



MIL-PRF-83282D(1) RADCOLUBE® FR282



RADCOLUBE® FR282

HYDRAULIC FLUID, FIRE RESISTANT, SYNTHETIC
HYDROCARBON BASE, METRIC

Synthetic, fire resistant hydraulic fluid consisting
of synthetic hydrocarbon base oils and additives.

NATO Code: H-537

Qualification Number: NAWCADPAX Itr 4123
Ser 434200A/10.0040

Qualification Date: 28 June 2010

ISO 9001:2015 Certification No: C2021-00038

Shelf Life: 24 Months from DOM

Manufactured: LaFox, IL 60147 | Cage: 1RVC4



NATIONAL STOCK NUMBERS (NSN)

9150-00-149-7431	Quart
9150-00-149-7432	Gallon
9150-01-009-7709	10 Gallon Drum
9150-00-180-6290	55 Gallon Drum

5 Gallon Pails Available Upon Request



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CHARACTERISTICS	TEST LIMITS	TYPICAL RESULTS	TEST METHOD
Auto-ignition Temperature	345°C, min	370	ASTM E659
Barium Content	10 parts/million (ppm), max	0.78	ASTM D5185
Bulk modulus at 40°C Isothermal secant 0 to 6.9 x 10 ⁴ kPa	1.379 x 10 ⁶ kPa, min	1.693 x 10 ⁶	Paragraph 4.4.1
Concentration of red dye	Conform	Conforms	MIL-SPEC
Compatibility of Oils	Pass	Pass	Paragraph 4.4.3
Corrosiveness and oxidation stability Change in weight of metal specimens Aluminum alloy Magnesium alloy Cadmium-plated steel Steel Copper No pitting, etching, nor visible corrosion No evidence of separation/gumming of fluid Change in viscosity at 40°C Increase in neutralization number	0.2 mg/cm ² , max 0.2 mg/cm ² , max 0.2 mg/cm ² , max 0.2 mg/cm ² , max 0.6 mg/cm ² , max (No .3 max) Pass Pass 10 percent, max 0.2, max	0.008 0 -0.031 0 0.008 (No. 1b - 2a) Pass Pass 0.27% 0.01	ASTM D4636
Evaporation	20.0 percent by weight, max	17.75%	FTM 350
Fire point	245°C, min	251	ASTM D92
Flame Propagation	0.30 cm/second, max	0.172	ASTM D5306
Wick flammability	10 cycles, min	>1,050	FTM 352
Flash point	205°C, min	221	ASTM D92
Foaming characteristics at 25°C At end of 5 minute blowing period After settling 10 minutes	65 mL, max Complete collapse	0 Complete collapse	ASTM D892
High temperature high pressure spray ignition	Pass	Pass	FTM 6052
High temperature stability Viscosity change at 40°C Neutralization number change Appearance	5%, max 0.1, max Pass	4.75% 0.00 Pass	Paragraph 4.4.4
Low temperature stability 72 hours -40±1°C	Pass	Pass	FTM 3458
Lubricity, 10 ±0.5 mL sample Under a 1 kilogram (kg) load Under a 10 kg load Under a 40 kg load	scar diameter 0.21 mm, max 0.30 mm, max 0.65 mm, max	0.20 0.23 0.46	ASTM D4172



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Neutralization number, mgKOH/g	0.10, max	0.08	ASTM D664
Pour point	-55°C, max	-69	ASTM D97
Filtration time	15 minutes, max	8.5	FTM 3009
Gravimetric analysis	0.3 mg, max	0.05	ASTM D4898
Specific gravity at 15.6°C/15.6°C	Report	0.838	ASTM D1298
Storage stability after 12 months of storage	Pass	Pass	FTM 3465
Swelling of synthetic rubber, NBR-L	18.0 to 30.0%	18.98%	FTM 3603
Viscosity at 205°C, cSt	1.0 cSt, min	1.085	ASTM D445
Viscosity at 100°C, cSt	3.45 cSt, min	3.63	ASTM D445
Viscosity at 40°C, cSt	14.0 cSt, min	15.0	ASTM D445
Viscosity at -40°C, cSt	2,200 cSt, max	2,089	ASTM D445
Water content	100 ppm, max	27	ASTM D1744
Workmanship	Pass	Pass	ISO 9001:2015