



# Product Information Flyer

## DESCRIPTION

MILCOOL<sup>®</sup>1311 is a heavy-duty, soluble metalworking fluid blending the reliability of traditional soluble fluids with industry leading technology to deliver performance which meets the market. MILCOOL<sup>®</sup>1311 is developed for all operation machining, sawing and grinding of ferrous and most non-ferrous metals.

## APPLICATION

MILCOOL<sup>®</sup>1311 is recommended for turning, drilling, milling, reaming, boring, tapping, roll/form tapping, broaching, sawing and most grinding applications. It should not be used on magnesium alloys.

## FEATURES & BENEFITS

### VERSATILE:

MILCOOL<sup>®</sup>1311 is ideally suited when one metalworking fluid, all metals, all operations is required throughout the machine shop and is formulated to withstand extremely hard water.

### FOAM CONTROL:

MILCOOL<sup>®</sup>1311 is recommended for use in a wide range of water qualities, has excellent foam control in soft water, and general high pressure applications.

### EXCELLENT RANCIDITY CONTROL:

Excellent fluid life. Minimizes the need for additives.

### CORROSION PROTECTION:

Outstanding rust protection for the work-piece and machine tool surfaces

### COMPATIBLE MATERIALS:

Steels, Stainless Steels, Alloy Steels most Aluminiums

## FULL WORKPIECE MATERIAL GROUP



## RECOMMENDED STARTING DILUTIONS

MILCOOL®1311 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. 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 1.2

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:** N/A

**pH Concentrate:** 10.1

**Total Chlorine/Chloride, wt%:** None

**Silicones:** Yes

**Appearance and Odor:** Hazy/Chemical

**Weight, lb/gal, 60°F (15.6 °C):** 8.4

**Flash Point /Sp.Gr./Boiling Point:** SEE SDS

**pH Mix 5%, Typical Operating:** 9.4

**Total Sulfur, wt%:** None

**Borons:** None

## HANDLING and STORAGE

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

## SAFETY DATA SHEET

Request at [www.cimcool.com.au](http://www.cimcool.com.au)

For additional information refer to its WHMIS MSDS, website or contact CIMCOOL® Technical Services at 1-513-458-8199 in Ohio or 1-800-050-469 in Australia.

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