

VV-L-825B
AMENDMENT 1
26 March 1991

FEDERAL SPECIFICATION

LUBRICATING OIL, REFRIGERANT COMPRESSOR, UNINHIBITED

This amendment, which forms a part of VV-L-825B, dated November 10, 1987, is approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

PAGE 3

2.2, ASTM: Add "ASTM D1744 - Standard Test Method For Water in Liquid Petroleum Products by Karl Fischer Reagent.(DOD adopted)".

PAGE 4

3.5, TABLE I.: Delete and substitute.

TABLE I. Physical and chemical requirements.

Property	Type II	Type III	Type IV	Test method
Viscosity cSt, 100 degrees Fahrenheit	60.2-81.0	----	29.0 - 37.1	ASTM D 445
Viscosity, cSt 100 °C (212 °F)	-----	21.7 - 26.3	----	ASTM D 445
Flash point, degree Fahrenheit (°F), min	350 (177°C)	450 (232°C)	325(163°C)	ASTM D 92
Pour point, ° F, max	Minus 30 (minus 34°C)	0 (minus 18°C)	Minus 40 (minus 40°C)	ASTM D 97
Floc point, °F, max	Minus 50 (minus 46°C)	0 (minus 18°C)	Minus 60 (minus 51°C)	ASHRAE 86
Color	Report	Report	Report	ASTM D 1500
Moisture* (max)	35 ppm	35ppm	35ppm	ASTM D 1744

*ppm=parts per million

1 of 3

AMSC N/A

FSC 9150

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

VV-L-825B
AMENDMENT 1

TABLE I Physical and chemical requirements - Continued

Property	Type II	Type III	Type IV	Test method
Total acid no , mg KOH/g, max	0.05	0 05	0 05	ASTM D 974
Dielectric, kV, min	25	20	25	ASTM D 877
Aniline point, °F	160° - 220	---	160° - 210	ASTM D 611
Gravity, °API	21 - 28	---	22 - 30	ASTM D 287
Chemical stability, percent R-22, max	1.5	---	0.8	ASHRAE 97
Corrosion	1	1	1	ASTM D 130
Bearing compati- bility	Pass	Pass	Pass	Method 3452 1 ²
Journal bearing test	³ 0.9	Pass	³ 0 9	Method 3452 1 ²
Carbon residue, percent, max	0 3	1 25	0 2	ASTM D 189
Ash, percent, max	0 005	0 005	0 005	ASTM D 482
Swelling of syn- thetic rubbers, percent by wt	Plus or minus 5 0 ⁴	---	Plus or minus 5 0 ⁴	ASTM D 471

¹ Discoloration of test strip shall be not greater than that caused by oxidation of a blank copper strip when exposed to dry heat oven at 212°F (100°C) for 3 hours.

² FED-STD-791

³ Journal speed - 3500 revolutions per minute, bearing temperature - 275 ± 1°F (135 ± 55°C)

⁴ Time - 166 hours, temperature - 158°F (70°C)
Rubber specimens. MIL-R-6855, class 1, grade 60
MIL-G-1149, type II, class 1
MIL-R-83248

VV-L-825B
AMENDMENT 1

PAGE 6

4.3, last line: Add "(see 3.5)".

4.4, line 4: Add "(see 3.5)" after "table I".

4.4.1.1, line 4: Add "or formulation process." after
"materials".

4.4.1.2, line 6: Add "or formulation process." after
"materials".

CIVIL AGENCY COORDINATING ACTIVITIES:
GSA-FSS

Custodians:

Army - MR
Navy - SH
Air Force - 68

Preparing activity:
Navy - SH
(Project 9150-1056)

Review activities:

Army - MI
DLA - GS