



MIL-PRF-6083G RADCOLUBE® RHP6083



RADCOLUBE® RHP6083

HYDRAULIC FLUID, PETROLEUM BASE, FOR PRESERVATION AND OPERATION

Rust-inhibited petroleum hydraulic fluid consisting of synthetic hydrocarbon base oils and additives; designed for use both as a preservative for hydraulic systems and components as well as operational fluid applications.

Military Symbol: OHT

NATO Code: C-635

Qualification Number: H-6067
H-6068

Qualification Date: 19 February 2020
25 August 2020

ISO 9001:2015 Certification No: C2021-00038

Shelf Life: 24 Months from DOM

Manufactured: LaFox, IL 60147 | Cage: 1RVC4



NATIONAL STOCK NUMBERS (NSN)	
9150-00-935-9807	Quart
9150-00-935-9808	Gallon
9150-00-935-9809	5 Gallon Pail
9150-00-935-9810	55 Gallon Drum



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CHARACTERISTICS	REQUIREMENT	TYPICAL RESULTS	TEST METHOD
Acid Number, mgKOH/g, max	0.2	0.15	ASTM D664
API Gravity at 15.6°C/15.6°C	Report	33.4	ASTM D1298
Color, ASTM Color Scale, max	5.0	Conforms	ASTM D1500
Compatibility	Pass	Pass	Paragraph 4.5.1
Copper Strip Corrosion 72 hours at 100 ± 1°C, ASTM Standard, max	2e	1b	ASTM D130
Corrosion Protection (Humidity Cabinet), 100 ± 1 hours at 48.9 ± 1.1°C air temperature			ASTM D1748
Sand-blasted (3 panels)	Pass	Pass	
Polished Panels (3 panels)	Pass	Pass	
Corrosiveness (Bimetallic Couple)	Pass	Pass	ASTM D6547
Corrosiveness and Oxidation Stability 168 hrs at 121 ± 0.5°C			ASTM D4636 Procedure 2
Metal specimen weight change, mg/cm ² , max			
Cadmium Anode	± 0.2	0.00	
Steel Grade 1010	± 0.2	0.00	
Aluminum Alloy	± 0.2	0.00	
Magnesium	± 0.2	0.00	
Copper (No. 3 max)	± 0.2	0.00 (1a)	
Percent change in viscosity at 40°C	-5% to +20%	-0.19%	
Change in acid number, max	0.2	0.03	
Separation of insoluble materials or gumming of the fluid	None	None	
Evaporation Loss 22 hours at 100 ± 0.5°C, % by weight, max	75	51.02	ASTM D972
Flash Point, °C min	82	83	ASTM D93
Foaming Characteristics			ASTM D892
Foaming Tendency			
Foam volume (mL) at end of 5 minute blowing period, max			
At 24°C	65	50	
At 94°C	65	40	
At 24°C after test at 94°C	65	50	
Foam Stability			
Foam volume (mL) at end of 10 minute setting period, max			
At 24°C	0	0	
At 94°C	0	0	
At 24°C after test at 94°C	0	0	



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Isothermal secant bulk modulus at 40°C and 4000 psig, psi, min	200,000	227,286	ASTM D6793
Low Temperature Stability -54 ± 1°C for 72 hours	Pass	Pass	FTM 3458
Particulate Contamination			
Particle Count, micrometers, max			ASTM D4898
5 - 25	10,000	153	
26-50	250	0	
51-100	50	0	
Over 100	10	0	
Gravimetric method, mg/100 mL, max	0.5	0.4	FTM 3012
Pour Point (°C) max	-59	-69	ASTM D97
Rubber Swell, Standard Synthetic Rubber, NBR-L, % 168 ± 0.5 hours at 70 ± 2.5°C	19.0% to 31.0%	24.0%	ASTM D4289
Shear Stability, percent, max	Pass	Pass	ASTM D2603
Steel-on-Steel wear (average wear scar) mm in diameter, max	1.0	0.96	ASTM D4172
Storage Stability 24 ± 3°C for 12 months	Pass	Pass	FTM 3465
Viscosity, mm ² /s			ASTM D445
At -54°C, max	3,300	2,916	
At -40°C, max	700	600	
At 40°C, min	13.2	15.4	
At 100°C, min	4.6	5.5	
Water, mass %, max	0.05%	0.02%	ASTM D6304