

CIMCOOL®

METALWORKING FLUIDS

CIMSTAR® QUAL STAR® XLH SEMISYNTHETIC, METALWORKING FLUID CONCENTRATE

APPLICATIONS	<p>CIMSTAR® QUAL STAR® XLH is recommended for general purpose machining and grinding of ferrous metals. It can also be used on some moderate to heavy-duty applications on non-ferrous metals.</p> <p>Metals: Cast Iron, Nodular Iron, Malleable Iron, Gray Iron, Carbon Steels, Cast Steel, 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® XLH is a new-generation biostable semi-synthetic that blends the technological advantages of modern day synthetic fluids with the performance capabilities of soluble oils.</p> <p>STABILITY - The product mix is stable, even in hard water - Mixes are stable even when tested at 400-ppm total hardness</p> <p>LUBRICITY - Physical and chemical lubricants provide good machining and grinding properties - Keeps parts and tools cool</p> <p>EXCELLENT RANCIDITY CONTROL - Contains a patented microbial control package - Effective protection against bacteria and mold - Provides long life and minimizes the use of additives</p> <p>EXCELLENT FERROUS CORROSION CONTROL - Rust inhibitor package is extremely effective in preventing in-process rust on machines and parts - also very effective on cast/malleable/gray/ and nodular iron</p> <p>NON-FERROUS CORROSION CONTROL - Contains non-ferrous corrosion inhibitors which prevent stain on aluminum alloys, brass, copper and bronze</p> <p>GENERAL PURPOSE PRODUCT - Can be used economically throughout the shop on light to moderate duty operations; just vary the dilution to suit the job requirements</p> <p>OPERATOR FRIENDLY - Easy to maintain and control - Waste treatable using standard fluid treatment procedures and systems - Can be recycled for reuse</p>

RECOMMENDED STARTING DILUTIONS	<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® XLH 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>For concentration analysis, use the MI Titration Procedure, Non-Solvent Titration Procedure, Total Alkalinity Titration Procedure, CIMCHEK™ Test Strip, or Refractometer.</p>
TYPICAL PHYSICAL AND CHEMICAL PROPERTIES	<p>Physical state: Liquid Appearance and odor: Clear / Chemical Colors available: Undyed Solubility in water: 100% Miscible Weight, lb/gal, 60°F (15.6°C): 8.51 Specific gravity, (H₂O = 1): 1.02 Boiling point, °F (°C): 212 (100) Flash point, COC, °F (°C): None, Self Extinguishing Fire point, COC, °F (°C): NA Freezing point (or pour point), °F, (°C): 26 (-3) If frozen, product separates. Thaw completely at room temperature and stir thoroughly. pH, concentrate: 9.7 pH, 5.0% mix, typical operating conditions: 8.7 Total chlorine/chloride, wt%, calculated: 0.00/< 50 ppm Total sulfur, wt%, calculated: 0.30 Silicones: No</p>
PACKAGING	Available in 5-gallon pails, 55-gallon drums, and bulk containers.
<p>REFRACTOMETER FACTOR = 1.6 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® XLH, 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-9972 1/20/06</p>	

