



MIL-PRF-5606K 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: C2024-00254

Shelf Life: 24 Months from DOM

Manufactured: Batavia, IL 60510 | Cage: 6ZS16



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



RADCO INDUSTRIES, INC.

**TECHNICAL DATA SHEET FOR RADCOLUBE® RHP5606 HYDRAULIC FLUID
MIL-PRF-5606K, HYDRAULIC FLUID, PETROLEUM BASE; AIRCRAFT, MISSILE, AND ORDNANCE**

Property	Requirement	Result	Test Method
Acid number, mg KOH/g	0.20 max	0.12	ASTM D664
Barium content, mg/kg	10 max	< 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	2e max	1b	Paragraph 4.4.3
Corrosiveness and oxidation stability (168 hours at 135°C ± 1°C)			ASTM D4636 Procedure 2
Change in acid number, mg KOH/g	0.20 max	0.18	
Metal specimen weight change, mg/cm ²			
Aluminum	± 0.2	0.02	
Cadmium plated steel	± 0.2	0.01	
Copper (color)	± 0.6 (No. 3 max)	-0.008 (1b)	
1010 Steel	± 0.2	0.01	
Magnesium	± 0.2	0.03	
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), %	20% max	18%	ASTM D972
Flash point, °C	82 min	86	ASTM D93
Foaming characteristics at 24°C			ASTM D892
Foaming tendency, mL	65 max	60	
Foam stability, mL	Complete collapse	0	
Isothermal secant bulk modulus @ 40 °C and 27.6 MPa (4000 psig), MPa (psi)	1379 (200,000) min	1680 MPa (243,663 psi)	ASTM D6793
Low temperature stability, 72 hours @ -54 °C ± 1 °C	Paragraph 3.4.3	Conforms	FED-STD-791D Method 3458
Particulate contamination			
Particle count, AS4059 Contamination Class	Class 5 max	4	
Particle size range NAS 1638 (ISO 11171), Differential, micrometers			FED-STD-791D Method 3012
5-15 (6-14 _(c))	8000 max	901	
16-25 (15-21 _(c))	1425 max	117	
26-50 (22-38 _(c))	253 max	78	
51-100 (39-70 _(c))	45 max	18	
Over 100 (Over 70 _(c))	8 max	0	
Gravimetric analysis, mg/100mL	1.0 max	0.0	ASTM D4898
Pour point, °C	-60 max	≤ -69	ASTM D97
Relative density at 15.6/15.6°C	Paragraph 3.4.4	0.8740	ASTM D1298
Rubber swell, standard synthetic rubber L (168 hours @ 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	1.0 max	0.66	ASTM D4172
Storage stability (24°C ± 3°C for 12 months)	Paragraph 3.4.6	Pass	FED-STD-791D Method 3465
Viscosity, mm ² /s at			ASTM D445
-54°C	2500 max	2231	
-40°C	600 max	510	
40°C	13.2 min	14.0	
100°C	4.90 min	5.09	
Water, mg/kg	100	41	ASTM D6304
Workmanship	Paragraph 3.5	Conforms	ISO 9001:2015