

INCH-POUND

A-A-55295

March 22, 1996

COMMERCIAL ITEM DESCRIPTION

CLOTH, PLAIN WEAVE, NYLON AND CLOTH, PLAIN WEAVE, POLYESTER

The General Services Administration has authorized the use of this commercial item description as a replacement for MIL-C-43286 for all Federal agencies.

1. SCOPE

1.1 Scope. This commercial item description covers medium weight cloth made of synthetic multifilament yarns, and prepared for coating. The cloths are intended for use as base materials for coated fabrics to be utilized in the manufacture of air supported shelters.

2. CLASSIFICATION. The cloth shall be furnished in the following types:

Type I -	Polyester, 4.0 ounces
Type II -	Nylon, 4.9 ounces

3. SALIENT CHARACTERISTICS

3.1 Description. The cloth shall be of a natural color. The weave of the cloth shall be plain. The width of the cloth shall be the minimum acceptable width inclusive of selvages. The cloth shall be scoured and heat set to meet the dimensional stability requirements of Table I.

3.2 Physical requirements. The finished cloth shall conform to the requirements listed in Table I.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: Defense Personnel Support Center, Clothing and Textiles Directorate, Attn: DPSC-FNS, 2800 South 20th Street, Philadelphia, PA 19145-5099.

AMSC N/A

FSC 8305

DISTRIBUTION STATEMENT A. *Approved for public release; distribution is unlimited.*

A-A-55295TABLE I. Physical requirements and test methods

Characteristic	Requirement	Test Method
Fiber identification		
Polyester (Type I)	100% polyester	AATCC 20 <u>1</u> /
Nylon (Type II)	100% nylon	AATCC 20 <u>1</u> /
Luster	Bright	Visual <u>1</u> /
Multifilament	Bright	Visual <u>1</u> /
Weight (minimum)		
Polyester (Type I)	4.0 oz./sq. yd.	ASTM D-3776, Opt. C
Nylon (Type II)	4.9 oz./sq. yd.	ASTM D-3776, Opt. C
Yarns per inch (minimum)		
Type I		
Warp	32	ASTM D-3775
Filling	32	ASTM D-3775
Type II		
Warp	22	ASTM D-3775
Filling	22	ASTM D-3775
Breaking strength (minimum)		
Type I		
Warp	200	ASTM D-5034
Filling	200	ASTM D-5034
Type II		
Warp	275	ASTM D-5034
Filling	275	ASTM D-5034
Weave	Plain	Visual <u>2</u> /
Finish		<u>1</u> /
Dimensional stability		
Warp	3.0	5556/FED-STD-191
Filling	2.0	5556/FED-STD-191
Diagonal	3.0	5556/FED-STD-191
Nonfibrous material (maximum)	1.0 percent	ASTM D-629
pH	5.0-8.5	2811/FED-STD-191

1/ Unless otherwise specified, a certificate of compliance shall be submitted and will be acceptable for the stated requirements.

2/ One determination per sample unit and results reported as "pass" or "fail".

3.2.1 Test for dimensional stability. The test specimen shall be a square of cloth at least 20 by 20 inches. While laid flat without tension, it shall be inscribed with an 18 by 18 inch square equidistant from the edges, and with the sides parallel to the warp and normal filling directions. The marked specimen shall be placed in a preheated oven and maintained at a temperature of 350°F ($\pm 20^\circ\text{F}$) for 10 minutes. The specimen may be looped over a rod or laid flat on a rack, but shall have free air circulation on both sides. The rod or track shall be a low-conductivity (non-metallic) material.

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Following the heating period, the specimen shall be removed from the oven and allowed to cool to room temperature on a flat surface, and then brought to equilibrium under standard conditions as defined in FED-STD-191. Any specimen showing appreciable distortion (skewing or bowing) or puckering shall be cause for rejection of the lot. Each side and each diagonal of the inscribed square shall be measured, and the changes from the original warp, filling, and the two diagonal dimensions shall each be reported as the average of the three specimens (six measurements) to the nearest 0.1 percent.

Appreciable distortion shall be reported separately for each specimen tested. Appreciable means a change that is immediately noticeable when comparing the test specimen with the original. If closer inspection is required to make apparent a slight change, the change is not considered appreciable.

Three specimens shall be tested for each sample unit. One specimen shall include the selvage on one side of the cloth, one from the center area, and the third, the selvage, on the other side. Each specimen shall be from a different filling than others.

3.3 Yarn. Type I warp and filling yarns shall be polyester, bright, multifilament, polyethylene glycol terephthalate. Type II warp and filling yarns shall be bright, multifilament nylon.

3.4 Length and put-up. The cloth shall be in continuous pieces, each not less than 50 yards. Each piece shall be put up on a roll.

3.5 Face identification. The face side of the cloth shall be identified by applying a stamping on that side of the cloth with the word "face" at each end of the piece. Each roll of cloth shall be labeled or ticketed for fiber content in accordance with the Rules and Regulations of the Textile Fiber Products Identification Act.

