

CIMCOOL®

METALWORKING FLUIDS

CIMSTAR® QUAL STAR® SEMISYNTHETIC, METALWORKING FLUID CONCENTRATE

APPLICATIONS	<p>CIMSTAR® QUAL STAR® is recommended for general purpose machining and grinding of ferrous metals. Can also be used on some applications on nonferrous metals.</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® QUAL STAR® is a new-generation semisynthetic metalworking fluid. It blends the technological advantages of synthetic fluids with the performance capabilities of soluble oils.</p> <p>LUBRICITY - Physical and chemical lubricants provide good machining and grinding properties - Keeps parts and tools cool</p> <p>EXCEPTIONALLY MILD - Ideal for individual machine applications - Can also be used in central systems</p> <p>EXCELLENT FERROUS CORROSION CONTROL - Rust inhibitor package is extremely effective in preventing in-process rust on machines and parts - Also effective on cast/malleable/gray/nodular irons</p> <p>NON-FERROUS CORROSION CONTROL - Contains non-ferrous corrosion inhibitors which prevent stain on aluminum alloys, brass, copper and bronze</p> <p>SUPERIOR RANCIDITY CONTROL - Effective protection against bacteria and mold</p> <p>GENERAL PURPOSE PRODUCT - Can be used economically throughout the shop on light, moderate and some heavy duty operations; just vary the dilution to suit the job requirements</p> <p>MACHINE FRIENDLY - Liquid residue keeps machine tool components free moving</p> <p>ENVIRONMENTALLY FRIENDLY - Is easy to maintain and control - It is waste treatable - It can also be recycled for reuse</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® QUAL STAR® 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 Solubility in water: 100% Miscible Weight, lb/gal, 60°F (15.6°C): 8.36 Specific gravity, (H₂O = 1): 1.002 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): 30 (-1) If frozen, thaw completely at room temperature. pH, concentrate: 9.9 pH, 5.0% mix, typical operating conditions: 8.9 Total chlorine/chloride, wt%, calculated: 0.00/ < 50 ppm Total sulfur, wt%, calculated: 0.16 Silicones: Yes</p>
<p>PACKAGING</p>	<p>Available in 5-gallon pails, 55-gallon drums, and bulk containers.</p>
<p>REFRACTOMETER FACTOR = 1.5 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® QUAL STAR®, 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>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-962 12/15/06</p>	

