

# CIMSTAR® 585

Semi-Synthetic Metalworking





# Product Application Guide

**CIMSTAR® 585** metalworking fluid is a premium semi-synthetic metalworking fluid designed for moderate to heavy-duty machining of ferrous and non ferrous materials.

**CIMSTAR® 585** can be used in central coolant systems or individual machine sumps.

**Metals:** Carbon Steels, High Speed Steel, Cast Steels, Alloy Steels, Tool Steel, Stainless Steel, Cast Iron, Aluminum, including ADC type Aluminium Alloys.

**Duty Range:** Moderate to Heavy-duty.

#### **FEATURES AND BENEFITS**

- Developed by latest technology of metalworking fluid.
- Excellent corrosion control on cast iron, steel and typical grades of aluminium including 2024, 7075, 390 and 6061
- Good lubricity making tool life extended.
- Contains new biocide package for long coolant life
- Good antibacterial performance.
- Mix remains stable as water hardness increases.
- Easy to use and maintains.

#### **TYPICAL PHYSICAL AND CHEMICAL PROPERTIES**

Physical state:	Liquid
Appearance and odor:	Clear / Chemical
Colors available:	Undyed / Pink
Solubility in water:	100% Miscible
Specific gravity, (H2O = 1):	1.030
pH, 5.0% mix, typical operating conditions:	8.9

PACKAGING: 200L drums, 20L pails & 5L packs

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## RECOMMENDED STARTING DILUTIONS FOR INDUSTRIAL USE ONLY

Recommended Starting Dilution: 5% (1:20)

Typical Operating Range: 5% (1:20) to 10% (1:10)

Refractometer Factor: 1.6

The table below demonstrates potential Refractometer readings and the concentration % derived by using the following formula: (Refractometer Reading x Refractometer Factor = Concentration %)

Refractometer Reading	1.8	2.5	3.1	3.7	4.4	5.0	5.6	6.2
Concentration %	3	4	5	6	7	8	9	10

#### REFRACTOMETER CALIBRATION AND INSTRUCTION FOR USE

- 1. Ensure that the refractometer (figure 1), water and metalworking fluid are at room temperature.
- 2. Place a few drops of water between the plastic cover and the prism.
- 3. Hold the refractometer horizontally and point it at a light source.
- 4. Look into the eyepiece and adjust the scale-calibrating screw until the boundary line, which separates the light and dark areas of the scale are aligned to zero "0" on the scale.
- 5. Lift the plastic cover and dry the prism with a clean, dry cloth.
- 6. Place one or two drops of the metalworking fluid on the prism and close the plastic cover.
- 7. Read the number on the scale at the point where the boundary line separates the light and dark areas on the scale (Figure 2). For the concentration, multiply this number by the refractometer factor.

**CIMSTAR® 585** 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.

For concentration analysis, use Total Alkalinity Titration Procedure, BCG Titration Procedure, CIMCHEK™ Test Strip, or Refractometer.



Figure 02

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CIMSTAR® 585 Refactometer Factor = 1.6

Take the Refractometer Scale Reading of 2.0 (i.e. Figure 2), multiplied by the Refractometer Factor of 1.6 = **3.2%** mix concentration.

Contact Details:		



For additional information on CIMSTAR® 585 refer to its MSDS or contact CIMCOOL Technical Services e-mail: info@cimcool.com.cn · Reprints/updates: www.cimcool.com.cn