

# CIMCOOL<sup>®</sup>

## METALWORKING FLUIDS

### CIMTECH<sup>®</sup> 310

#### SYNTHETIC, METALWORKING FLUID CONCENTRATE

<b>APPLICATIONS</b>	<p><b>CIMTECH<sup>®</sup> 310</b> metalworking fluid is recommended for machining and grinding operations, including creep feed grinding, on non-ferrous or ferrous metals.</p> <p><b>Metals:</b> Wrought aluminum alloys (2024, 6061, 7050, 7075), Cast aluminum alloys (380, 390), Cast Iron, Nodular Iron, Carbon Steels, Stainless Steels, Titanium, Other Exotic Alloys</p> <p><b>Duty Range:</b> For moderate to heavy-duty operations</p>
<b>FEATURES &amp; BENEFITS</b>	<p><b>CIMTECH<sup>®</sup> 310</b> metalworking fluid is a unique, low pH synthetic fluid designed for the aerospace industry.</p> <p><b>MEETS AEROSPACE REQUIREMENTS</b> - Passes bi-metallic and aluminum (7075) "sandwich" corrosion tests - Approved product for many aerospace manufacturers</p> <p><b>EXCELLENT LUBRICITY</b> - Provides excellent tool life and surface finish</p> <p><b>EXCELLENT CLEANLINESS</b> - Rejects tramp oil to keep product clean, which extends sump life</p> <p><b>OPERATOR - FRIENDLY</b> - Provides excellent part visibility - A fresh mix is transparent - No Smoke - Low misting - Mild to the skin</p> <p><b>EXCELLENT MACHINE COMPATIBILITY</b> - Very low foaming product, even when used with deionized water</p> <p><b>EXCELLENT RANCIDITY CONTROL</b> - Excellent fluid life - Minimizes the need for additives</p> <p><b>ENVIRONMENTALLY FRIENDLY</b> - Easily recycled</p>

<b>RECOMMENDED STARTING DILUTIONS</b>	<p><b>FOR INDUSTRIAL USE ONLY</b>  <b>Recommended Starting Dilution: 5% (1:20)</b>  <b>Typical Operating Range: 5% (1:20) to 10% (1:10)</b>  <b>For concentrations outside this range contact CIMCOOL® Technical Service at 513-458-8199.</b></p> <p><b>CIMTECH® 310</b> 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. Not recommended for use with magnesium or alloyed magnesium.</p> <p><b>For concentration analysis, use</b> the Total Alkalinity Titration Procedure, BCG Titration Procedure, CIMCHEK™ Test Strip, or Refractometer.</p>
<b>TYPICAL PHYSICAL AND CHEMICAL PROPERTIES</b>	<p><b>Physical state:</b> Liquid  <b>Appearance and odor:</b> Clear / Chemical  <b>Colors available:</b> Undyed  <b>Solubility in water:</b> 100% Miscible  <b>Weight, lb/gal, 60°F (15.6°C):</b> 9.02  <b>Specific gravity, (H<sub>2</sub>O = 1):</b> 1.081  <b>Boiling point, °F (°C):</b> 212 (100)  <b>Flash point, COC, °F (°C):</b> None, Self Extinguishing  <b>Fire point, COC, °F (°C):</b> NA  <b>Freezing point, °F, (°C):</b> 13 (-11)  If frozen, product separates. Thaw completely at room temperature and stir thoroughly.  <b>pH, concentrate:</b> 8.2  <b>pH, 5.0% mix, typical operating conditions:</b> 7.8  <b>Total chlorine/chloride, wt%, calculated:</b> 0.00/0.09  <b>Total sulfur, wt%, calculated:</b> 0.00  <b>Silicones:</b> None</p>
<b>PACKAGING</b>	<b>Available in 5-gallon pails, 55-gallon drums, and bulk containers.</b>
<p><b>REFRACTOMETER FACTOR = 1.7</b> Multiply the scale reading obtained on your CIMCOOL® Metalworking Fluid or other acceptable refractometer by the <b>Refractometer Factor</b> to obtain the mix concentration in percent.</p> <p><b>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.</b></p>	
<p>For additional information concerning CIMTECH® 310, refer to its OSHA MSDS or contact CIMCOOL® Technical Services at 1-513-458-8199. Reprints/Updates of this Product Information Flyer (PIF) can be found on our web site, <a href="http://WWW.CIMCOOL.COM">WWW.CIMCOOL.COM</a> or from your Milacron representative.</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><b>PC-9027 3/29/06</b></p>	

