

INCH-POUND

A-A-52106

June 28, 1991

COMMERCIAL ITEM DESCRIPTION

CLOTH, TWILL OR PLAIN WEAVE, POLYESTER AND POLYESTER BLEND

The General Service Administration has authorized the use of this commercial item description in preference to Military Specification MIL-C-43718, Cloth, Polyester; Polyester and Cotton; Polyester and Rayon, for Pockets and Military Specification MIL-C-44121, Cloth, Twill, Polyester.

Abstract. This commercial item description covers polyester and polyester blend cloth. The class 1 cloth is intended for use as pocketing and waistband material in dress and semi-dress trousers. The class 2 cloth is intended for use as pocketing material in dress coats. The class 3 cloth is intended for use as lining material in dress coats.

1. CLASSIFICATION

1.1 Classification. The cloth shall be of the following classes as specified (see 5.1).

- Class 1 - Heavyweight, 4.3 ounce
- Class 2 - Medium weight, 2.9 ounce
- Class 3 - Lightweight, 2.2 ounce

2. SALIENT CHARACTERISTICS

2.1 General description. The class 1 and 2 cloths shall be a two up-one down twill or a plain weave using staple or textured polyester yarns or using yarns spun from staple polyester and carded cotton or staple rayon. The class 3 cloth shall be a two up-one down right hand twill weave using filament polyester yarns. The width of the cloth shall be as specified (see 5.1) and shall be the minimum acceptable width inclusive of the selvage when fly-shuttle or shuttleless looms with tuck-in selvage are used. For all

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any other data which may improve this document should be sent to: Commander, U.S. Army Natick Research, Development, and Engineering Center, ATTN: SIRNC-IRT, Natick, MA 01760-5019.

AMSC N/A

FSC 8305

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

A-A-52106

other shuttleless looms the width measurement shall be made between the last warp yarn on each side excluding the protruding fringe(s). The color of the finished cloth shall be natural, bleached or dyed as specified (see 5.1). When dyed cloth is specified, the use of dyes or substances containing elementary sulfur compounds capable of oxidation to sulfuric acid shall be carefully chosen. The finished cloth shall match the standard sample when viewed under filtered tungsten lamps that approximate artificial daylight and that have a correlated color temperature of $7500 \pm 200\text{K}$, with illumination of 100 ± 20 foot candles, and shall be a good match to the standard sample under incandescent lamplight at $2300 \pm 200\text{K}$.

2.2 Physical requirements. The finished cloth shall conform to the requirements listed in table I.

TABLE I. Cloth requirements

| Characteristic | Class 1 | Class 2 | Class 3 | Test method 1/ |
|--------------------------------|-----------|-----------|---------|----------------|
| Material content, percent: | | | | |
| Polyester | 47 to 100 | 47 to 100 | 100 | 2535 |
| Cotton | 0 to 53 | 0 to 53 | 0 | 2535 |
| Rayon | 0 to 53 | 0 to 53 | 0 | 2535 |
| Colorfastness to: | | | | |
| Perspiration | Good | Good | Good | 5680 |
| Sublimation | Good | Good | Good | 5642 2/ |
| Wet drycleaning | Good | Good | Good | 5622 |
| Crocking (min) | 3.5 3/ | 3.5 3/ | 3.5 3/ | 5651 |
| (black or dark blue colors) | 1.0 3/ | 1.0 3/ | 1.0 3/ | 5651 |
| Labile sulfur content | 4/ | 4/ | - | 2020 |
| Weight, oz./sq.yd. (min) | 4.3 5/ | 2.9 | 2.2 | 5041 |
| Yarns per inch (min): | | | | |
| Warp | 73 5/ | 73 | 120 | 5050 |
| Filling | 46 5/ | 46 | 66 | 5050 |
| Breaking strength, lbs. (min): | | | | |
| Warp | 72 | 58 | 100 | 5100 |
| Filling | 55 | 44 | 75 | 5100 |

A-A-52106

TABLE I. Cloth requirements (cont'd)

| Characteristic | Class 1 | Class 2 | Class 3 | Test method 1/ |
|---|---------|---------|---------|----------------|
| Shrinkage or elongation percent (max): | | | | |
| Warp | 3.0 | 3.0 | 3.0 | 5580 |
| Filling | 3.0 | 3.0 | 3.0 | 5580 |
| Seam efficiency percent (min) | 70 | 70 | - | 5110 6/ |

- 1/ The test methods indicated, from FED-STD-191 Textile Test Methods, have been found acceptable to determine if the cloth meets the stated requirements. If the Government requires proof that the cloth meets the stated requirements, the test methods indicated shall be used.
- 2/ The test shall be performed at 325° ± 6°F.
- 3/ Refers to AATCC Chromatic Transference Scale rating.
- 4/ Shall contain no more than that shown by the standard sample or not more than a "slight" trace of labile sulfur as defined in the test method. For 100 percent polyester cloth, this requirement shall not apply.
- 5/ For 100 percent polyester cloth a 15 percent minus tolerance is permitted.
- 6/ The needle shall measure 0.044 inch ± 0.001 inch across the blade at the eye. The thread shall be polyester core; cotton, or polyester-covered in accordance with A-A-50199, Ticket No. 50 for the needle and Ticket No. 70 for the looper, or spun polyester in accordance with MIL-T-43624, size 30; 2, 3, or 4 ply for the needle and size 40, 2 or 3 ply for the looper. (Not applicable to 100 percent polyester cloth.)

