

# VISCOOL 5126

## Emulsifiable Oil

## Product Data Sheet

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**VISCOOL 5126** is a low to moderate duty soluble oil type coolant formulated for a wide variety of metalworking operations including machining and grinding operations on both ferrous and most non-ferrous metals.

The *unique* combination of ingredients forms an exceptionally stable macro emulsion even in extremely hard water thus providing superior tool life and long term trouble free performance. Outstanding performance is accomplished by using the proper multi-functional premium components that outperform conventional formulas.

- ... Wide range of job applications on most metals
- ... Non sulfur containing which promotes superior rancidity control
- ... Increased tool life
- ... Nonirritating to the skin
- ... No nitrates, phenols or toxic chemistry
- ... Superior rust protection

**STABILITY** Viscool 5126 has excellent stability in the concentrate and the emulsion form. It is stable from 1% to 100% but may vary in emulsion characteristics when used out of the typical ranges of 3 to 10%.

**BIORESISTANCE** Viscool 5126 has been formulated selecting highly biostable components and amines that enhance bioresistance without harsh biocides. It contains no sulfur components eliminating the potential for Monday morning rancidity and sulfide odor.

**LUBRICITY** Viscool 5126 has been found to perform well on lubricity performance compared to leading moderate duty emulsifiable oils on the market. Quality is assessed and maintained including Microtap computerized testing.

**FOAM CONTROL** Viscool 5126 is designed to be low foaming without a defoamer. Foam performance has been evaluated under shear conditions and Viscool 5126 remains foam resistant. However, a small amount of defoamer may be used to provide an increased safety for charge-up conditions.

**RUST PROTECTION** Viscool 5126 has a low Cast Iron Chip Test breakpoint, it forms a very thin impervious film that cleans easily and protects ferrous and nonferrous metal from oxidation, stain and rust.

**METAL COMPATIBILITY** Viscool 5126 is compatible with ferrous and nonferrous metals including most aluminum, brass, copper and mixed or clad alloys. Please request testing if unusual alloys or metal composition comes to question. It is designed using minimal leaching components to avoid leaching stain or alteration of metal surfaces.

## RECOMMENDED STARTING DILUTIONS

The following are typical starting dilutions that often can be significantly reduced on verifying effectiveness of this high performance coolant.

Each metalworking process varies some with its metallurgy, tool set-up, feeds and speeds. Finding the optimum dilution ratio can immensely benefit the economics and performance of the process.

In general, the dilutions range from 1:3 for the most difficult jobs to 1:30 for less demanding operations.

Grinding usually requires maximum cooling with less emphasis on lubrication, dilution ratios of 1:30 to as high as 1:150 yield excellent results in both finish and wheel life.

ALWAYS ADD OIL TO THE WATER WHEN PREPARING EMULSIONS.

Hand-held refractometer can be used to maintain close control of concentration and performance. Titration kits are available and provide an alternate but relatively simple and more reliable method when refractometer results are questioned as emulsion systems age.

<b>Operations</b>	<b>Carbon Steels Cast Steels</b>	<b>High Alloy Steels Stainless Steels</b>	<b>Non-Ferrous</b>
Milling, Drilling, Turning, Sawing	1:19 (5%)	1:13 (7%)	1:19 (5%)
Reaming, Light Duty Broaching	1:16 (6%)	1:11 (8%)	1:16 (6%)

### **Typical Characteristics:**

Appearance: Blue, Bright, Clear concentrate;  
Cloudy to White emulsion

pH: 1:19 dilution –9.8

Weight, Pounds per Gallon: 8.28

Residue: Soft, oily

Flash Point, COC, °F: >350

Avoid prolonged skin contact with concentrate. Use eye protection. Product becomes viscous at cold temperatures. Allow to warm to room temperature before mixing. Coolant should always be added to water. Do not add water to concentrate.

Available in 5 gallon pails, 55 gallon drums, and bulk quantities.

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