

# **Technical Data Sheet**

# Solutions Through Innovative Technology

Name: VP800P

**Revision Date**: 11/14/2017 - R1

ValCool, LLC 5230 Brittmoore Rd Houston, TX 77041

# **VP700P**

CHLORINE-FREE SEMI-SYNTHETIC METALWORKING FLUID

#### **DESCRIPTION**

VP700P is a fighting grade, economical, semi-synthetic metalworking fluid. This water extendable metal removal fluid is a high water, low mineral oil, micro-emulsion. It is designed with a combination of non-chlorinated extreme pressure (EP) additives and corrosion inhibitors to improve tool life, surface finish, and increase speeds. The high water and specialized lubricity package improves cooling at the work zone while maintaining the proper boundary film lubricity. The reduced metal-to-metal contact, reduced heat, and proper film strength optimizes tool life through proper chip formation, reduced work hardening and increased heat removal from the cut zone. VP700P is designed with a versatile bio-dynamic protection package. This enables the working fluid in the sump to resist and react against bacteria and fungi growth.

#### **FEATURES & BENEFITS**

- Chlorine, sulfur, phenol and boron free
- Low to no foam
- Extended tool life with increased production rates
- · Best in class resistance to bacteria growth
- Exceptional tramp oil rejection
- Outstanding surface finish
- · Non-irritating to operators' skin

### **METAL COMPATIBILITY**

- Steel
- Inconel
- Cast Iron
- Aluminum
- Stainless Steel
- Copper
- Titanium
- Brass

### **HEALTH & SAFETY**

See the most recent SDS which is available directly from ValCOOL, your local representative or authorized distributor. ValCOOL uses only raw materials not listed as carcinogenic by IRAC.

#### **PROPERTIES**

Appearance: Slightly Viscous Liquid

Diluted Appearance: Milky Light Blue

Solubility: Water

Odor: Mild Industrial

Specific Gravity: 1.02
Concentrate pH: 9.4
pH, 5 % dilution: 9.3
Freeze/Thaw Cycles: Passed 3x

### **APPLICATION & USAGE**

ValCOOL recommends using Val-U-Clean or K-5-P cleaner before adding VP700P to a machine.

The recommended concentration for VP700P is 5-10% for optimum results. However, results for any operation can only be determined through testing.

Maintaining the coolant at its optimum concentration is achieved through daily refractive index checking.

No special precautions are necessary with respect to seals or valves.

#### REFRACTIVE INDEX MONITORING

## 2.7 x multiplier

Percentage	Ratio	Refractometer Reading
5	19 to 1	1.8
10	9 to 1	3.6
15	6 to 1	5.4
20	4 to 1	7.2

Fluid compatibility and machinability should always be tested first; as fluid concentration, metal alloy, and machining operation are variable.

