

CIMCOOL®

METALWORKING FLUIDS

CimVantage® CSS-NR3 SEMISYNTHETIC, METALWORKING FLUID CONCENTRATE

APPLICATIONS	<p>CimVantage® CSS-NR3 is an economical, water soluble, semisynthetic metalworking fluid.</p> <p>Metals: Cast Iron, Nodular Iron, Carbon Steels, Alloy Steels, Aluminum, Copper, Brass, Bronze</p> <p>Duty Range: For light to moderate-duty operations</p>
FEATURES & BENEFITS	<p>CimVantage® CSS-NR3 is a low-cost, general-purpose machining and grinding fluid, which can be used on a variety of materials and operations.</p> <p>EXCEPTIONALLY MILD - A good choice for individual machine applications where mixes tend to become more concentrated than recommended.</p> <p>EXCELLENT CLEANLINESS - Provides clean parts and keeps machines clean - Good residue characteristics - residue is easily removed with an alkaline cleaner or just warm water</p> <p>LOW OIL EMULSIFICATION - Low Oil Emulsification - Extraneous oil can be skimmed from the mix, thus preserving performance characteristics and prolonging fluid life</p> <p>EXCELLENT FOAM CONTROL - low foaming, even in soft water (less than 125 ppm total hardness)</p> <p>GOOD RANCIDITY CONTROL - Inhibits the growth of bacteria and mold; helps to eliminate "Monday morning odor"</p> <p>ENVIRONMENTALLY-FRIENDLY - Good sump life and operator acceptance - Is easy to maintain and control - It is waste treatable using standard fluid treatment procedures and systems - Can also be recycled for reuse using appropriate metalworking fluid recycling equipment</p>

<p>RECOMMENDED STARTING DILUTIONS</p>	<p>FOR INDUSTRIAL USE ONLY Recommended Starting Dilution: 10% (1:10) Typical Operating Range: 8% (1:13) to 12% (1:8) For concentrations outside this range contact CIMCOOL® Technical Service at 513-458-8199.</p> <p>CimVantage® CSS-NR3 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): 8.4 Specific gravity, (H₂O = 1): 1.00 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 (-3) If frozen, product separates. Thaw completely at room temperature and stir thoroughly. pH, concentrate: 9.9 pH, 10.0% mix, typical operating conditions: 8.8 Total chlorine/chloride, wt%, calculated: 0.00 Total sulfur, wt%, calculated: 0.140 Silicones: None</p>
<p>PACKAGING</p>	<p>Available in 5-gallon pails, 55-gallon drums, and bulk containers.</p>
<p>REFRACTOMETER FACTOR = 3.7 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 CimVantage® CSS-NR3, 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. / Milacron Marketing Company Cincinnati, Ohio 45209</p> <p>PC-9989 12/15/06</p>	

