

CIMCOOL®

METALWORKING FLUIDS

CIMPERIAL® 1073Z

SOLUBLE OIL, METALWORKING FLUID CONCENTRATE

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| APPLICATIONS | <p>CIMPERIAL® 1073Z metalworking fluid is a premium soluble oil designed for machining aluminum, but can also be used on other materials, including magnesium.</p> <p>CIMPERIAL® 1073Z can be used in individual machines or central systems</p> <p>Metals: Aluminum, Carbon Steels, High Speed Steel, Cast Steels, Alloy Steels, Tool Steel, Stainless Steel, Titanium (non-aerospace), Cast Iron, Bronze, Brass, Copper, Magnesium*</p> <p>Duty Range: For moderate to heavy-duty operations</p> |
| FEATURES & BENEFITS | <p>EXCELLENT BIOLOGICAL CONTROL - Maintains control of bacteria and mold, resulting in extended fluid life</p> <p>EXCELLENT LUBRICITY - CIMPERIAL® 1073Z can perform a variety of machining applications on aluminum, steel and magnesium - An exceptional product for form tapping aluminum</p> <p>MAGNESIUM COMPATIBILITY* - Using CIMPERIAL® 1073Z for machining magnesium results in minimal hydrogen evolution - Reduces magnesium dust creation</p> <p>GOOD CORROSION CONTROL - Good corrosion control on ferrous and nonferrous metals, including magnesium</p> <p>WASTE TREATABLE - Compatible with most conventional waste treatment methods</p> <p>OPERATOR FRIENDLY - Mild to skin - Easy to mix</p> |

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| RECOMMENDED STARTING DILUTIONS | <p>FOR INDUSTRIAL USE ONLY Recommended Starting Dilution: 5% (1:20) Typical Operating Range: 5% (1:20) to 10% (1:10) For concentrations outside this range contact CIMCOOL® Technical Service at 513-458-8199.</p> <p>CIMPERIAL® 1073Z is to be mixed with water for use (add concentrate to water).</p> <p>Add no other substances to the concentrate or mix unless approved by CIMCOOL® Technical Services.</p> <p>For concentration analysis, use the MI Titration Procedure, Non-Solvent Titration Procedure, Total Alkalinity Titration Procedure, or Refractometer.</p> |
| TYPICAL PHYSICAL AND CHEMICAL PROPERTIES | <p>Physical state: Liquid Appearance and odor: Hazy / Chemical Colors available: Undyed Solubility in water: 100% Miscible Weight, lb/gal, 60°F (15.6°C): 7.8 Specific gravity, (H₂O = 1): 0.93 Boiling point, °F (°C): Not Applicable Flash point, COC, °F (°C): 300 (149) Fire point, COC, °F (°C): 305 (152) Freezing point, °F, (°C): < 0 (< -18) If frozen, thaw completely at room temperature. pH, concentrate: Not Applicable pH, 5.0% mix, typical operating conditions: 8.4 Total chlorine/chloride, wt%, calculated: 0.000/< 50 ppm Total sulfur, wt%, calculated: 0.45 Silicones: Yes Dicyclohexylamine: None</p> |
| PACKAGING | Available in 5-gallon pails, 55-gallon drums, and bulk containers. |
| <p>REFRACTOMETER FACTOR = 1.0 Multiply the scale reading obtained on your CIMCOOL® Metalworking Fluid or other acceptable refractometer by the Refractometer Factor to obtain the mix concentration in percent.</p> <p>NOTE: Calibrate the refractometer so that it reads 0.0 with water, before testing the sample mix. Remove gross contaminants from the sample mix, before testing.</p> | |
| <p>For additional information concerning CIMPERIAL® 1073Z, refer to its OSHA MSDS or contact CIMCOOL® Technical Services at 1-513-458-8199.</p> <p>* - 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.hydrumagnesium.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</p> <p>Minor formulation changes or normal variations in the manufacture of this product may cause slight variances in the data presented on this sheet. Consumable Products Division/ Milacron Marketing Company Cincinnati, Ohio 45209</p> <p>PC-9984 2/23/07</p> | |