3.6 Label/tag. Each item shall be individually bar-coded with a paper tag for personal clothing items. The paper tag shall be standard bleached sulfate having a basis weight of 100 pounds. The paper used for the tags shall have a smooth finish to accept thermal transfer and direct printing. The tags shall have a hole and shall be attached to each item by a fastener, clearly legible and readable by a scanner. The bar coding element shall be a 13 digit national stock number (NSN). The bar code type shall be a medium to high code density and shall be located so that it is completely visible on the item when it is folded and/or packaged as specified and so that it causes no damage to the item.

4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

5. QUALITY ASSURANCE PROVISIONS

5.1 Certification. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this commercial item description and

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conforms to the producer's own drawings, specifications, standards, and quality assurance practices. The Government reserves the right to require proof of such conformance prior to the first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

5.2 Market acceptance criteria. The item offered, or a generic equivalent, must have been sold to the commercial market or to the Government for at least two years.

5.3 Examination

5.3.1.1 Defects. Any hole, cut, or tear; broken or missing yarn; smash; float; mispick, harness skip; other misweave; hitchback; stripback; open or thin place; crack (warp or filling); knot or slub; loose, slack, or tight yarns; reed mark; wrong draw; abrasion mark; bruise; tender or weak spot; embedded crease or wrinkle; selvage cut, torn, folded, rolled, slack, or tight; filling bar; coarse filling; mixed filling; spot; stain; streak; dirty yarn; foreign matter; shade not as specified; finish not equal to or better than standard; offshade or uneven shading throughout piece; mottled; cloudy; streaky; barre; overall uncleanness; soiled; baggy; ridgy; wavy; unevenly woven; width not within established tolerances; net length less than indicated on the ticket; fiber identification marking omitted or illegible; bar code omitted or not readable by scanner; human-readable interpretation (HRI) omitted or illegible; bar code not visible on folded, packaged item; bar code causes damage to the item; any items not packaged in accordance with the contract or purchase order. Each defect shall be marked with a 1-1/2 inch long string; the string shall be inserted into the selvage opposite the defect

5.3.1.2 Yard-by-yard examination. The required yardage of each roll shall be examined. Each roll in the sample shall be examined on the face side only. All appropriate defects that are clearly noticeable at normal inspection (3 feet) shall be scored and assigned demerit points.

When total yardage in the roll does not exceed 100 yards, the entire yardage in the roll shall be examined. When the total yardage in the roll exceeds 100 yards, only 100 yards shall be examined. The lot shall be unacceptable if the points per square yards of two or more individual rolls exceeds 38 points.

If one roll exceeds 38 points per 100 square yards, a second sample of 20 rolls shall be examined only for individual roll quality examination. The lot shall be unacceptable if one or more rolls in the second sample exceeds 38 points per square yards. Point computation for lot quality and individual roll quality shall be as follows:

Total points scored in sample X 3600

Contracted width of cloth (inches) X total yards inspected

A-A-55295**5.3.1.3 Demerit points.** Demerit points shall be assigned as follows:

For defects up to 3 inches in any dimension	-one point
For defects up to 3 inches, but not exceeding 6 inches in any dimension	-two points
For defects exceeding 6 inches, but not exceeding 9 inches in any dimension	-three points
For defects exceeding 9 inches in any dimension	-four points

NOTE: The following defects, when present, shall be scored four points for each yard in which they occur: Bowed or bias pilling; baggy, ridgy or wavy cloth; objectionable odor; width not as specified; poor dye penetration; uneven weaving; tight selvage; tight loop end

5.3.1.4 Length examination. During yard-by-yard examination, each roll in the sample shall be examined for length. Any length found to be less than the minimum length shall be considered a defect with respect to length. The lot shall be unacceptable if two or more rolls in the sample are defective in respect to length. The lot shall be unacceptable if the total of the actual lengths of rolls in the sample is less than the total of the lengths marked on the ticket.

5.3.1.5 Examination for face identification and compliance with the Textile Fiber Products Identification Act. During the yard-to-yard examination, each roll in the sample shall be examined for the defects listed below. The lot shall be unacceptable if two or more defects are present: face identification on wrong side; not labeled or ticketed in accordance with the Rules and Regulations under the Textiles Fiber Products Identification Act.

6. PACKAGING

6.1 Preservation, packing, and marking. The preservation, packing, and marking shall be as specified in the contract or purchase order.

7. NOTES

7.1 Source of Government documents. Copies of military and Federal documents are available from:

Standardization Documents Order Desk
Bldg. 4D
700 Robbins Avenue
Philadelphia, PA 19111-5094

Rules and Regulations Under the Textile Fiber Products Identification Act

(Copies may be obtained free of charge from the Federal Trade Commission, Washington, DC 20580-0001.)

7.2 Source of non-Government documents

ASTM Test Methods

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(Applications for copies should be addressed to American Society For Testing and Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

AATCC Test Method

(Applications for copies should be addressed to American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Triangle Park, NC 27709-2215.)

7.3 Heat treatment. A temperature of 390°F ($\pm 10^\circ\text{F}$) is recommended for heat treating.

MILITARY INTERESTS:

Custodians:

Army - GL

Navy - NU

Air Force - 99

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FSS

Review Activities

Army - AT, ME

Air Force - 45, 82

PREPARING ACTIVITY:

DLA - CT

(Project 8305-0539)