MIL-PRF-87252E
RADCOLUBE® 500M

RADCOLUBE® 500M
COOLANT FLUID, HYDROLYTICALLY STABLE, DIELECTRIC

Dielectric/cooling fluid consisting of a synthetic hydrocarbon base oil and additives; designed for safe use in land and airborne closed loop cooling systems.

NATO Code: S-1748

Qualification Number: AFPET/PTPS 19-014

Qualification Date: 25 September 2019

ISO 9001:2015 Certification No: C2021-00038

Shelf Life: 24 Months from DOM

Manufactured: LaFox, IL 60147 | Cage: 1RVC4

NATIONAL STOCK NUMBERS (NSN)	
9150-01-306-2475	Quart
9150-01-336-7174	Oblong Gallon
9150-01-304-0885	Gallon
9150-01-306-2470	55 Gallon Drum

5 Gallon Pails Available Upon Request

MIL-PRF-87252E RADCOLUBE® 500M

CHARACTERISTICS	REQUIREMENT	TYPICAL RESULTS	TEST METHOD
Kinematic Viscosity, mm^2/s (cSt)			
100°C	1.65 min	1.68	ASTM D445
40°C	5.0 min	5.0	ASTM D445
-40°C	300 max	261	ASTM D445
-54°C			ASTM D2532
1.5 hours, initial	1300 max	1,078	
3.0 hours	1300 max	1,100	
Dielectric strength, kV	35 min	40	ASTM D877
Resistivity at 25°C, ohm-cm	1.0×10^{10} min	2.1×10^{13}	ASTM D1169
Flash point, °C	150 min	172	ASTM D92
Fire point, °C	160 min	178	ASTM D92
Acid number, mg KOH/g	0.20 max	0.01	ASTM D664
Water, mg/kg (ppm)	50 max	26	ASTM D6304
Rubber swell, SAE AMS 3217/2 (NBR-L) percent change in volume	0.0 - 10%	7.4%	ASTM D4289
Solid particle contamination			Paragraph 4.4.1
Particle count per size range NAS 1638			FTM 3012
5 to 15	8000 max	417	
16 to 25	1425 max	27	
26 to 50	253 max	30	
51 to 100	45 max	0	
> 100	8 max	0	
AS4059 Contamination Class	5 max	2	
Storage stability	Pass	Pass	FTM 3465
High-temperature stability	Pass	Pass	Paragraph 4.4.3
Corrosiveness and oxidation stability			ASTM D4636
Change in acid number, mg KOH/g	0.5 max	0.00	
Metal specimen weight change, mg/cm2			
Aluminum	± 0.2	-0.01	
Cadmium plated steel	± 0.2	0.00	
Copper (copper color)	± 0.4 (3a max.)	0.01 (3a)	
1010 Steel	± 0.2	0.01	
Magnesium	± 0.2	0.00	
Percent change in viscosity at 40°C	5% max	1.2%	
Separation of insoluble materials/gumming of fluid	None	None	
Compatibility	Pass	Pass	Paragraph 4.4.2