesium\*, most Aluminum alloys and other non-ferrous metals, Carbon Steels, High Speed Steel, Cast Steels, Alloy Steels, Tool Steel, Stainless Steel, and Cast Iron.

### FEATURES & BENEFITS

**MAGNESIUM COMPATIBILITY\*:** Using CIMPERIAL 1880M for machining magnesium results in the lowest level of hydrogen evolution, when compared to all other water-based products tested - Reduces magnesium dust creation

**MIX STABILITY:** Excellent mix stability, even in the presence of high levels of magnesium

**CLEANLINESS:** Good mix cleanliness, even in the presence of magnesium

**GOOD CORROSION CONTROL:** Good corrosion control on magnesium, ferrous and other nonferrous metals

**GOOD RANCIDITY CONTROL:** Contains a microbial control package which extends fluid life for long lasting, trouble-free performance

**LOW FOAMING:** Can be used in high turnover applications

**WASTE TREATABLE:** Compatible with most conventional waste treatment methods

### RECOMMENDED STARTING DILUTIONS

CIMPERIAL 1880M 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 (13 C). 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

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

The Refractometer Factor is 0.9

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. A refractometer is only recommended for use in checking the concentration of a fresh charge.

### TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

**Physical State: Liquid**

**Solubility in water: 100% miscible**

**Viscosity (SUS) @ 100°F: 775**

**pH Concentrate: NA**

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

**Silicones: NO**

**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: 8.4**

**Total Sulfur, wt%: 0.22**

### HANDLING and STORAGE

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

### SAFETY DATA SHEET

Available at [www.cimcool.com](http://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>