



Product Information Flyer

DESCRIPTION

CIMPERIAL HD90 is a premium soluble oil metalworking fluid.

APPLICATION

CIMPERIAL HD90 was developed for use on carbon steels, high speed steel, alloy steels, tool steel, and stainless steel.

CIMPERIAL HD90 is designed for use in heavy to extremely heavy-duty grinding operations such as center less, form, creep-feed and center type. Also for low-speed, low clearance machining operations such as threading, tapping, broaching, reaming, gun drilling, and gear hobbing.

FEATURES & BENEFITS

LUBRICITY:

CIMPERIAL HD90 contains high degree of extreme pressure (EP) lubricity. Exhibits an excellent grinding ratio when compared to straight oils and soluble oils. Increased productivity because high speeds and feeds can be used. Better cooling and cleaning ability provide higher stock removal rates and better finishes than straight oils.

CORROSION PROTECTION:

CIMPERIAL HD90 provides excellent protection by a combination of chemical corrosion inhibitors and the physical protection of oil. No black staining problems like those associated with sulfurized cutting oils.

MACHINE FRIENDLY:

CIMPERIAL HD90 residues can be removed with water or alkaline cleaners, no solvent degreasers required as with straight oils.

COST EFFECTIVE:

CIMPERIAL HD90 provides higher productivity and improved cleanliness compared to straight oils.

RECOMMENDED STARTING DILUTIONS

CIMPERIAL HD90 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. 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

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

The Refractometer Factor is 0.9

A refractometer is only recommended for use in checking the concentration of a fresh charge. 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: 680

pH Concentrate: NA

Total Chlorine/Chloride, wt%: 6.78/<50ppm

Silicones: No

Appearance and Odor: Clear/Chemical

Weight, lb/gal, 60°F (15.6 °C): 8.5

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

pH Mix 5%, Typical Operating: 8.9

Total Sulfur, wt%: 2.5

HANDLING AND STORAGE

If frozen, thaw completely at room temperature prior to 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.

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