



MIL-PRF-5606J RADCOLUBE® RHP5606



RADCOLUBE® RHP5606

HYDRAULIC FLUID, PETROLEUM BASE;
AIRCRAFT, MISSILE, AND ORDNANCE

A petroleum based, non-synthetic hydraulic fluid used in a variety of hydraulic systems requiring an operational fluid in the -54°C to 135°C temperature range.

Military Symbol: OHA

NATO Code: H-515

**Qualification Number: AFPET/PTPS 20-005
AFPET/PTPS 20-006
AFPET/PTPS 23-002**

**Qualification Date: 20 February 2020
9 March 2020
3 April 2023**

ISO 9001:2015 Certification No: C2021-00038

Shelf Life: 24 Months from DOM

**Manufactured: LaFox, IL 60147 | Cage: 1RVC4
Batavia, IL 60510 | Cage: 6ZS16**

SINCE 1930



PETROLEUM SERVICE COMPANY

WWW.PETROLEUMSERVICECOMPANY.COM



NATIONAL STOCK NUMBERS (NSN)

9150-00-252-6383	Quart
9150-00-223-4134	Gallon
9150-00-082-7524	10 Gallon Drum
9150-00-265-9408	55 Gallon Drum

5 Gallon Pails Available Upon Request



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PROPERTY	REQUIREMENT	TYPICAL RESULTS	TEST METHOD
Acid number, mg KOH/g (max)	0.20	0.10	ASTM D664
Barium content, mg/kg (max)	10	< 1	ASTM D5185
Color	Paragraph 3.4.1	Pass	ASTM D1500
Compatibility	Paragraph 3.4.2	Pass	Paragraph 4.4.2
Copper strip corrosion, ASTM Standard (max)	2e	1b	Paragraph 4.4.3
Corrosiveness and oxidation stability 168 hours at 135°C ± 1°C			ASTM D4636
Change in acid number, mg KOHg (max)	0.20	0.18	Procedure 2
Metal specimen weight change, mg/cm ² (max)			
Aluminum	± 0.2	0.016	
Cadmium plated steel	± 0.2	0.008	
Copper	± 0.6 (No. 3)	-0.008 (1b)	
1010 Steel	± 0.2	0.008	
Magnesium	± 0.2	0.031	
Percent change in viscosity at 40°C	-5% to +20%	9.27%	
Separation of insoluble materials or gumming of the fluid	None	Conforms	
Evaporation loss (6 hours at 71°C), % (max)	20%	18%	ASTM D972
Flash point, °C (min)	82	85.5	ASTM D93
Foaming Characteristics at 24°C			ASTM D892
Foaming tendency, mL (max)	65	50	
Foam stability, mL (max)	Complete Collapse	Complete Collapse	
Isothermal secant bulk modulus at 40 °C and 27.6 MPa (4000 psig), MPa (psi) (min)	1379 (200,000)	1680 MPa (243,663 psi)	ASTM D6793
Low temperature stability 72 hours at -54 °C ± 1 °C	Paragraph 3.4.3	Conforms	FTM 3458
Particulate contamination			
Particle count, SAE AS4059, Contamination Level	5	3C	FTM 3012
Number of particles per 100 mL (max)			ISO 11500
5-15 (6-14 _(c))	8000	3825	
16-25 (15-21 _(c))	1425	181	
26-50 (22-38 _(c))	253	76	
51-100 (39-70 _(c))	45	16	
> 100 (> 70 _(c))	8	2	
Gravimetric analysis, mg/100 mL (max)	1.0	0.0	ASTM D4898
Pour point, °C (max)	-60	≤-63	ASTM D97
Relative density at 15.6/15.6°C	Paragraph 3.4.4	0.8740	ASTM D1298



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PROPERTY	REQUIREMENT	TYPICAL RESULTS	TEST METHOD
Rubber swell, standard synthetic rubber L 168 hours at 70 °C, %	19.0% to 30.0%	29.8%	ASTM D4289
Shear stability	Paragraph 3.4.5	Pass	ASTM D2603
Steel-on-steel (average wear scar) mm in diameter (max)	1.0	0.66	ASTM 4172
Storage stability (24°C ± 3°C for 12 months)	Paragraph 3.4.6	Pending	FTM 3465
Viscosity, mm ² /s at			ASTM D445
-54°C (max)	2500	1940	
-40°C (max)	600	431	
40°C (min)	13.2	13.7	
100°C (min)	4.90	5.02	
Water, mg/kg (max)	100	23	ASTM D6304
Workmanship	Paragraph 3.5	Pass	ISO 9001:2015