

CIMCOOL®

METALWORKING FLUIDS

CIMSTAR® 3891Z

SEMISYNTHETIC, METALWORKING FLUID CONCENTRATE

APPLICATIONS	<p>CIMSTAR® 3891Z is designed for general machining and grinding of ferrous and non-ferrous parts. It is also an excellent product for general machining of aluminum parts.</p> <p>Metals: Aluminum, Titanium, Exotic Alloys, Cast Iron, Carbon Steels, High Speed Steel, High Alloy Steels, Stainless Steels, Copper, Brass, Bronze</p> <p>Duty Range: For moderate to heavy-duty operations</p>
FEATURES & BENEFITS	<p>EXCELLENT LUBRICITY - Designed for heavy-duty operations such as reaming and tapping - Excellent tool life and surface finish - Designed to maximize performance of high speed steel, carbide and diamond tooling applications</p> <p>EXCELLENT MICROBIAL CONTROL - Excellent bio-stability - Provides long sump life</p> <p>EXCELLENT FOAM CONTROL - Very low foaming, without the use of silicone antifoam</p> <p>EXCELLENT CLEANLINESS - Rejects tramp oil, provides clean parts and keeps machines clean</p> <p>FORGIVING RESIDUE - The product is easily rinsed off parts for post-machining operations</p> <p>EXCELLENT CORROSION CONTROL - Specialized non-ferrous corrosion inhibitors eliminate part staining and prevent bi-metallic corrosion</p> <p>SUPERIOR MATERIAL AND APPLICATION COMPATIBILITY - Compatible with many titanium alloys and other exotic alloys - Can be used on ferrous and non-ferrous metals where one product is needed for a variety of jobs</p> <p>OPERATOR-FRIENDLY - No smoke - No slippery film on parts, machinery or floor - Low misting - Mild to the skin</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® 3891Z 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 Solubility in water: 100% Miscible Weight, lb/gal, 60°F (15.6°C): 8.61 Specific gravity, (H₂O = 1): 1.0321 Boiling point, °F (°C): 212 (100) Flash point, COC, °F (°C): NA Fire point, COC, °F (°C): NA Freezing point, °F, (°C): 22 (-6) If frozen, product separates. Thaw completely at room temperature and stir thoroughly. pH, concentrate: 9.5 pH, 5.0% mix, typical operating conditions: 8.8 Total chlorine/chloride, wt%, calculated: 0.000/< 50 ppm Total sulfur, wt%, calculated: 0.001 Silicones: None Dicyclohexylamine: None</p>
<p>PACKAGING</p>	<p>Available in 5-gallon pails, 55-gallon drums, and bulk containers.</p>
<p>REFRACTOMETER FACTOR = 1.3 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® 3891Z, 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-9973 12/14/06</p>	

