



Product Information Flyer

DESCRIPTION

CIMTECH 610 is an innovative new generation synthetic metalworking fluid featuring a hybrid blend of patented and synthetic lubricants for use in heavy to severe duty applications. This unique blend of lubricants provides synergistic performance on difficult-to-machine-ferrous and non-ferrous alloys.

APPLICATION

CIMTECH 610 can be used on inconel, titanium, stainless steel, aerospace alloys and hardened steels. CIMTECH 610 is an exceptional product for milling, drilling and cut tapping these materials. Not for use on magnesium.

FEATURES & BENEFITS

- Excellent heavy-duty performance without chlorine, sulfur or phosphorus EP lubricants
- Near neutral pH
- Formulated for use on aerospace alloys

CASE HISTORY #1:

High stock removal milling of 6A4V Titanium – 500% increase in tool life, at a lower mix concentration, compared to both a high-oil containing semi synthetic and a chlorinated soluble oil product.

CASE HISTORY #2:

Turning and milling 13-8 steel, 45 Rockwell – 500% increase in tool life compared to a heavy-duty synthetic coolant.

CASE HISTORY #3:

Tapping M4 tool steel, 4-40 taps – 400% increase in the tool life compared to a heavy-duty synthetic.

RECOMMENDED STARTING DILUTIONS

CIMTECH 610 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 1.3

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

Solubility in water: 100% miscible

Viscosity (SUS) @ 100°F (38°C): 400

pH Concentrate: 8.2

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

Silicones: None for CIMTECH 610 / Yes for CIMTECH 610B

Appearance and Odour: Clear/Chemical

Weight, lb/gal, 60°F (15.6°C): 9.1

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

pH Mix 5%, Typical Operating: 7.8

Total Sulfur, wt%: <0.1%

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.ca

For additional information refer to its WHMIS MSDS, website or contact CIMCOOL® Technical Services at 1-513-458-8199 in Ohio or 1-888-254-1919 in Canada.

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.