

MIL-STD-652D (AR)  
NOTICE 4  
21 November 1983

MILITARY STANDARD  
PROPELLANTS, SOLID FOR CANNONS  
REQUIREMENTS AND PACKING

TO ALL HOLDERS OF MIL-STD-652D (AR)

1. THE FOLLOWING PAGES OF MIL-STD-652D (AR) HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

NEW PAGE	DATE	SUPERSEDED PAGE	DATE
i	21 NOV 83	i	4 AUG 78
ii	4 AUG 78	(REPRINTED WITHOUT CHANGE)	
9	21 NOV 83	9	5 OCT 79
10	21 NOV 83	10	5 OCT 79

2. RETAIN THIS NOTICE AND INSERT BEFORE TABLE OF CONTENTS.

3. Holders of MIL-STD-652D (AR) will verify that page changes and additions indicated above have been entered. This notice page will be retained as a check sheet. This issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the Military Standard is completely revised or canceled.

Custodian:  
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(Project 1376-A223)

MIL-STD-652D (AR)

DEPARTMENT OF DEFENSE

WASHINGTON, D.C. 20301

Propellants, Solids for Cannons, Requirements and Packing,  
MIL-STD-652 (AR).

1. This Military Standard is approved for use by the US Army Armament, Munitions and Chemical Command, and is available for use by all Departments and Agencies of the Department of Defense.

2. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document, should be addressed to: Commander, US Army Armament, Munitions and Chemical Command, ATTN: DRSMC-CAR(D), Dover, NJ 07801, by using the self addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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Minor: None defined.

4.4.1.4 Sealed container (as applicable) (see drawings 7549033, 138439, 76-4-46, 76-4-53, 76-4-56 and 9256486).

Categories	Defect	Method of Inspection
Critical: None defined		
Major:	AQL 0.65 percent	
101	Holes in container . . . . .	Visual
102	Damaged seams . . . . .	Visual
103	Damaged locking devices . . . . .	Visual
104	Gasket missing or incomplete . . . . .	Visual
Minor:	AQL 1.50 percent	
201	Metallic seal missing, unsealed or improperly positioned . . . . .	Visual
202	Hardware improperly engaged . . . . .	Visual
203	Marking misleading or unidentifiable . . . . .	Visual
204	Excess dents . . . . .	Visual

4.4.1.5 Sealed fiber drums

Categories	Defect	Method of Inspection
Major:	AQL 0.65 percent	
101	Locking device damaged or improperly closed . . . . .	Visual
102	Holes or breaks in cover or body . . . . .	Visual
103	Damage to coating or cover . . . . .	Visual
Minor:	AQL 1.00 percent	
201	Marking misleading or unidentifiable . . . . .	Visual
202	Exterior torn or delaminated . . . . .	Visual

4.4.2 Sampling for chemical and physical testing. Ten (10) containers shall be selected at random from each lot of propellant (or less quantity as determined for actual need). One and one half (1 1/2) pounds of propellant shall be removed from each container and mixed to form a composite sample of 15 pounds. Five (5) pounds of the sample shall be forwarded to Commander AMCCOM, ATTN: DRSMC-LCE-MP(D), Dover, NJ 07801, for the 65.5 degrees centigrade (°C) surveillance test. The remaining ten pounds shall be used for the chemical and physical test. All samples shall be packed in air tight containers and shall be marked to

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show the propellant designation, lot number, manufacturer, date of sampling, contract number, and number of pounds in the lot. If the sample fails to comply with the requirements the lot shall be rejected.

4.4.3 Sampling for ballistic testing. Ten (10) containers (or as required by item specification) shall be selected for ballistic testing at each temperature specified in the applicable item specification. The total sample size at each temperature shall consist of the weight in pounds specified on the applicable assembly drawing multiplied times the sample size (10) times the factor 1.3. The samples shall be selected from individual containers, packaged separately and shipped to the Proving Ground, if specified by the basic propellant specification. Duplicate sampling of containers shall be accomplished if necessary to prepare the required number of samples.

4.4.3.1 Aging of triple base propellants. All triple base propellants shall be aged a minimum of forty-five (45) days at ambient conditions (unless other conditions specified), prior to loading for assessment.

## 5. TESTING AND PROCEDURES

5.1 The chemical and physical properties shall be determined as specified in Table II and conform to the requirements specified in Table III.

5.2 The composition shall be calculated on total volatiles and added ingredient free basis when required.

Methods from MIL-STD-286 for the chemical and physical properties of the propellant.

TABLE II

Properties	Methods Either/or
Nitrocellulose	209.2
	209.3
	209.6
	209.7
Nitroglycerin (1)	208.1
	208.3
	208.4
	208.5