

INCH-POUND

MIL-P-46994B (AR)  
 AMENDMENT 4  
11 November 1993  
 SUPERSEDING  
 AMENDMENT 3  
 23 September 1988

## MILITARY SPECIFICATION

 PELLETS/GRANULES  
 BORON/POTASSIUM NITRATE

This amendment forms a part of Military Specification MIL-P-46994B (AR), dated 4 January 1982, and 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.

## PAGE 1

- \* 1.1 Delete in its entirety and substitute the following:  
 "1.1 Scope This specification covers eight types of ignitor pellets/granules for use in rocket motors, fuzes and payload ignition/expelling charges. (see 6.8)"
- \* 1.2 Add the following Type IX:  
 "Type IX - Oblate Spheroid Granules  
 5% max retained on USS Sieve No 20  
 5% max thru USS Sieve No 50"

## PAGE 4

- \* 3.1.2 Delete Table I., Formulation and replace with the following:

"TABLE I. Formulation

MATERIALS	All types except Type		Type IV	Type IX
	IV	and Type IX		
Potassium Nitrate, %	70.7 ± 2.0		72.2 ± 1.5	85.0 ± 2.0
Boron, Amorphous, %	23.7 ± 2.0		22.2 ± 1.5	15.0 ± 2.0
Binder, %	5.6 ± 0.5		5.6 ± 0.5	0      0"

(NOTE: Type VIII was deleted from the specification by Amendment 3)

MIL-P-46994B (AR)  
AMENDMENT 4

PAGE 4

3.1.3: Delete Table II and replace with the following:

TABLE II. Binder Composition

<u>Ingredients</u>	<u>Percent</u>
Polyester Resin, (see 6.4.2)	98.0
Catalyst, (see 6.4.3)	1.5
Accelerator, Advisory (see 6.4.1)	0.5

- \* 3.1.4 Delete "All Types, except Type IV" and substitute "All Types, except Type IV and Type IX."

Add new Type IX as follows:

	<u>Percent Boron</u>
"Type IX	11.7 to 15.6%

PAGE 6

- \* 3.3 Add Type IX in Table III as follows:

"IX Oblate Spheroid Granules (see Table V)"

(see note in 3.1.2 regarding Type VIII)

PAGE 7

Add Type IX in Table IV as follows:

<u>Properties</u>	<u>"IX</u>
Density, min. gm/cm <sup>3</sup>	N/A
Moisture Content (percent) max.	.75
Burning Rate (inches/second)	N/A
Heat of Reaction (calories/gram) min.	1300
Crush Strength	
Axial	N/A
Radial	N/A
Time to Max. pressure milliseconds	N/A

(see note in 3.1.2 regarding Type VIII)

MIL-P-46994B (AR)  
AMENDMENT 4

PAGE 8

- \* 3.5 Delete paragraph 3.5 with Table V and substitute the following:

"3.5 Granulation. The granulation for Types VII and IX shall be as specified in Table V when determined as specified in 4.6.9.

TABLE V Size Requirements

<u>Type VII</u>	<u>5% Max. retained on USS Sieve No.</u>	<u>5% Max. thru USS Sieve No.</u>
Class 1	50	60
Class 2	60	100
Class 3	100	140
	Special granulations (see 6.1 and 6.7)	
	6	12
	12	25
	25	50
	40	140
<u>Type IX</u>	20	50

Other granulations of Type VII may be specified for special applications.

PAGE 18

- \* 5.1.1 Add the following:

"The granular form shall be packaged, packed, marked and labeled for shipment in accordance with the requirements of CFR 173.62 and MIL-STD-129, as applicable. Proper Shipping Name: Articles, Pyrotechnic - UN No. 0430."

The margins of this amendment are marked with asterisks to indicate where changes (additions, modifications, corrections, deletions) from the previous issue 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 issue.

Custodian:  
Army-AR

Preparing activity:  
Army-AR

Review activities:  
Army-EA

(Project 1375-A512)