



CIMTECH® C205

Synthetic, Metalworking Fluid Concentrate



Product Application Guide

CIMTECH® C205 metalworking fluid is an extremely low foaming, clear biostable synthetic for central systems and individual machines.

Metals: Cast Iron, Nodular Iron, Carbon Steels, Ferrous metals

Duty Range: Moderate to some Heavy-duty

Water Conditions: Soft to Medium

FEATURES AND BENEFITS

- Well suited for applications where foam and ferrous corrosion control are critical in individual machines or central systems
- Very resistant to attack by mold and bacteria
- Extremely low foaming even under high agitation conditions
- Excellent settling properties allowing the mix to remain clean
- Exceptional tramp oil rejection. Oil floats on top of the mix and is easily removed by an oil skimmer
- Excellent ferrous corrosion control with rust inhibitors preventing corrosion of cast iron and steel

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Physical state:Liquid
 Appearance and odor:Clear, chemical
 Colors available:Undyed
 Solubility in water:100% Miscible
 Specific gravity, (H₂O = 1):1.04
 Freezing point (or pour point), °F, (°C):-5 °C
 If frozen, thaw completely at room temperature.

pH, concentrate:9.4
 pH 5.% mix, typical operating conditions:9.1
 Silicones:None

PACKAGING: 20 litre pails, 200 litre drums, and bulk containers

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RECOMMENDED STARTING DILUTIONS FOR INDUSTRIAL USE ONLY

Recommended Starting Dilution: 5.0% (1:20)
Typical Operating Range: 5.0% (1:20) to 10% (1:10)
Refractometer Factor: 2.5

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

Refractometer Reading	1.2	1.6	2.0	2.4	2.8	3.2	3.6	4.0
Concentration %	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0

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.

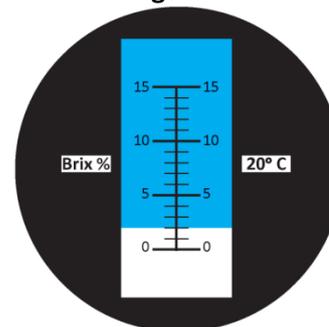
CIMTECH® C205 to be mixed with water for use (add concentrate to water). Add no other substances to the concentrate or mix unless approved by CIMCOOL® Technical Services.

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

Figure 1



Figure 2



EXAMPLE:

CIMTECH® C205 Refractometer Factor = **2.5**
Take the Refractometer Scale Reading of 2.0 (i.e. Figure 2), multiplied by the Refractometer Factor of 2.5 = **5.0%** mix concentration.

Contact Details:



For additional information on CIMTECH® C205 refer to its MSDS or contact CIMCOOL Technical Services
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