2.3 Length and put-up. For Government procurements only, unless otherwise specified (see 5.1), the cloth shall be furnished in continuous lengths of not less than 40 yards and shall be put-up full width on rolls as specified in 4.1.

3. QUALITY ASSURANCE

3.1 Certification. The contractor shall certify, and maintain substantiating evidence that the product offered meets the salient characteristics and requirements of this Commercial Item Description, and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices. The Government reserves the

A-A-52106

right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

3.2 Visual examination. Lots of cloth shall be inspected in accordance with MIL-STD-105. The inspection level shall be II and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 6.5. The lot size shall be expressed in units of yards. The sample unit shall be one linear yard. The cloth shall be examined for the following defects: hole, cut, tear, missing end or pick, thick or thin areas, permanent crease, slubs, slugs or gout, shade bar, streaks, spots, stains or uneven dyeing.

3.3 Length examination. During the visual examination, each roll in the sample shall be examined for length. Any length found to be less than the minimum specified or more than 2 yards less than the length marked on the roll ticket shall be considered a length defect. If two or more rolls in the sample are defective with respect to length, or if the total of the actual lengths of rolls in the sample is less than the total of lengths marked on the roll tickets, the lot shall be rejected.

3.4 Regulatory requirements. The offeror/contractor is encouraged to use recovered material in accordance with Public Law 94-580 to the maximum extent practicable.

4. PACKAGING

4.1 Packaging. The cloth shall be rolled on a convolute or spiral-wound chipboard tube. The tube shall have a smooth finish surface that will prevent the fibers of the chipboard from transferring to the cloth. Each roll of cloth, put-up as specified, shall be wrapped with 60-pound minimum basis weight kraft paper in such a way that the paper shall encircle the roll at least once with a minimum overlap of 3 inches, and the width of the paper shall be sufficient to fold over and protect the ends of the roll. Gummed paper tape, with a minimum width of 2-1/2 inches shall be applied to the overlap seam the full length of the roll and across each end. Alternately, each roll of cloth shall be enclosed in a polyethylene film tube, and the tube secured by heat-sealing or mechanical ties.

4.2 Packing. Each wrapped roll shall be enclosed in a bias-sewn tubing made from woven polypropylene cloth. The tube shall be secured by heat-sealing, by means of a mechanical tie, or by plastic ties with a lock-end. Alternately, a maximum of four rolls of kraft-wrapped cloth shall be packed in a snug-fitting double-sided fiberboard container known as a double cover, and shall consist of a body or joined liner and two covers. Corrugated fiberboard with a minimum bursting strength of 500 pounds shall be used. The container shall be strapped with metallic straps not less than 1/2 by 0.020 inch or non-metallic straps not less than 7/16 by 0.030 inch.

A-A-52106

4.3 Marking. In addition to any special markings required by the contract or purchase order, rolls and shipping containers shall be marked in accordance with MIL-STD-129. Each roll shall have a piece ticket (identification tag) affixed with a 5-ply minimum cotton string or a plastic tag hanger. The tag shall have a reinforced eyelet and shall be legibly printed, using water insoluble ink, with the following information:

| | |
|-----------------------|-----------------------------------|
| Procurement Agency | Contract or Purchase Order Number |
| National Stock Number | Finish or Greige Mill |
| Item Description | Roll Number |
| Contractor | Lot Number |
| Width | Piece Number |
| Fiber Content | Yardage |

5. NOTES

5.1 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of this document.
- b. Class of cloth required (see 1.1).
- c. Width of cloth required (see 2.1).
- d. Color of cloth required (see 2.1).
- e. Length and put-up if other than specified (see 2.3).

5.2 Sources of documents.

5.2.1 Sources of non-Government association documents.

AATCC Chromatic Transference Scale is available from:

American Association of Textile Chemists and Colorists (AATCC)
P.O. Box 12215
Research Triangle Park, NC 27709-2215

5.2.2 Source of Government documents. Copies of Military and Federal documents are available from:

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

5.3 Cross reference. The classes of cloth covered by this Commercial Item Description replace classes covered by MIL-C-43718 and MIL-C-44121 as follows:

A-A-52106

This CID

Class 1
Class 2
Class 3

Replaces

MIL-C-43718 - Class 1
MIL-C-43718 - Class 2
MIL-C-44121

MILITARY INTERESTS

Custodians:

Army - GL
Navy - NU
Air Force - 11

Review activities:

Army - MD
Air Force - 82, 99
DLA - CT

User activities:

Navy - MC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FSS

PREPARING ACTIVITY:

Army - GL

(Project 8305-0362)