

Name: VP940P
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ValCool, LLC
5230 Brittmoore Rd
Houston, TX 77041

VP940P

SYNTHETIC CUTTING & GRINDING FLUID

DESCRIPTION

VP940P is a specially formulated grinding fluid, designed for carbide grinding. VP940P exhibits superior hard water stability, while providing excellent performance and coolant life in individual sumps and central systems.

FEATURES & BENEFITS

- Excellent for diamond wheel grinding of carbide
- Best in class resistance to bacteria growth
- Cobalt leaching below 1 ppm
- Exceptional tramp oil rejection and little to no foam
- Eliminates deep red to purplish color change due to dissolved cobalt into the coolant
- Non-irritating to operators' skin
- Better Surface finishes and improved structural integrity

METAL COMPATIBILITY

- Tungsten carbide
- Silicon Carbide
- Hi Temp Alloys
- Cast Iron
- Aluminum
- Hi Carbon
- Stainless Steel
- Copper
- Ferrous Metals
- Boron Carbide
- Brass
- 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.

COBALT LEACHING PROTOCOL

A carbide swarf test was run on VP940P, and was diluted at 20 parts tap water to one part fluid, by weight. 100.0g of diluted fluid was placed in a 250 ml Erlenmeyer flask to which was added 1.57g of carbide swarf containing 9.5% cobalt; yielding a total cobalt concentration of 1500 ppm in the diluted fluid. The sealed flask was tagitated for five days at room temperature. The flask was removed, the fines allowed to settle, and the extract filtered using 0.2-micron Teflon syringe filters. The extract was analyzed for dissolved cobalt by Atomic Absorption (AA) analysis.

PROPERTIES

Appearance:	Clear Blue Liquid
Diluted Appearance:	Clear Light Blue
Solubility:	Complete
Odor:	Mild Industrial
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 VP940P to a machine.

The recommended concentration for VP940P is 3-5% 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.