CIMCOOL®

METALWORKING FLUIDS

CIMSTAR® 60

SEMISYNTHETIC, METALWORKING FLUID CONCENTRATE

APPLICATIONS		**CIMSTAR® 60** may be used as a general-purpose fluid for machining and grinding aluminum, iron and steel. It has the performance capabilities of soluble oils. It is also recommended for tapping, reaming, turning, drilling, internal grinding, and centerless grinding. **Metals:** Cast Iron, Nodular Iron, Carbon Steels, High Speed Steel, High Alloy Steels, Stainless Steels, Aluminum **Duty Range:** For moderate to heavy-duty operations
FEATURES & BENEFITS		**CIMSTAR® 60** metalworking fluid is a clean, completely water soluble, phenol-free, silicone-free, semi synthetic product that contains an extreme pressure (EP) lubricant for superior machining and grinding capability. **ADVANTAGES** - Economical, Excellent lubricity, Excellent rancidity and mold control, Outstanding cleanliness, Leaves a soft residue **BIOSTABLE** - Exceptionally good bacteria and mold control - Resists attack by mold and bacteria **ENVIRONMENTALLY FRIENDLY** - Is easily waste treatable using standard fluid treatment procedures and systems. It can also be recycled for reuse using appropriate metalworking fluid recycling equipment. **ECONOMICAL** - Very Cost effective **VERSATILE** - Specially designed for excellent machining and grinding of aluminum, iron and steel **CORROSION CONTROL** - Excellent corrosion control on both ferrous and nonferrous metals

RECOMMENDED STARTING DILUTIONS		**FOR INDUSTRIAL USE ONLY** **Use between 5.0% (1:20) and 10.0% (1:10) for machining and grinding ferrous and nonferrous metals.** **CIMSTAR® 60** 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. Not recommended for use with magnesium or alloyed magnesium. **For concentration analysis, use** the MI Titration Procedure, Non-Solvent Titration Procedure, Total Alkalinity Titration Procedure, CIMCHEK™ Test Strip, or Refractometer.
TYPICAL PHYSICAL AND CHEMICAL PROPERTIES		**Physical state:** Liquid **Appearance and odor:** Clear, vanilla **Colors available:** Undyed, pink, blue **Solubility in water:** 100% Miscible **Weight, lb/gal, 60°F (15.6°C):** 8.59 **Specific gravity, (H_2O = 1):** 1.029 **Boiling point, °F (°C):** 212 (100) **Flash point,COC,°F (°C):** None, self extinguishing **Fire point,COC, °F (°C):** NA **Extinguishing media:** NA **Unusual fire & explosion hazards:** None **Freezing point (or pour point), °F, (°C):** 26 (-3) If frozen product separates. Thaw completely and stir thoroughly before using. **pH, concentrate:** 9.9 **pH, *5.0%* mix, typical operating conditions:** 8.9 **Total chlorine/chloride, wt%, calculated:** 3.90/< 50 ppm **Total sulfur, wt%, calculated:** 0.23 **Silicones:** None
PACKAGING		**Available in 5-gallon pails, 55-gallon drums, and bulk containers.**

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.

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.

For additional information concerning CIMSTAR® 60, refer to its OSHA MSDS or contact CIMCOOL® Technical Services at 1-513-458-8199.

Minor formulation changes or normal variations in the manufacture of this product may cause slight variances in the data presented on this sheet.

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