CIMTECH® 320
METALWORKING FLUID

DESCRIPTION
CIMTECH 320 metalworking fluid is recommended for machining, including heavy-duty operations like form tapping aluminum, and grinding operations, including creep feed grinding, on non-ferrous or ferrous metals.

APPLICATION
CIMTECH 320 can be used on wrought aluminum alloys (2024, 6061, 7050, 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.

For heavy duty machining and grinding applications, CIMTECH 320 metalworking fluid is a unique, low pH synthetic fluid designed for the aerospace industry.

FEATURES & BENEFITS

EXCELLENT LUBRICITY: Provides excellent tool life and surface finish.

EXCELLENT CLEANLINESS & RANCIDITY CONTROL: Rejects tramp oil to keep product clean, which extends sump life.

OPERATOR – FRIENDLY: Provides excellent part visibility - A fresh mix is transparent - No Smoke - Low misting - Mild to the skin.

EXCELLENT FOAM CONTROL: Very low foaming product, even when used with de-ionized water.
RECOMMENDED STARTING DILUTIONS
CIMTECH 320 is to be mixed with water for use. Always add concentrate to water. 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
BCG Titration, Total Alkalinity, CIMCHEK™ Test Strip or Refractometer can be used.

The Refractometer Factor is 1.5
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.

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES
- **Physical State**: Liquid
- **Solubility in water**: 100% miscible
- **Viscosity (SUS) @ 100°F**: 160
- **pH Concentrate**: 8.2
- **Total Chlorine/Chloride, wt%**: 0.0/0.09
- **Silicones**: None
- **Appearance and Odor**: Clear/Chemical
- **Weight, lb/gal, 60°F (15.6 °C)**: 9
- **Flash Point /Sp.Gr./Boiling Point**: SEE MSDS
- **pH Mix 5%, Typical Operating**: 7.9
- **Total Sulfur, wt%**: 0

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](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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