INCH-POUND
MIL-PRF-7061C
Amendment 2
16 July 1999
Superseding
Amendment 1
1 September 1998

PERFORMANCE SPECIFICATION

HOSE, ELASTOMERIC, AIRCRAFT, SELF-SEALING, AROMATIC FUEL

This amendment forms a part of Military Specification MIL-PRF-7061C dated 15 May 1998 and is approved for use by the Department of the Air Force and is available for use by all Departments and Agencies of the Department of Defense.

Page 2

2.2.1 Specifications and standards.

SPECIFICATIONS

DEPARTMENT OF DEFENSE

Add: MIL-PRF-5624 - Turbine Fuel, Aviation, Grades JP-4, JP-5 and JP-5/JP-8 ST
MIL-T-83133 - Turbine Fuel, aviation, Kerosene Types, NATO F-34 (JP-8) And NATO F-35

Page 5

* Table I: Delete and substitute:

Table I Hose requirements.

Size Code	ID (inches)	OD (inches)	Burst pressure	Minimum bend radius	Collapse vacuum
			(psi)	(in.)	(in. Hg)
062	0.625 ± 0.016	1.531±0.062	400	4.0	20
075	0.750 ± .031	1.625±0.062		4.5	
100	1.000 ± .031	1.891±0.062		5.5	
125	1.250 ± .031	2.219±0.062	250	8.0	12
150	1.500 ± .031	2.438±0.062		9.0	6
200	2.000 ± .031	2.938±0.062	150	12.5	4
250	2.500 ± .031	No requirement		No requirement	2
300	3.000 ± .031	No requirement		No requirement	

3.5.1, delete and substitute:

"3.5.1 Proof Pressure. Hose shall not leak or blister when exposed to either an aerostatic proof pressure of 100 pounds per square inch (psi) or a hydrostatic proof pressure of 120 psi."

Page 6

3.5.8: Delete and substitute:

"3.5.8 Gunfire. The hose shall be capable of withstanding gunfire up to and including 50 caliber armor piercing ammunition."

3.5.8.1: Delete and substitute:

"3.5.8.1 Grade JP-4 fuel. The hose shall completely seal within 2 minutes when punctured by gunfire at an ambient temperature of 75 °F and filled with fuel conforming to MIL-PRF-5624, Grade JP-4 at an internal hose pressure of 40 psi. The hose shall completely seal within 5 minutes when punctured by gunfire at a temperature of -20ºF and filled with fuel conforming to MIL-PRF-5624, Grade JP-4 at internal hose pressure of 40 psi. The hose shall not shatter as a result of gunfire when tested as specified in 4.5.3.1."

3.5.8.2: Delete and substitute:

"3.5.8.2 Grade JP-8 fuel. The hose shall seal within 2 minutes when subjected to gunfire at an ambient temperature of 75 °F and filled with fuel conforming to MIL-T-83133, Grade JP-8 at an internal hose pressure of 40 psi. Slight seepage, but no spurting, after the first 30 seconds will be permitted when the hose is punctured by gunfire at -20ºF and filled with fuel conforming to MIL-T-83133, Grade JP-8 at an internal hose pressure of 40 psi. The hose shall not shatter as a result of gunfire when tested as specified in 4.5.3.2."

3.6, Lines 1,2, 3 and 4: Delete and substitute:

* "3.6 Identification of Product. A red or yellow stripe, parallel to the longitudinal axis, shall be along the entire length of the hose. The color shall approximate color 1136 or 13538 of FED-STD-595. Parallel to the colored stripe…"

Page 8

* 4.3.2: Delete and substitute:

"4.3.2 Sampling Inspection. A five-foot sample of hose shall be selected from at least each 10,000 feet of hose of the same size produced consecutively, and subjected to the tests specified in table III."

* 4.5.2: Delete and substitute:

"4.5.2 Proof Pressure. Hose shall be subject to an aerostatic proof pressure of 100 +15, -0 psig in accordance with the aerostatic pressure test of ASTM D380 or a hydrostatic proof pressure of 120+/-5 psig. The proof pressure shall be held for a minimum of 5 minutes for the aerostatic test and a minimum of 30 sec. for the hydrostatic test.

Add:

"4.5.3 Testing of Product. The hose shall be tested as specified herein, any failure of the tests shall be cause for rejection of the lot".

4.5.3.1: Delete and substitute:

* "4.5.3.1 Grade JP-4 Fuel. Two hoses of each size as specified in Table I shall be filled with fluid MIL-T-5624, JP-4 fuel and aged for 7 days at 75±5 °F. One each hose shall then be attached to a manifold at 75±5 °F and -20±5 °F and at the appropriate pressure specified in paragraph 3.5.8.2. Each hose shall then be subjected to three or more impacts of caliber 0.50 ball M-2 ammunition at a distance of 5 and 60 yards. The impacts shall take effect at least 2 inches apart."

4.5.3.2: Delete and substitute:

* "4.5.3.2 Grade JP-8 Fuel. Two hoses of each size as specified in Table I shall be filled with fluid MIL-T-5624, JP-8 fuel and aged for 7 days at 75±5 °F. One each hose shall then be attached to a manifold at 75±5 °F and -20±5 °F and at the appropriate pressure specified in paragraph 3.5.8.2. Each hose shall then be subjected to three or more impacts of caliber 0.50 ball M-2 ammunition at a distance of 5 and 60 yards. The impacts shall take effect at least 2 inches apart."

NOTE: The margins of this amendment are marked with asterisks to indicate where changes from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

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