

CIMCOOL®

METALWORKING FLUIDS

CIMSTAR® 60LF

SEMISYNTHETIC, METALWORKING FLUID CONCENTRATE

APPLICATIONS	<p>CIMSTAR® 60LF is a general-purpose fluid recommended for machining and grinding aluminum, iron and steel.</p> <p>It has the performance capabilities of soluble oils. It is also recommended for tapping, reaming, turning, drilling, internal grinding, and centerless grinding.</p> <p>Metals: Cast Iron, Nodular Iron, Carbon Steels, High Speed Steel, High Alloy Steels, Stainless Steels, Aluminum</p> <p>Duty Range: For moderate to heavy-duty operations</p>
FEATURES & BENEFITS	<p>CIMSTAR® 60LF metalworking fluid is a clean, completely water soluble, silicone-free, semi synthetic product that contains an extreme pressure (EP) lubricant for superior machining and grinding capability.</p> <p>Designed to be low foaming in soft water (less than 125 ppm total hardness)</p> <p>Advantages: Economical, Excellent lubricity, Excellent rancidity and mold control, Outstanding cleanliness, Leaves a soft residue</p> <p>Biostable: Exceptionally good bacteria and mold control - Resists attack by mold and bacteria</p> <p>Is easily waste treatable using standard fluid treatment procedures and systems. It can also be recycled for reuse using appropriate metalworking fluid recycling equipment.</p> <p>Very Cost effective</p> <p>Versatile: Specially designed for excellent machining and grinding of aluminum, iron and steel</p> <p>Parts and machines stay very clean</p> <p>Excellent corrosion control on both ferrous and nonferrous metals</p>

<p>RECOMMENDED STARTING DILUTIONS</p>	<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>CIMSTAR® 60LF is to be mixed with water for use (add concentrate to water). Add no other substances to the concentrate or mix unless approved by CIMCOOL® Technical Services.</p> <p>Not recommended for use with magnesium or alloyed magnesium.</p> <p>For concentration analysis, use the MI Titration Procedure, Non-Solvent Titration Procedure, Total Alkalinity Titration Procedure, CIMCHEK™ Test Strip, or Refractometer.</p>
<p>TYPICAL PHYSICAL AND CHEMICAL PROPERTIES</p>	<p>Physical state: Liquid Appearance and odor: Clear / Chemical Colors available: Undyed, Pink, Blue Solubility in water: 100% Miscible Weight, lb/gal, 60°F (15.6° C): 8.6 Specific gravity, (H₂O = 1): 1.04 Viscosity (SUS) @ 100° F, Typical: 500 Boiling point, °F (°C): 212 (100) Flash point, COC, °F (°C): None, Self Extinguishing Fire point, COC, °F (°C): None, Self Extinguishing Freezing point, °F, (°C): 28 (-2) If frozen, thaw completely at room temperature. pH, concentrate: 9.2 pH, 5.0% mix, typical operating conditions: 8.6 Total chlorine/chloride, wt%, calculated: 3.02 Total sulfur, wt%, calculated: 0.28 Silicones: None</p>
<p>PACKAGING</p>	<p>Available in 5-gallon pails, 55-gallon drums, and bulk containers.</p>
<p>REFRACTOMETER FACTOR = 1.7 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 CIMSTAR® 60LF, 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, WWW.CIMCOOL.COM or from your Milacron representative.</p> <p><small>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.</small></p> <p style="text-align: center;"><small>CIMCOOL® Global Industrial Fluids / Milacron Marketing Company 3000 Disney Street Cincinnati, Ohio 45209</small></p> <p>PC-3001 4/17/08</p>	

