

# CIMCOOL®

## METALWORKING FLUIDS

### CIMSTAR® 40

SEMISYNTHETIC, METALWORKING FLUID CONCENTRATE

<b>APPLICATIONS</b>	<p><b>CIMSTAR® 40</b> is designed to be used in machines and operations where long fluid life is needed, such as in large individual machine or central system reservoirs. It is recommended for moderate-duty machining and grinding of ferrous metals, and some nonferrous metals.</p> <p><b>Metals:</b> Cast Iron, Nodular Iron, Carbon Steels, High Speed Steel, High Alloy Steels, Stainless Steels, Aluminum</p> <p><b>Duty Range:</b> For light to moderate-duty operations</p>
<b>FEATURES &amp; BENEFITS</b>	<p><b>CIMSTAR® 40</b> is a clear, water soluble, semisynthetic product.</p> <p><b>Advantages</b> - Exceptional rancidity control - Effective lubrication and cooling - Good settling properties - No nitrite</p> <p><b>Effective Lubrication and Cooling</b> - A combination of chemical lubricants and wetting agents provide good machining and grinding properties - Keeps parts and tools cool - Extends tool life - Allows high speeds and feeds that increase production</p> <p><b>Stable</b> - Can be used in individual machines as well as central system applications</p> <p><b>Good Settling Properties</b> - Efficiently settles chips and grit - Produces a good cake on positive filters which removes recirculating fines and also lowers media usage - Parts and machines stay clean</p> <p><b>Excellent Corrosion Control</b> - Organic and inorganic corrosion inhibitors protect machines and parts from rust</p> <p><b>Environmentally Friendly</b> - Is easy to maintain and control - It is waste treatable - It can also be recycled for reuse</p> <p><b>Note:</b> CIMSTAR® 40B has the same performance characteristics as CIMSTAR® 40 but in addition, is designed to be low foaming in soft water (50 ppm hardness)</p>

<p><b>RECOMMENDED STARTING DILUTIONS</b></p>	<p><b>FOR INDUSTRIAL USE ONLY</b>  <b>Use between 5.0% (1:20) and 10.0% (1:10) for machining and grinding ferrous and nonferrous metals.</b></p> <p><b>CIMSTAR® 40</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, CIMCHEK™ Test Strip, or Refractometer.</p>
<p><b>TYPICAL PHYSICAL AND CHEMICAL PROPERTIES</b></p>	<p><b>Physical state:</b> Liquid  <b>Appearance and odor:</b> Clear, yellow/chemical  <b>Colors available:</b> Undyed, pink, blue  <b>Solubility in water:</b> 100% Miscible  <b>Weight, lb/gal, 60°F (15.6°C):</b> 8.83  <b>Specific gravity, (H<sub>2</sub>O = 1):</b> 1.058  <b>Boiling point, °F (°C):</b> 210 (99)  <b>Flash point, COC, °F (°C):</b> None, self extinguishing  <b>Fire point, COC, °F (°C):</b> NA  <b>Extinguishing media:</b> NA  <b>Unusual fire &amp; explosion hazards:</b> None  <b>Freezing point (or pour point), °F, (°C):</b> 32 (0)          If frozen product separates. Thaw completely and stir thoroughly before using.  <b>pH, concentrate:</b> 10.2  <b>pH, 5.0% mix, typical operating conditions:</b> 9.0  <b>Total chlorine/chloride, wt%, calculated:</b> 0.00/&lt; 50 ppm  <b>Total sulfur, wt%, calculated:</b> 0.01  <b>Silicones:</b> No for CIMSTAR® 40 / Yes for CIMSTAR® 40B</p>
<p><b>PACKAGING</b></p>	<p><b>Available in 5-gallon pails, 55-gallon drums, and bulk containers.</b></p>
<p><b>REFRACTOMETER FACTOR = 3.1</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 CIMSTAR® 40, refer to its OSHA MSDS or contact CIMCOOL® Technical Services at 1-513-458-8199.</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-794 12/14/06</p>	