

Name: VPTECHP
 Revision Date: 11/14/2017 – R1

ValCool, LLC
 5230 Brittmoore Rd
 Houston, TX 77041

VPTECHP

CHLORINE-FREE SEMI-SYNTHETIC METALWORKING FLUID

DESCRIPTION

VPTECHP is a high-performance, semi-synthetic metalworking fluid. This water extendable metal removal fluid is a medium water, high content mineral oil, macro-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. VPTECHP 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 | • Hi Temp Alloys | • Nickel Alloys |
| • Cast Iron | • Aluminum | • High Carbon |
| • Stainless Steel | • Copper | • Plastics |
| • Titanium | • Brass | • Inconel |

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:	.99
Concentrate pH:	9.5
pH, 5 % dilution:	9.4
Freeze/Thaw Cycles:	Passed 3x

APPLICATION & USAGE

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

The recommended concentration for VPTECHP 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

1.6 x multiplier

Percentage	Ratio	Refractometer Reading
5	19 to 1	3.0
10	9 to 1	6.0
15	6 to 1	9.0
20	4 to 1	12.0

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