

# CIMTECH® 310

# **METALWORKING FLUID**







# Product Information Flyer

#### **DESCRIPTION**

CIMTECH 310 metalworking fluid is a unique, low pH synthetic fluid approved for use in the aerospace industry. It is recommended for moderate to heavy duty grinding applications.

#### **APPLICATION**

CIMTECH 310 can be used on wrought aluminum alloys (2024, 6061, 7050, and 7075), cast aluminum alloys (380, 390), cast iron, nodular iron, carbon steels, stainless steels, titanium and other exotic alloys. It should not be used on magnesium alloys.

CIMTECH 310 metalworking fluid is recommended for machining and grinding operations, including creep feed grinding, on non-ferrous or ferrous metals.

# **FEATURES & BENEFITS**

# **MEETS AEROSPACE REQUIREMENTS:**

CIMTECH 310 passes bi-metallic and aluminum (7075) "sandwich" corrosion tests. Approved product for many aerospace manufacturers.

# **EXCELLENT LUBRICITY:**

CIMTECH 310 provides excellent tool life and surface finish.

# **EXCELLENT RANCIDITY CONTROL:**

CIMTECH 310 rejects tramp oil, which extends sump life.

## **EXCELLENT FOAM CONTROL:**

Very low foaming product, even when used with deionized water.

#### RECOMMENDED STARTING DILUTIONS

CIMTECH 310 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® Territory Manager.

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

#### CONCENTRATION

BCG Titration, Total Alkalinity, CIMCHEK™ Test Strip or Refractometer can be used.

## The Refractometer Factor is 1.7

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 on a fresh charge.

#### TYPICAL PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Liquid Appearance and Odor: Clear/Chemical Solubility in water: 100% miscible Weight, lb/gal, 60°F (15.6°C): 9.0

Viscosity (SUS) @ 100°F (38°C): 110 Flash Point /Sp.Gr./Boiling Point: SEE MSDS

pH Concentrate: 8.2 pH Mix 5%, Typical Operating: 7.8

Total Chlorine/Chloride, wt%: 0.0/< 900 ppm Total Sulfur, wt%: 0

Silicones: None

#### **HANDLING and STORAGE**

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

#### **SAFETY DATA SHEET**

Available at www.cimcool.com

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

Limitation of Liability: Under no circumstances, shall we or any affiliate of ours have any liability whatsoever for loss of use, or for any indirect or consequential damages. Minor formulation changes or normal variations in the manufacture of this product may cause slight variances in the data presented on this sheet.

