



# Product Information Flyer

## **DESCRIPTION**

CIMSTAR QUAL STAR XLZ is a semi-synthetic metalworking fluid. It is a chlorine free general purpose product for machining and grinding.

## **APPLICATION**

CIMSTAR QUAL STAR XLZ was developed for use on ferrous and most non-ferrous materials. It can be used on mild steels, stainless steels, hardened steels, and most non-ferrous alloys. It should not be used on magnesium alloys.

For use in moderate duty machining and grinding applications, such as milling, drilling, cut tapping, reaming, boring and in most grinding applications.

## **FEATURES & BENEFITS**

### **VERSATILE PRODUCT:**

This new generation bio-stable semi-synthetic blends the technical advantages of modern day synthetics fluids with the performance of soluble oils. Because of the unique formulation, this product can be used on tough applications like sawing but also versatile enough for surface grinding, milling or turning.

### **CORROSION PROTECTION:**

The oily residue keeps machine tools and work-piece materials free of corrosion and staining.

### **MICROBIAL CONTROL:**

CIMSTAR QUAL STAR XLZ has excellent rancidity control.

### RECOMMENDED STARTING DILUTIONS

CIMSTAR QUAL STAR XLZ is to be mixed with water for use. Always add concentrate to water. Fluid may be more difficult to mix when water temperature is below 55 F (13 C). Add no other materials to the concentrate or mix unless approved by your CIMCOOL® District Manager.

Grinding	5% - 10%	(1:20 to 1:10)
Machining	5% - 10%	(1:20 to 1:10)

### CONCENTRATION

An MI Titration, Non-solvent Titration, Total Alkalinity or Refractometer can be used.

The Refractometer Factor is 1.6

Multiply the scale reading obtained on your CIMCOOL® Refractometer by this factor to obtain the mix concentration in percent. Calibrate the refractometer so that it reads 0.0 with water before testing the sample mix. Remove gross contaminants from the sample mixes before testing. A refractometer is only recommended for use in checking the concentration of a fresh charge.

### TYPICAL PHYSICAL AND CHEMICAL PROPERTIES:

**Physical State:** Liquid

**Solubility in water:** 100% miscible

**Viscosity (SUS) @ 100°F:** 400

**pH Concentrate:** 9.8

**Total Chlorine/Chloride, wt%:** 0.0/<50ppm

**Silicones:** NO

**Appearance and Odor:** Hazy/Chemical

**Weight, lb/gal, 60°F (15.6 °C):** 8.6

**Flash Point /Sp.Gr./Boiling Point:** SEE MSDS

**pH Mix 5%, Typical Operating:** 8.9

**Total Sulfur, wt%:** 0.23

### HANDLING and STORAGE

If frozen product separates. Thaw completely at room temperature and stir thoroughly. Inside storage is recommended.

### SAFETY DATA SHEET

Available at [www.cimcool.com](http://www.cimcool.com)

For additional information refer to its OSHA MSDS, website or contact your local CIMCOOL TECHNICAL SPECIALIST OR DISTRICT MANAGER, or you may contact CIMCOOL® Technical Services at 1-513-458-8199.

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