

MIL-P-7254F
 Amendment 2
 18 January 1972
 Superseding
 Amendment 1
 22 February 1971

MILITARY SPECIFICATION

PROPELLANT, NITRIC ACID

This amendment forms a part of Military Specification MIL-P-7254F, dated 30 April 1970, and is mandatory for use by all Departments and Agencies of the Department of Defense.

Page 1, 1.2: Add "Type IV - High density propellant with nominal 44 percent NO_2 content, lower solids content, plus corrosion inhibitor, and limited iron content".

Page 3, Table 1, Type IIIA: For HNO_3 maximum assay delete "84.8" and substitute "84.9".

Page 3, Table 1, Type IIIB: For HNO_3 assay delete "81.6 - 84.8" and substitute "81.7 - 84.9".

Page 3, Table 1, Type IIILS: For HNO_3 assay delete "83.6 - 86.3" and substitute "83.7 - 86.4".

Page 3, Table 1, Type IIILS: For Fe_2O_3 constituent delete "0.0015" and substitute "0.002".

Page 3, Table 1: Add Type IV with the following chemical composition and physical properties requirements and, with quality assurance provisions equivalent to that specified by the specification and this amendment.

HNO_3 , percent by weight	52.7-57.4
NO_2 , percent by weight <u>1/</u>	44 \pm 2
HF, percent by weight	0.7 \pm 0.1
H_2O , percent by weight	0.5 max
Fe_2O_3 , percent by weight	0.002 max
Solids, percent by weight as nitrates	0.04 max
Specific Gravity, 60°F/60°F	1.642 min 1.652 max

1/ The NO_2 content shall be in accordance with MIL-P-26539C, Composition MON-1.

FSC 9135

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Amendment 2

Page 6, 4.5.2.2: At end of sentence seven (7) delete "until the ampoule is opened".

Page 7, 4.5.3.1: Delete sentence five (5) and substitute "Add without stirring an exact volume of 0.1N ceric solution sufficient to react the nitrite ion, amount can be calculated from the aliquot weight of the sample, plus 5 ml in excess."

Page 8, 4.5.3.3(a)(1): Delete sentence one (1) and substitute "Dissolve exactly 54.878 g of dry primary standard grade ceric ammonium hexanitrate $[(\text{NH}_4)_2 \text{Ce} (\text{NO}_3)_6]$ in $2\text{N-H}_2\text{SO}_4$ and make up to the mark in a 1000 ml volumetric flask with $2 \text{ N-H}_2\text{SO}_4$."

Page 8, 4.5.3.3(a) (3): Delete and substitute: (3) Sulfuric acid solutions, 0.5 N, 1 N and 2 N: Dilute 14 ml, 28 ml and 56 ml respectively of concentrated ACS reagent grade H_2SO_4 to 1000 ml with distilled water.

Page 11, 4.5.6.2: Under calculation delete "2.09" and "1.52" factors and substitute "4.18" and "3.03", respectively.

Page 13, 4.5.8.1: In second (2) sentence delete "at 1405 μm " and substitute "of the water peak".

Page 15, Figure 2: Delete "1405 μm " and "1440 μm " values shown on the absorption spectrum and, substitute "HOH" and "HONO₂", respectively. Under legend delete "1405" and "1440" values and, substitute "1410 approx" and "1450 approx".

Page 18, 6.1.1: Add at end of last sentence "and Type IV is now redefined herein for HDA."

Page 19, 6.2.2: In last line delete "(RPORS)" and substitute "(DOZS)".

Page 19, 6.3: Delete last sentence and substitute "The shipment of Types IIILS and IV propellant in stainless steel containers for long-distances is prohibitive for reason of a low maximum allowable limit iron requirement. The use of these containers may result in out-of-specification product at destination. Types IIILS and IV propellant should be shipped exclusively in aluminum containers".

Custodians:

Army - MI
Navy - AS
Air Force - 12

Review Activities:

Army - MI
Navy - AS
Air Force - 19,68

Preparing Activity:

Air Force - 12

Civilian Agency Interest:

NAS

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