

MIL-C-13814 (AR)
AMENDMENT 4
03 January 1983
SUPERSEDING
AMENDMENT 3
6 October 1981

MILITARY SPECIFICATION

CLOTH, IGNITER

This Amendment forms a part of Military Specification MIL-C-13814 (ORD), dated 1 Dec 1954, and is approved for use by the US Army Armament Research and Development Command and is available for use by all Departments and Agencies of the Department of Defense.

PAGE 1

Scope. Delete in its entirety and substitute the following:

"1. Scope. This specification covers two types of igniter cloth for use in the manufacture of igniter pads used in ammunition."

1.2 Classification. The igniter cloth shall be of the following types and classes:

Type I Silk

Class A - Breaking strength 125 pounds per square inch, minimum (min).

Class B - Breaking strength 90 pounds per square inch, min.

Type II Acrylic

Class A - Breaking strength 100 pounds per inch, min."

2. Applicable Documents, Under Federal, delete:

"TT-C-595 - Colors; (for) Ready-Mixed Paints" and substitute "Federal Standard - 595 - Colors".

1 of 4

PSC 1395

MIL-C-13814(AR)
AMENDMENT 4

PAGE 2

3.1.2 Type II, Delete in its entirety and substitute the following:

"3.1.2 Material Type II.-Acrylic igniter cloth shall be woven from acrylic yarns spun from acrylic fibers containing 85% minimum polyacrylonitrile, no homopolymer shall be used."

3.4 Delete the last sentence and substitute the following:

"A tolerance of plus or minus 0.5 inch will be permitted."

PAGE 3

Table I, delete in its entirety and substitute the following:

"TABLE I
ACRYLIC CLOTH

WEIGHT (Oz. per sq yd)	BREAKING STRENGTH (lb per inch)		THREAD COUNT (threads per inch)	
	<u>WARP</u>	<u>FILL</u>	<u>WARP</u>	<u>FILL</u>
MIN - MAX	MIN	MIN	MIN-MAX	MIN-MAX
5.25 5.75	100	100	34-45	35-45"

PAGE 7

* 4.16. Delete in its entirety and substitute the following:

"4.16 Color (applicable to Type I and Type II): In all instances the cloth shall be dyed scarlet. The scarlet dye shall produce a color closely equivalent to red color No. 11105 Federal Standard No. 595. The following types of dye stuffs may be used:

4.16.1 Acid type. One of the following, or a blend of the two:

Sodium salt of ditolyl-diazo-bis α naphthylamine-4 sulfonic acid $C_{34}H_{26}N_6O_6S_2Na_2$

MIL-C-13814 (AR)
AMENDMENT 4

Sodium salt of 4 sulfo α naphthalene-azo- β -naphthol
C₂₀H₁₃N₂O₄Na

4.16.1 Dispersed Type. A dispersed type dyestuff blend may be used consisting of: 6 methysulfonyl-2-benzothiazoleazo-N, β - cyanoethyl-N- β -acetoxyethyl aniline, or an equivalent dye blended with auxillary dyes to give the proper color."

4.17, Delete in its entirety and substitute the following:

"4.17 Acrylic fiber content

4.17.1 Desizing. Approximately 5g of the test fabric shall be transferred to a 600 mL beaker to which 400 mL of distilled water has been added. This mixture shall be boiled and the liquid decanted. The addition of water, boiling and decanting shall be repeated until the liquid is clear. The specimen shall be removed from the beaker and allowed to air dry. The specimen shall then be tested with iodine (approximately N/10) to assure that all starch has been removed. The washing procedure shall be repeated as often as necessary until a negative test for starch is obtained on the cloth.

4.17.2 Extraction with dimethylformamide. The specimen shall be transferred to a 250 mL beaker and the beaker and contents placed in an oven maintained at 100 to 105°C for one hour. The beaker and contents shall be cooled in a desiccator and weighed. The specimen shall be removed and the empty beaker weighed. The difference between these weights represents the weight of the desized sample. The specimen shall be placed in a 600 mL beaker to which 150 mL dimethylformamide has been added. This beaker and contents shall be placed in a steam bath and heated for 15 minutes. The liquid shall be decanted. The addition of dimethylformamide, heating and decanting shall be repeated 5 times. The contents of the beaker shall be washed with distilled water until the odor from the dimethylformamide has been removed. The sample shall then be transferred to a tared 250 mL beaker. The beaker and contents shall be placed in an oven maintained at 100 to 105°C for one hour, cooled in a desiccator and weighed.

MIL-C-13814(AR)
AMENDMENT 4

$$\text{Percent acrylic fiber} = \frac{(A - B)}{A} \times 100$$

Where:

A = weight of desized sample, g

B = weight of desized sample after extraction with
dimethylformamide, g"

The margins of this amendment are marked with an asterisk to indicate where changes 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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