TECHNICAL DATA SHEET FOR RADCOLUBE® C937-4

MIL-PRF-87937E TYPE IV HEAVY DUTY, WATER DILUTABLE CLEANING COMPOUND, AEROSPACE EQUIPMENT

Requirement	Requirement	Results	Test Method
Insoluble Matter, percent weight	0.05%, max	< 0.01%	MIL-PRF-87937E ¶4.4.2
Filler materials	None	None	MIL-PRF-87937E ¶4.6
Flash Point, °C, concentrated solution	None	None	MIL-PRF-87937E ¶4.4.7
Emulsion Characteristics (mL in free water)			MIL-PRF-87937E ¶4.4.8
5 minutes	5.0 max	< 3	
24 hours	11.0 min	13	
Cleaning Efficiency, percent	90% min	95%	MIL-PRF-87937E ¶4.4.21
Nonvolatile matter	MIL-PRF-87937E ¶3.5	37%	MIL-PRF-87937E ¶4.4.1
pH			MIL-PRF-87937E ¶4.4.3
10% solution	8.0 ± 1.0	8.0	
Concentrated solution	8.5 ± 1.0	8.5	
100 ppm, percent survival	Report	100%	
Biodegradability, percent	85%, min.	87%	MIL-PRF-87937E ¶4.4.22
Residue Rinsibility	MIL-PRF-87937E ¶3.6.2	Conforms	MIL-PRF-87937E ¶4.4.4
Heat Stability	MIL-PRF-87937E ¶3.7.1	Conforms	MIL-PRF-87937E ¶4.4.5
Cold Stability	MIL-PRF-87937E ¶3.7.2	Conforms	MIL-PRF-87937E ¶4.4.6
Concentrated solution	Pass	Pass	
Total Immersion Corrosion, average of 3 Panels Weight Loss, 168 hours, mg/cm² max			MIL-PRF-87937E ¶4.4.10
Magnesium (AZ 31B-H24) AMS4377; surface treatment per SAE AMS-M-3171, Type III			
10% solution	0.50 max	-0.03	
Concentrated solution	0.50 max	-0.04	
Aluminum, SAE AMS-QQ-A-250/4, T3; surface treatment per MIL-A-8625, Type I, Class I			
10% solution	0.15 max	<0.01	
Concentrated solution	0.15 max	<0.01	
Aluminum, SAE AMS-QQ-A-250/4, Bare T3 Alloy			
10% solution	0.15 max	<0.01	
Concentrated solution	0.15 max	<0.01	
Aluminum, SAE AMS-QQ-A-250/12, Bare T6 Alloy			
10% solution	0.15 max	<0.01	
Concentrated solution	0.15 max	<0.01	
Titanium, SAE AMS-T-9046, 6AL-4V Class III, Composition C			
10% solution	0.10, max	<0.01	
Concentrated solution	0.10, max	<0.01	
Steel, AMS5046, SAE 1020			
10% solution	0.25, max	<0.01	
Concentrated solution	0.25, max	<0.01	
Steel, 410 SS, silver plated per SAE AMS2410			
10% solution	0.10, max	<0.01	
Concentrated solution	0.10, max	<0.01	
Low-embrittling cadmium plate corrosion, weight change, mg/cm²			MIL-PRF-87937E ¶4.4.11
10% solution	0.14, max	0.03	
Concentrated solution	0.14, max	0.10	
Effects on unpainted metal surfaces, 10% solution	Pass	Pass	MIL-PRF-87937E ¶ 4.4.12
Effects on painted metal surfaces, 25% solution	MIL-PRF-87937E ¶3.9		MIL-PRF-87937E ¶ 4.4.13
MIL-PRF-22750 Coating, Epoxy Topcoat	Conform	Conforms	
MIL-PRF-85285 Type I Coating: Polyurethane, High Solids	Conform	Conforms	
Stress Crazing Acrylic Plastics	MIL-PRF-87937E ¶3.10		MIL-PRF-87937E ¶ 4.4.14
Type A (MIL-PRF-5425) finish	Conform	Conforms	
Type C (MIL-PRF-25690) finish	Conform	Conforms	
Stress crazing of SAE AMS-P-83310 polycarbonate plastic, 10% solution	MIL-PRF-87937E ¶3.11	Conforms	MIL-PRF-87937E ¶4.4.15
Long term storage stability.	MIL-PRF-87937E ¶3.8.6	Pass	MIL-PRF-87937E ¶4.4.17
Hot dip galvanizing corrosion.	MIL-PRF-87937E ¶3.9	Conforms	MIL-PRF-87937E ¶4.4.18
Effects on polysulfide sealant, 25% solution	MIL-PRF-87937E ¶3.15	Conforms	MIL-PRF-87937E ¶4.4.19
Toxicity and waste disposal characteristics	MIL-PRF-87937E ¶3.18	Pass	MIL-PRF-87937E ¶4.5
Rubber Compatibility, 25% solution, Shore A durometer hardness change	5 max	< 5	MIL-PRF-87937E ¶4.4.20

* Data represents typical laboratory samples and are not guaranteed for all samples

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