



Product Information Flyer

DESCRIPTION

CIMPERIAL 20 is a soluble oil formulated for heavy to severe duty grinding and machining.

APPLICATION

CIMPERIAL 20 contains extreme pressure (EP) lubricity agents making it excellent for low-speed, low clearance machining operations such as threading, tapping, broaching, reaming, gun drilling and gear hobbing. It is also recommended for form-grinding operations, such as ball track grinding of bearing races, and bar grinding. It should not be used on magnesium alloys or yellow metals.

FEATURES & BENEFITS

LUBRICITY:

CIMPERIAL 20 has an excellent grinding ratio when compared to both straight oils and conventional soluble oils. CIMPERIAL 20 will result in increased productivity by allowing higher speeds and feeds than conventional fluids. The superior cooling and cleaning ability provide higher stock removal rates and better finishes than straight oils.

CORROSION PROTECTION:

CIMPERIAL 20 provides excellent rust protection utilizing both chemical corrosion inhibitors and the physical protection of oil - No black staining problems like those associated with sulfurized cutting oils.

COST EFFECTIVE:

Provides higher productivity and improved cleanliness compared to straight oils - Avoids housekeeping problems and fire hazards of straight oils.

CIMPERIAL 20B has the same performance characteristics as CIMPERIAL 20 but in addition, is designed to be lower foaming.

RECOMMENDED STARTING DILUTIONS

CIMPERIAL 20 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

MI Titration, Non-solvent Titration, Total Alkalinity, CIMCHEK™ Test Strip or Refractometer can be used.

The Refractometer Factor is 0.9

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: 800

pH Concentrate: NA

Total Chlorine/Chloride, wt%: 5.2/<50ppm

Silicones: No for CIMPERIAL 20 / YES for CIMPERIAL 20B

Appearance and Odor: Hazy/Chemical

Weight, lb/gal, 60°F (15.6 °C): 8.3

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

pH Mix 5%, Typical Operating: 8.7

Total Sulfur, wt%: 3.2

HANDLING and STORAGE

If frozen, product separates. Thaw completely at room temperature and stir thoroughly. 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.

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