



PRODUCT INFORMATION FLYER

DESCRIPTION

CIMPERIAL® 861 is a hybrid lubricity, semi-synthetic metal working fluid designed for the aerospace industry. It is recommended for moderate to heavy duty machining and grinding operations, on ferrous or non-ferrous metals. Lubricity of this fluid on titanium, aluminum and even cast iron or steel makes it ideal for aerospace, automotive and general industry applications where a premium fluid is needed.

APPLICATION

CIMPERIAL® 861 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 except magnesium alloys. It is especially suited for high pressure and through-the-tool coolant delivery systems and is the product of choice for aerospace applications where extra lubricity and long sump life are needed.

APPROVALS

BOMBARDIER, BAMS 569-001, Class A

BOEING BAC 5008, Revision U, Areas 5 and 6

SAFRAN MESSIER-BUGATTI-DOWTY, PCS-4002

FEATURES & BENEFITS

- Excellent lubricity, tool life and surface finish
- Excellent rancidity control and sump life
- Low misting
- Mild to skin
- Low foaming even when used with de-ionized water
- Does not contain DCHA

RECOMMENDED STARTING DILUTIONS

CIMPERIAL® 861 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, or Refractometer can be used.

The Refractometer Factor is 1.0

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): 524

pH Mix 5%, Typical Operating: 8.8

Total Sulfur, wt%: 0.011

Appearance and Odour: Amber/Chemical

Weight, lb/gal, 60°F (15.6°C): 8.22

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

Total Chlorine/Chloride 0.0%/< 50ppm

HANDLING AND STORAGE

If frozen, thaw completely at room temperature before use. Inside storage is recommended.

SAFETY DATA SHEET

Available at www.cimcool.ca

For additional information refer to its WHMIS SDS 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.