

RADCOLUBE 17111



700 Kingsland Drive
PO Box 1928
Batavia, IL 60510
Phone: (630) 232-7966
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www.Radcoind.com

MILITARY FLUIDS

MIL-DTL-17111E(1) RADCOLUBE® 17111 (FLUID, POWER TRANSMISSION)

Radcolube® 17111 is for use in the hydraulic transmission of power.

Qualification Number: N/A

Qualification Date: N/A

NATO CODE: H-575

ISO 9001:2015 Certification Number: C2018-00035

National Stock Numbers Available From Radco

9150-00-261-8317 5-Gallon Pails

9150-00-261-8318 55-Gallon Drums

<u>BASE STOCK CHARACTERISTICS</u>	<u>REQUIREMENT</u>	<u>TYPICAL RESULTS</u>	<u>TEST METHOD</u>
Neutralization number, max	0.05 mg KOH/g	0.01	ASTM D974
Aniline point, min	77°C	78.1	ASTM D611
Aniline point change, max	2.8°C	+2.3	ASTM D611
Precipitation number, max	0.05 ml	0.000	ASTM D91

<u>FINISHED FLUID CHARACTERISTICS</u>	<u>REQUIREMENT</u>	<u>TYPICAL RESULTS</u>	<u>TEST METHOD</u>
API Gravity at 15.6°C	Report	30.7	ASTM D287
Viscosity at -35°C, max	1,000 mm ² /s (cSt)	888.8	ASTM D445
Viscosity at -20°C, max	500 mm ² /s	287.8	ASTM D445

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Viscosity at +40°C, min	25 mm ² /s	26.56	ASTM D445
Viscosity at +100°C, min	8 mm ² /s	13.11	ASTM D445
Pour point, max	-40°C	-63	ASTM D97
Flash point, Cleveland Open Cup, min	104°C	104	ASTM D92
Fire point, Cleveland Open Cup, min	113°C	114	ASTM D92
Neutralization number, max	0.3 mg KOH/g	0.12	ASTM D974
Precipitation number, max	0.05 ml	0.001	ASTM D91
Water	0.0%	0.0%	ASTM D95
Color, ASTM D1500, max	2	0.5	ASTM D1500
Low temperature turbidity, 72 hours at -37°C	¶ 3.2.4.1	Conforms	¶ 4.5.2.2
Rust prevention	No evidence of rust	PASS	¶ 4.5.2.3
Corrosion and oxidation stability, 336 hours at 93°C Copper, weight change, max There shall be no pitting, etching, or visible signs of corrosion Appearance of copper Viscosity at 99°C, percent change Viscosity at -18°C, percent change Neutralization number change, max Insoluble material, percent weight, max Color, ASTM D1500, max	0.2 mg/cm ² Conform Report 0 to 25% 0 to 25% 0.5 0.5% 5.0	+0.001 Conforms 1b +9.71% +23.95% 0.14 0.15% 1.5	¶ 4.5.2.4.1
Corrosion and oxidation stability, 72 hours at 93°C Viscosity at 99°C, percent change Viscosity at -18°C, percent change Neutralization number change of fluid layer, max	0 to 15% 0 to 15% 0.5 0.5 mg KOH/g	+3.58% +8.49% 0.13 0.05	¶ 4.5.2.4.2

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Acidity of water layer, max			
Shear stability			
Viscosity change at 38°C, viscosity change max.	-20%	-8.40%	ASTM D5621
Neutralization number change, max	0.2	+0.02	
Steel-on-steel wear, max	1 mm	0.54	ASTM D2266
Evaporation, 6 hours at 66°C, max	20%	10.25%	ASTM D972
Water sludging, viscosity change at 38°C, max.	-2% to 10%	-0.82%	¶ 4.5.2.5
Workmanship	¶ 3.2.5	Conforms	Visual

Manufacturing Location: Batavia IL, 60510