



**Metal-Shield  
Physical and Chemical Properties**

Weight per Gallon->9 pounds 8 oz  
Viscosity Brookfield No. 6 spindle @ 10RPM CPS->3000-6000  
Flash Point PMCC ASTM D93, ° F->105  
Melting Point, ° F, (Dry Film)->550

Metal Shield contains a low aromatic solvent with a flash point of 105° F or better. The solvent meets requirements of rule 443 and rule 66. The low aromatic content assures low reactivity of the solvent with other substrates.

Performance: Metal Shield meets MIL-C-83933A (MR) specifications.

**Requirements:**

**1. NONVOLATILE**

Not less than 52.0%...Passes

**FIRE RESISTANCE:**

Shall not support combustion after flame source is removed...Passes

**LOW TEMPERATURE FLEXIBILITY:**

Coating will not crack, peel or chip when bent 180° around a mandrel 3/15" in diameter which has been cooled to -10° ± 2 ° F...Passes

**LOW TEMPERATURE STABILITY:**

No evidence of separation or settling out after 4 cycles of cooling to -20 ° ±1 F and return to 77° ±5° F...Passes

**THERMAL STABILITY:**

Softening or Dropping points are in excess of 500° F

**CORROSION PROTECTION:**

a) Salt Spray Resistance...Passes b) Salt water immersion...Passes c) Creep-more than 1/4" penetration after 7 days @ 77° ...Passes d) Sprayability...Passes e) Condition to touch...Passes

Flash point, °F, min 100...Passes

Fire point, °F, min 105...Passes

Water content, percent max,1.0...Passes

**Copper Strip Corrosion:**

(3 hours @ 212 °F) maximum ASTM classification 2e...Passes

Typical salt fog performance: Dry Film 0.5...1000+ 5.0 mils...3000+

Ultraviolet light studies have shown that Metal Shield is resistant to ultraviolet light degradation. Most coatings will last only 48 to 72 hours in a QUV tester, Metal Shield showed no deteriorious effects after 500 hours.

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