

INCH-POUND

MIL-A-82667/2(OS)
AMENDMENT 3
15 November 1993
SUPERSEDING
AMENDMENT 2
27 June 1985

MILITARY SPECIFICATION SHEET

AMMONIUM PERCHLORATE, CONDITIONED

This amendment forms a part of MIL-A-82667/2(OS), dated 31 January 1977.

PAGE 1

1.1, line 2: Delete "two" and substitute "three."

1.2, Type I: Add "Class 3 — Ground crystals (5 - 6 μm)."

1.2: Add "Type III Class 1 - whole crystals (200 μm)
Class 2 - whole crystals (45 μm)
Class 3 - ground crystals (8 - 13 μm)"

2.1, under "SPECIFICATIONS": Delete "MIL-D-3464" and its title.

PAGE 2

2.1: Delete "MIL-STD-129" and its title.

2.2: Delete "CODE OF FEDERAL REGULATIONS....and supplements thereto.)"

PAGE 3

3.1, line 7: Following "13 μm ." insert "Type I Class 1 shall be Type I crystals ground to a particle size of 5 to 6 μm ."

3.1: Add the following to end of paragraph, "Type III Class 1 and Class 2 shall be solid white crystalline ammonium perchlorate consisting of essentially whole crystals with rounded corners and edges. Type III Class 3 shall be Type III Class 1 crystals ground to a particle size of 8 to 13 μm ."

4.5, line 3: After "4.7." add new sentence: "Type III tests shall be as specified in table I."

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Distribution Statement A: Approved for public release; distribution is unlimited.

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Add the following to table I:

"Type III

	Minimum	Maximum	Test Method
Purity	99.0	—	4.6.1
Chloride, as NH ₄ Cl	—	0.03	4.6.2
Chromate, as NH ₄ ClO ₃	—	0.02	4.6.3
Bromate, as NH ₄ BrO ₃	—	0.003	4.6.4
Sulfate Ash, as H ₂ SO ₄	—	—	—
Sulfated Ash, calculated as NaClO ₄	—	0.8	4.6.5
Iron, as Fe ₂ O ₃	—	0.001	4.6.6
Sodium and Potassium	—	0.08	4.7.6
Tricalcium Phosphate, as Ca ₃ (PO ₄) ₂	0.20	0.35	4.6.7
Moisture, total	—	0.05	4.6.8
Moisture, surface	—	0.025	4.6.9
Water insolubles	—	0.35	4.7.10
Acid insolubles	—	0.04	4.6.10
pH	5.5	6.5	4.6.11
Granulation, Classes 1, 2	Table II or IV	—	4.6.12
Granulation, Class 3			4.6.13"

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Table II: Change Table heading to: "Type II Class 1 and Type III Class 1 Particle Size."

Add Table IV as follows:

TABLE IV. Type III Class 2 Particle Size.

U.S. Standard Sieve No.	Percent passed by the size sieve shown	
	Minimum	Maximum
150	98	—
230	90	98
270	75	90
325	55	75

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4.6.1, at the end of paragraph: Add "N = normality of standard silver nitrate solution."

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4.6.12: Change paragraph heading to: "Type I Class 1 and Type III Class 1 particle size."

4.6.13: Delete and substitute: "**4.6.13 Type I, Class 2 and 3, Type III, Class 3 particle size.** The particle size for Type I Class 2, Type I Class 3, and Type III Class 3 shall be determined in accordance with ASTM B 330-65."

PAGE 14

4.7.1, at the end of paragraph: Add "W = weight of specimen, g."

PAGES 18 AND 19

5.1, 5.1.1, and 5.2: Delete and substitute:

"5.1 Preservation. Preservation shall be level A in accordance with MIL-A-82667.

"5.2 Packaging. Type I Class 2 and Class 3 and Type III Class 3 ammonium perchlorate shall be packaged in accordance with level A of MIL-A-82667. Type I Class 1, Type II, and Type III Class 1 and Class 2 ammonium perchlorate shall be packaged in accordance with level C of MIL-A-82667.

"5.3 Marking. Type I Class 2 and Class 3 and Type III Class 3 ammonium perchlorate shall be marked in accordance with level A marking of MIL-A-82667. Type I Class 1, Type II, and Type III Class 1 and Class 2 ammonium perchlorate shall be marked in accordance with level C marking of MIL-A-82667."

PAGE 19

6.1, line 1: Delete "aoxidizer" and substitute "an oxidizer."

6.1, line 2: Delete "Type I" and substitute "Type III Class 1 and Class 3."

6.1, line 2: Add "Type I Class 3 is intended to be used in propellant in accordance with MIL-P-82680 for the CKU-7/A Rocket Catapult."

6.1: Add new sentence at end of paragraph, "The Type III material is to be used in the Mk 23 Mod 2 Rocket Motors."

6.2.1: Delete "(b) Quantity required" and substitute "(b) Quantity, class and type required."

6.2.1: Delete "(f) Packaging...(see 5.1.1)" and substitute "(f) Safety precautions (see 6.7 and 6.9)."

6.2.2: Below "Applicable DID*" insert "DI-T-3721."

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Add new paragraphs:

"6.9 Explosive hazard classification. Type I Class 2 and Class 3 and Type III Class 3 ammonium perchlorate in accordance with this specification are Class A explosives. The contracting officer is directed to section 5 of MIL-A-82667 and NAVSEAINST 8023.1 for additional information.

"6.9.1 Hazard notice. The ammonium perchlorate described herein is an oxidizing material and/or high explosive and consequently presents a hazard in manufacture, handling, storage, and shipment. The contractor should recognize this hazard and take appropriate measures to guard and protect against fire, explosion, adverse environment, corrosive atmosphere, rough handling, and electrically induced incidents."

- * Add new paragraph: **"6.10 Storage conditions.** Material in open containers and the ground crystals should be stored in a humidity regulated area with a 30 percent maximum relative humidity."

NOTE: The margins of this amendment are marked with asterisks 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.

Preparing activity:
Navy - OS
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