

INCH-POUND

A-A-55272

30 MAY 1995

COMMERCIAL ITEM DESCRIPTION

CLOTH, PLAIN WEAVE (BASKET VARIATION) POLYESTER
AND COTTON (CREASE RESISTANT FINISH)

The General Services Administration has authorized the use of this commercial item description as a replacement for MIL-C-29140 for all Federal agencies.

1. SCOPE. This commercial item description covers the requirements for a polyester and cotton blend fabric treated with a crease resistant finish. The cloth is intended for use in the blue utility shirt worn by Coast Guard personnel.

2. SALIENT CHARACTERISTICS

2.1 General description. The material shall be a polyester and cotton blend. The polyester fiber shall be polyethylene glycol terephthalate, semi-dull. The cotton fiber shall be carded and combed. The warp and filling yarns shall be a blend of 65 (\pm 5) percent polyester and the remaining percentage cotton, based on the dry weight of the desized and definished specimens. The weave shall be a modified plain weave as shown in Figure 1. The fibers shall be spun into singles yarn for both the warp and filling. The cloth shall be desized, scoured, dyed, heat set, treated with an approved resin, and cured to provide an approved crease resistant finish and hand equal in characteristic to that of the standard sample. The width of the finished cloth shall be the minimum acceptable width as specified in the contract or purchase order. The color shall be Blue 3362 and

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be addressed to: Defense Personnel Support Center, Clothing and Textiles Directorate, Attn: DPSC-FQSD, 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-55272

shall match the standard sample. The use of dyes and compounds containing elementary sulfur capable of oxidation to sulfuric acid is prohibited. The finished cloth shall match the standard sample when viewed under filtered tungsten lamps which approximate artificial daylight having a correlated color temperature of 7500 ± 200 K, with the illumination of 100 ± 20 foot candles, and shall be a good match to the standard sample under incandescent lamplight at 2300 ± 200 K.

2.2 Physical requirements. The finished cloth shall conform to the following requirements.

2.2.1 The cloth shall have a minimum weight of 4.25 ounces per square yard when tested according to ASTM-D 3775, Option C. The minimum number of yarns per inch shall be 102 in the warp direction and 44 in the filling direction. The minimum breaking strength shall be 105 pounds in the warp and 70 pounds in the filling when tested in accordance with ASTM-D 5034. The minimum tearing strength shall be 9.0 pounds for the warp direction and 5.8 pounds for the filling direction when tested in accordance with ASTM-D 1424.

2.2.2 The finished cloth shall not shrink or elongate more than 3.0 percent in the warp and filling when tested for dimensional stability in accordance with Method 5556 (Cotton laundry procedure) of FED-STD-191 - Textile Test Methods.

2.2.3 The cloth shall have a seam efficiency of not less than 85 percent when tested in accordance with Method 5110 of FED-STD-191 - Textile Test Methods. The needle shall measure 0.040 inch (± 0.001) across the blade at the eye. The thread shall be either polyester covered or cotton covered in accordance with A-A-50199, ticket No. 50, 2 ply for the needle and ticket No. 70, 2 or 3 ply for the looper.

2.2.4 The total nonfibrous material content of resin finished cloth shall not exceed 6.0 percent when tested in accordance with ASTM-D 629 (Section 9). The finished cloth shall contain no more labile sulfur than that shown by the standard sample when tested as specified in Method 2020 of FED-STD-191 - Textile Test Methods. The pH value of the water extract of the finished cloth shall be no less than 5.0 or more than 8.5 when tested in accordance with Method 2811 of FED-STD-191.

2.2.5 Colorfastness. The finished cloth shall show colorfastness to light, laundering, perspiration and crocking equal to or better than the standard sample. As a limit of acceptability or when no standard sample is available, the finished cloth shall show a minimum rating of "4" (good) colorfastness to light, laundering and perspiration (acid and alkaline) and a minimum rating of "4" (good) colorfastness to dry crocking and a minimum rating of "3" (fair) colorfastness to wet crocking when tested in accordance with the indicated test methods:

AATCC 16 - Colorfastness to Light with the following exceptions: When a color change equal to step 4 on the gray scale for change in color is evident in either sample being evaluated or the standard sample, exposure shall be continued for an additional number of hours

A-A-55272

equal to the number of hours at which the color change was apparent. Specimens which do not show a color change until 80 AFU's shall be returned to the machine for a total exposure period not to exceed 140 hours.

AATCC 61, Test 3A - Colorfastness to Laundering with the following exceptions: The specimens must be dried after each of the three laundering cycles. The soap solution shall contain 0.5 percent by weight, P-D-245 - Detergent, Laundry, and Hand Dishwashing (Granular) Type II, in water hardness not over 50 parts per million. The sample size shall be 4.0 ± 0.5 , with 10 stainless steel balls in each cylinder and the rotation time shall be 30 minutes.

AATCC 15 - Colorfastness to Perspiration with the following exception: The test for acid and alkaline solution shall apply.

AATCC 8 - Colorfastness to Crocking.

2.2.6 Length and put-up. The finished cloth shall be furnished in continuous lengths, each not less than 40 yards and shall be put up on rolls. Each length shall be put up on full width rolls as specified in FED-STD-803 - Cotton and Cotton-Synthetic Fiber Blend Fabrics (Excluding Duck Fabrics), Packaging of.

