

Technical Data Sheet

Solutions Through Innovative Technology

Name: Aerotech B

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ValCool, LLC 5230 Brittmoore Rd Houston, TX 77041

Aerotech B

HIGH PERFORMANCE COOLANT WITH EXTREME BIO-STABILITY

DESCRIPTION

Aerotech B is a micro emulsion metalworking fluid designed for high pressure coolant applications. The product is found in systems with pistons and positive displacement pumps that increase coolant pressure up to 2000 psi. Aerotech B was designed for the aerospace industry focusing on aluminum alloys and other non-ferrous metals; however, over the years the product has found great acceptance by the medical, naval nuclear, and semi-conductor industries due to its "clean" chemistry. Aerotech B provides best-in-class sump life, emulsion stability, and meets or exceeds numerous aerospace certification requirements for coolants.

FEATURES & BENEFITS

- · Chlorine, sulfur, phenol and boron free
- Excellent Foam Suppression
- 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
- Titanium
- Nickel Alloys

- Cast Iron
- Aluminum
- High Carbon

- Stainless Steel
- Copper
- Plastics

- High Temp Alloys
- 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: Clear Amber Liquid
Diluted Appearance: Milky Amber Liquid
Solubility: Milky Micro-Emulsion

Odor: Mild Industrial

Specific Gravity: .98
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 Aerotech B to a machine.

The recommended concentration for Aerotech B 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

1.25 x multiplier

Percentage	Ratio	Refractometer Reading
5	19 to 1	4.0
10	9 to 1	8.0
15	6 to 1	12.0
20	4 to 1	16.0

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

