

Product Specifications

ACF-50 PERFORMANCE QUALIFIED Mil-C-81309E Amd 3, Type II

Characteristics	Requirements	Test Para..	Found
- Minimum flash point	60°C (140°F)	4.7.1	Conforms (175F)
- Synthetic Sea Water-Sulfurous Acid Spray	Type II: No visible corrosion of carbon steel after 2 cycles.	4.7.2	Conforms
-Synthetic Sea Water displacement	No visible corrosion.	4.7.3	Conforms
- Removability	Not more than 3 cycles to remove.	4.7.4	Conforms
- Abrasives	Non present	4.7.5	Conforms
- Maximum film thickness	Type II: 0.0005 inches	4.7.6	Conforms
- Sprayability	Sprayable	4.7.7	Conforms
- Corrosivity	No visible pitting, etching or dark discoloration. No weight change (milligram/cm2) greater than 0.5 for magnesium, cadmium, and zinc nor greater than 0.2 for aluminum, copper, and brass.	4.7.8	Conforms
- Staining	No visible evidence of staining or other deleterious effects.	4.7.9	Conforms
- Minimum dielectric breakdown	25,000 volts	4.7.10	Conforms 38,000 volts
- Mixability of compounds	No evidence of separation	4.7.11	Conforms
- Lubricity of compounds	Less than 0.20	4.7.12	Conforms
- Effect on electric components	No Significant change in capacitance, dissipation factor and conductance of coil forms and capacitors. For coils no significant change in the Q and amount of capacitance to resonate the coil. No significant change in the resistance of resistors. A change greater than 1/2 the allowed tolerance of the component shall be considered as significant.	4.7.13	Conforms
- Effect on electric connectors	No significant increase in resistance between connected pins or decrease in resistance between adjacent pins.	4.7.14	Conforms

ADDITIONAL ACF-50 TEST DATA

TEST IDENTITY	TEST METHOD	RESULTS
BMS 3-23E		
Table I		
-Flash Point	ASTM D93	Pass
-Sprayability	MIL-C-1617D	Pass
-Low-Temperature Adhesion	MIL-C-1617D	Pass
-Nonvolatile Content	ASTM D1644	Pass
-Detectability		Pass
-Removability		Pass
-Storage Stability		Pass
-Drying Time		Pass
-Compatibility with Cadmium		
Douglas Aircraft CSD #1		
- Painted Surfaces	ASTM F 502	Conforms
- Residue Surfaces	ASTM F 485	Conforms
- Sandwich Corrosion Test		Conforms
- Stress Cracking Acrylic Plastics	ASTM F 484	Conforms
- Immersion Corrosion Test	ASTM F 483	Conforms
- Cadmium Removal Test	ASTM F 1111	Conforms
Douglas Aircraft DMS 2150		
- Film Characteristic	ASTM D-56	Conforms
- Product Composition	ASTM D-1644A	Conforms
- Appearance	ASTM D-445	Conforms
- Toxicity	ASTM B-117	Conforms
- Flash Point		Conforms
- Nonvolatile Content		Conforms
- Viscosity		Conforms
- Salt Fog Exposure		Conforms
- Water Displacement		Conforms
- Removability		Conforms
- Storage Stability		Conforms
Table II		
-Water Displacement Ability	MIL-C-1617D	
-Viscosity		
-Corrosion Inhibiting Characteristics	FED-STD 791 (ASTM G 34)	Pass
-Functional Penetration Test		
Airbus Industrie TN A 007.10138		
Corrosion Resistance To:		
Turco Toilet Fluid, Orange Juice, Coke, Coffee, De-Icing Fluid		
3:4-1:2-1:4, %5 NaOH, %5 HCl, 5% HNO ₃ , %10 CH ₃ COOH, %45 Ethanol		
Volatile Organic Content		
-California Air Quality Compliant	ASTM 2369	>166.9g/L
Misc.		
-Humidity Resistance	AMS 3066B	Conforms
-Hydrogen Embrittlement	ASTM F 519	Conforms
-Polyimide Insulated Wire	MIL-C-87937B	Conforms

ACF-50 has endorsements or approvals from 23 airframe OEM's and meets industry anti-corrosion performance requirements.