2.2.7 Label/tag. Each roll shall be labeled or ticketed for fiber content in accordance with the Textile Fiber Products Identification Act. The face side of the cloth shall be identified by stamping on that side with the word "FACE" at each end of each piece. This label/tag shall be located so that it is completely visible on the roll when it is folded and/or packaged as specified and so that it causes no damage to the item.

3. REGULATORY REQUIREMENTS

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

4. QUALITY ASSURANCE PROVISIONS

4.1 Certification. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this commercial item description and that the product conforms to the producer's own drawings, specifications, standards and quality assurance practices, and is the same product offered for sale in the commercial marketplace. 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 or purchase order.

4.2 Market acceptability. The following market acceptability criteria are necessary to document the quality of the product to be provided under this commercial item description.

A-A-55272

4.2.1 The company offering the cloth furnished in continuous lengths, or generically similar cloth as described herein, must have been sold to the commercial market or to the Government for at least 2 years.

4.3 Warranty. The item offered shall include the standard warranty given to the commercial market beginning with the date of delivery of the individual item.

4.4 Visual examination. The cloth shall be examined as indicated in 4.4.1 through 4.4.1.4.

4.4.1 Yard-by-yard examination. The required yardage of each roll in the sample shall be examined on the face side only. When the 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. All defects as defined as Section I of FED-STD-4 - Glossary of Fabric Imperfections, which are clearly visible at normal inspection distance (3 feet) shall be scored and assigned demerit points as specified in the contract or purchase order, except that only those slubs and knots which exceed the limits shown on Sears Fabric Defect Scale "C" for slubs and "B" for knots, shall be scored. No linear yard (increments of 1 yard on the measuring device of the inspection machine) from any one roll within the sample shall be penalized more than 4 points. The sample size shall be 20 rolls selected from 20 containers. The lot shall be unacceptable if the points per 100 square yards of the total yardage examined exceeds 25 points. The lot shall be unacceptable if the points per 100 square yards of two or more individual rolls exceed 38 points. If one roll exceeds the point level, a second sample of 20 rolls shall be examined only for individual roll quality examination. If one or more rolls exceed the value, the lot shall be rejected. Point computation for lot quality and individual roll quality shall be as follows:

Total points scored in sample X 3600 = Points per
Contracted width of cloth (inches) X Total yds. inspected 100 sq.yds.

4.4.1.1 Demerit points. Demerit points shall be assigned as follows:

For defects up to and including 3 inches in any dimension	- one point
For defects exceeding 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

The following defects, when present, shall be scored four points for each yard in which they occur.

Baggy, ridgy, or wavy cloth; width less than specified; characteristics of finish, hand and shade not equal to the standard sample; poor dye penetration, mottled, streaky, or cloudy; excessive neppiness.

A-A-55272

4.4.1.2 Examination for length. During the yard-by-yard examination, each roll in the sample shall be examined for length. Any length found to be less than the minimum specified, or more than two yards less than the length marked on the ticket 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 length of rolls in the sample is less than the total of the lengths marked on the ticket. The rolls examined shall be those selected for the examination of individual rolls.

4.4.1.3 Examination for shade variation. During the yard-by-yard examination, each roll in the sample shall be examined for shade variation. Any roll in the sample exhibiting uneven shade, shaded variation side to side, side to center or end to end shall be cause for rejection of the entire lot represented by the sample.

4.4.1.4 Examination for face identification, identification of preshrinkage process and non-conformance with the Textile Fiber Products Identification Act. During the yard-by-yard examination, each roll in the sample shall be examined for these defects. The lot shall be unacceptable if two or more rolls in the sample have face identification missing from either or both ends, two or more rolls in the sample contain identification of the preshrinkage process by name or trademark on the cloth or ticket or two or more rolls in the sample are not labeled or ticketed in accordance with the Textile Fiber Products Identification Act.

5. PACKAGING

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

6. NOTES

6.1 Acceptance criteria. Acceptance criteria shall be as specified in the contract or purchase order.

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

Department of the Navy
Defense Printing Service
Detachment Office
700 Robbins Avenue, BLDG 4D
Philadelphia, PA 19111-5093

Rules and Regulations Under the Textile Fiber Products Identification Act - Applications for copies should be addressed to:

Federal Trade Commission
Washington, DC 20580

A-A-55272

ONE
REPEAT

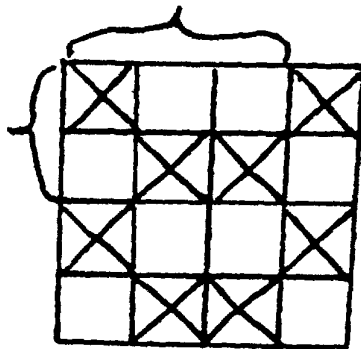


FIGURE 1. MODIFIED PLAIN WEAVE

A-A-55272

6.2.1 Source of non-Government documents

ASTM Test Methods - Applications for copies should be addressed to:

American Society For Testing and Materials
1916 Race Street
Philadelphia, PA 19103-1187

AATCC Test Methods - Applications for copies should be addressed to:

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

Sears Fabric Defect Scales and Fabric Defect Replica Kits are available from:

Sears, Roebuck and Company
Department 817, ATTN: BSC 23-29
Sears Tower
Chicago, IL 60684

MILITARY INTERESTS:

Custodian
Coast Guard - CG

CIVIL AGENCY COORDINATION
ACTIVITY:
GSA - FSS

PREPARING ACTIVITY:
DLA - CT

Project
8305-0537