

# CIMCOOL®

## METALWORKING FLUIDS

### CIMPERIAL® 1060CFZ SOLUBLE OIL, METALWORKING FLUID CONCENTRATE

<b>APPLICATIONS</b>	<p><b>CIMPERIAL® 1060CFZ</b> metalworking fluid is recommended for a wide variety of "heavy-duty" machining and grinding operations including turning, drilling, tapping, reaming, gear cutting, and broaching.</p> <p><b>Metals:</b> Carbon Steels, High Speed Steel, Cast Steels, Alloy Steels, Tool Steel, Stainless Steel, Cast Iron, Aluminum, Bronze, Brass, Copper</p> <p><b>Duty Range:</b> For heavy-duty operations</p>
<b>FEATURES &amp; BENEFITS</b>	<p><b>CIMPERIAL® 1060CFZ</b> is a chlorine-free, general-purpose formulation designed for a wide variety of metals and operations.</p> <p><b>EXCELLENT BIOLOGICAL CONTROL</b> - Maintains control of bacteria and mold, resulting in extended fluid life</p> <p><b>EXCELLENT LUBRICITY</b> - Contains mineral oil for physical lubricity - Also contains organic lubricants for heavy-duty operations - Provides excellent tool life and surface finishes</p> <p><b>EXCELLENT CORROSION CONTROL</b> - Controls ferrous and non-ferrous corrosion on parts and machine components</p> <p><b>OPERATOR FRIENDLY</b> - Mild to skin - Easy to mix - Low foaming - Pleasant odor</p> <p><b>MACHINE FRIENDLY</b> - Cleaner machines and work areas create a more pleasant work environment - Residue can be removed with water or alkaline cleaners - No solvent degreasers required as with straight oils</p> <p><b>ECONOMICAL</b> - Wide application on metals and operations - CIMPERIAL® 1060CFZ minimizes requirements for storage, mixing, charging, makeup and maintenance</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>CIMPERIAL® 1060CFZ</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 MI Titration Procedure, Non-Solvent Titration Procedure, Total Alkalinity Titration Procedure, 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, Blue  <b>Solubility in water:</b> 100% Miscible  <b>Weight, lb/gal, 60°F (15.6°C):</b> 7.75  <b>Specific gravity, (H<sub>2</sub>O = 1):</b> 0.9285  <b>Boiling point, °F (°C):</b> 212 (100)  <b>Flash point, COC, °F (°C):</b> 345 (174)  <b>Fire point, COC, °F (°C):</b> 355 (179)  <b>Freezing point (or pour point), °F, (°C):</b> &lt; 0 (&lt; -18)  If frozen, thaw completely at room temperature.  <b>pH, concentrate:</b> Not Applicable  <b>pH, 5.0% mix, typical operating conditions:</b> 8.9  <b>Total chlorine/chloride, wt%, calculated:</b> 0.00/&lt; 50 ppm  <b>Total sulfur, wt%, calculated:</b> 0.2  <b>Silicones:</b> None  <b>Triazine:</b> None  <b>Dicyclohexylamine:</b> None</p>
<b>PACKAGING</b>	<b>Available in 5-gallon pails, 55-gallon drums, and bulk containers.</b>
<p><b>REFRACTOMETER FACTOR = 1.0</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 CIMPERIAL® 1060CFZ, 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-9969 9/21/06</b></p>	

