

Name: VP 990P
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ValCool, LLC
 1441 Park Ten Blvd.
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VP 990P

GENERATION III WATER-BASED SYNTHETIC CUTTING FLUID

DESCRIPTION

VP 990P is a Gen III synthetic metalworking fluid designed for the most demanding of ferrous machining applications. The product is exceptionally clean with the ability to reject tramp oil and extend sump life. VP 990P is non-aggressive to the machining environment and possesses a chemistry that is machinist friendly. The product is formulated with the latest bio-based synthetically derived chemistries that protect tooling exponentially better than Gen I and Gen II synthetics. The product can perform equally as well on aluminum and copper alloys due to its enhanced lubricity, VP 990P is boron free assuring borate soaps do not build up in the machine or on workpieces.

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 lubricity
- Outstanding surface finish
- Non-irritating to operators' skin
- Excellent cooling properties

METAL COMPATIBILITY

- Steel
- Cast Iron
- Stainless Steel
- Titanium
- Inconel
- Aluminum
- Copper
- Brass
- Hi Temp Alloys
- High Carbon
- Plastics
- Nickel Alloys

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:	Clear Blue Liquid (or water-white)
Diluted Appearance:	Clear Light Blue (or water-white)
Solubility:	100%
Odor:	None
Specific Gravity:	1.03
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 VP990P to a machine.

The recommended concentration for VP990P 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

2.5 x multiplier

Percentage	Ratio	Refractometer Reading
5	19 to 1	2.0
10	9 to 1	4.0
15	6 to 1	6.0
20	4 to 1	8.0

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