

CIMTECH[®] 610-HFP *with FACT*[™] *with InSol*[™] and MSL[®] Technology

*METALWORKING FLUID for TOUGH ALLOYS
WORKS IN HIGH PRESSURE APPLICATIONS TOO*



What is InSol[™] Technology....?

InSol Technology puts lubricant at the cut zone-tooling interface so that lubrication and cooling are optimized. Since InSol Technology is water soluble, this great performance lasts longer due to lower depletion rates. Best of all, InSol Technology can help with tough alloys and even form tapping of aluminum. Using CIMTECH fluids with InSol Technology can improve machining and grinding ratios significantly compared to conventional fluids.

What is MSL[®] Technology....?

MSL is Milacron's patented synthetic lubricant.

DESCRIPTION

CIMTECH 610-HFP with FACT with InSol[™] and MSL[®] Technology is an innovative new synthetic metalworking fluid featuring a hybrid blend of patented and synthetic lubricants. This unique blend of lubricants provides synergistic performance on difficult-to-machine-ferrous and non-ferrous alloys without corrosion or stain. It even outperforms sulfo-chlorinated metalworking fluids, but does not contain any EP lubricants.

APPLICATION

CIMTECH 610-HFP with FACT with InSol[™] and MSL[®] Technology is uniquely formulated to be used on hard metals that "ordinary" fluids have difficulties with, such as Inconel, titanium, stainless steels, aerospace alloys and hardened steels. CIMTECH 610-HFP with FACT with InSol[™] and MSL[®] Technology is an exceptional product for milling, drilling, and cut tapping these materials, as well as for operations on aerospace and most aluminum alloys. Not for use on magnesium.

FOAM CONTROL at HIGH PRESSURE:

CIMTECH 610-HFP with FACT with InSol[™] and MSL[®] Technology provides superior foam control through the combination of product design, raw material selection and innovative antifoam technology. These fluids are the result of years of experience that have identified creative methods to prevent, control, and reduce foam, even when fluids are used in high pressure delivery systems. This expertise is only available in CIMCOOL[®] HFP Fluids *with FACT with InSol[™] and MSL[®] Technology.*

FEATURES & BENEFITS

- Excellent heavy-duty performance without chlorine, sulfur or phosphorus EP lubricants
- Near neutral pH
- Works best in tough operations

Application Example #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.

Application Example #2: Turning and milling 13-8 steel, 45 Rockwell – 500% increase in tool life compared to a heavy-duty synthetic coolant.

**CIMTECH® 610-HFP with FACT™ with
InSol™ and MSL® Technology
METALWORKING FLUID**

RECOMMENDED STARTING DILUTIONS

CIMTECH 610-HFP with FACT with InSol™ and MSL® Technology 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 55F (13 C). 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, 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: 520

pH Concentrate: 8.3

Silicones: Yes

Appearance and Odor: 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: 7.7

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 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.

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.



3000 Disney Street
Cincinnati, OH 45209
1-513-458-8199
Fax 1-513-458-8179