INCH-POUND

MIL-C-46281F(AR)
AMENDMENT 3
26 November 1997
SUPERSEDING
AMENDMENT 2
04 November 1993

MILITARY SPECIFICATION

CARTRIDGE, 7.62MM, NATO, TRACER, M62

MIL-C-46281F was inactivated after 6 February 1996 For New Design.

This amendment forms a part of MIL-C-46281F(AR), dated 24 November 1987, and is approved for use by the US Army Armament, Research, Development and Engineering Center, and is available for use by all Departments and Agencies of the Department of Defense.

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2.1.2. under Drawings: Delete the following drawings and their titles:

"7553747, 8594726, 10521856 and 10521859"

And substitute the following:

"9362607 - Packing and Marking for Box, Wirebound for Cartridge, 7.62mm"

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- 3.6: Delete in its entirety and substitute the following:
 - "3.6 <u>Trace</u>. When viewed at night from a line parallel to the plane of the trajectory, with the line of sight perpendicular to the plane of the trajectory at teach point of observation, the bullet of the tracer cartridge shall exhibit a visible trace of full luminosity from a point not greater than 100 yards from the muzzle of the weapon to a point not less than 850 yards from the muzzle. The trace shall be of a level below full luminosity, and preferably invisible, from the muzzle of the weapon to a point at least 15 yards from the muzzle."
- 3.8.1 Add the following to the end of paragraph 3.8.1:
 - "If velocity is measured using the EPVAT System, the chamber pressure measurement must be performed using the EPVAT System as well."

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- 3.8.1.5: Delete in its entirety.
- 3.8.1.6: Delete in its entirety.
- 3.8.1.7: Delete in its entirety.

Add new paragraphs 3.8.2, 3.8.2.1, 3.8.2.2 and 3.8.2.3 as follows:

- "3.8.2 $\underline{\text{Velocity}}$. The velocity test may be performed using a velocity test barrel or the EPVAT method. The test method employed shall be recorded on the test results.
- 3.8.2.1 <u>Velocity measurement by velocity test barrel</u>. The average velocity of the sample cartridges conditioned at $70^{\circ}F$ shall be 2,750 \pm 30 ft/sec for gilding metal clad steel jacketed bullets or 2680 ± 30 ft/sec for gilding metal jacketed bullets at 78 feet from the muzzle of the weapon. The standard deviation of the velocities shall not exceed 32 ft/sec.
- 3.8.2.2 <u>Velocity measurement by EPVAT test method</u>. The average velocity of the sample cartridges conditioned at $70^{\circ}F$ shall be 2,735 \pm 30 ft/sec for gilding metal clad steel jacketed bullets or 2,665 \pm 30 ft/sec for gilding metal jacketed bullets at 78 feet from the muzzle of the weapon. The standard deviation of the velocities shall not exceed 32 ft/sec.
- 3.8.2.3 <u>Velocity at $125^{0}F$ and $-65^{0}F$ </u>. The average velocity of the sample cartridges subjected to $125^{0}F$ and $-65^{0}F$ storage conditions shall not vary from the average velocity of the sample cartridges of the same lot conditioned at $70^{0}F$ by more than plus (+) 150 or minus (-) 250 ft/sec."

Add new paragraph 3.8.3 as follows:

- "3.8.3 Function and casualty. The sample cartridges subjected to $70^{\circ}F$, $125^{\circ}F$ and $-65^{\circ}F$ storage conditions shall function without casualty."
- 3.10: Delete in its entirety and substitute the following:
 - "3.10 Port pressure. The port pressure measurement may be performed by either the copper-crush cylinder or EPVAT test method. If velocity is measured using the EPVAT system, the port pressure measurement must be performed using the EPVAT system as well. The average port pressure of the sample cartridges when conditioned for not less than 2 hours at 68° to 72° F and fired at that temperature shall be as noted in the applicable subparagraphs."

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- * Delete paragraph 3.10.2 in its entirety and substitute the following:
 - "3.10.2 Measurement by EPVAT test method. The average port pressure of the sample cartridges shall not be greater than 73 Mpa (10,588 psi) and shall not be less than 55 Mpa (7,977 psi)."

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4.3, in requirement column:

Delete "3.8.1.5" and substitute "3.8.2" in one place.

Delete "3.8.1.6" and substitute "3.8.2.3" in two places.

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4.3, in requirement column:

Delete "3.8.1.7" and substitute "3.8.3" in 15 places.

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4.3, in requirement column:

Delete "3.8.1.7" and substitute "3.8.3" in six places.

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4.4.3.1, in Table IV under requirement paragraph column:

Delete "3.8.1.7" and substitute "3.8.3" in one place.

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4.4.3.1, in Table IV under requirement paragraph and measurement by copper-crush cylinder:

Delete "3.8.1.5, 3.8.1.6" and substitute "3.8.2.1, 3.8.2.3" in one place.

4.4.3.1, in Table IV under requirement paragraph column and measurement by ${\tt EPVAT:}$

Delete "3.8.1.5, 3.8.1.6" and substitute "3.8.2.2, 3.8.2.3" in one place

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- 5.: Delete in its entirety and substitute the following:
 - "5. PREPARATION FOR DELIVERY
 - 5.1 Preservation and packing.
 - 5.1.1 <u>Packing, Level A</u>. The cartridges shall be packed in accordance with drawing 9362607, 7553708 or 10521861 as appropriate.
 - $5.1.2~\underline{\text{Marking}}.~\underline{\text{Markings}}$ shall be in accordance with Dwg. 9362607, 7553708 or $\overline{10521861}$ as appropriate.
 - 5.2 <u>Shipping</u>. When cartridges from more than one lot are shipped at one time, each lot shall be kept separate and the division between lots clearly indicated to prevent mixing of the lots in transit."

The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) 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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