

PURCHASE DESCRIPTION

T-SHIRT, TACTICAL

This purchase description is approved for use by the Defense Supply Center, Philadelphia and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE. This purchase description covers the requirements for a moisture-wicking t-shirt.

Sizes

X-small Small Medium Large X-Large XX-Large

Note: The above sizes may be abbreviated as S, M, L, XL, XXL,

3. SALIENT CHARACTERISTICS.

3.1 Description. The t-shirt shall have short sleeves, a crew neck collarette that shall finish $3/4 \pm 1/8$ inch wide. The sleeve and bottom shall be hemmed approximately $3/4$ inch from edge. All seams shall be overedged or cover stitched. The color shall be Olive Drab.

3.3 Materials.

3.3.1 Basic material. The nylon knit jersey shall be 84% nylon and 16% lycra.

TABLE I. - Material requirements

CHARACTERISTIC	REQUIREMENT	TEST METHOD
Weight, oz/sq yd.	4.0 \pm 0.2	ASTM D 3776, Opt C
Bursting strength: (min.)	120 lbs.	ASTM D 3787
Dimensional stability (max.) Home laundering: Wales Courses	5.0% 5.0%	AATCC 135, Table I (III,V, iii)
Colorfastness: Laundrying Light (40 hours)	Grade 4 Good	AATCC 61 Test 1A AATCC-16
Pilling	4 or better	ASTM D 3511 4/
Moisture vapor transmission: Initial (min) After 5 Launderings	400/m ² /24 hours 400/m ² /24 hours	ASTM E 96, Test "B" ASTM E 96, Test "B" 1/, 2/
Air permeability, min.	280 cfm	ASTM D 3511 4/

Anti- Microbial (Class III Only)	Log 3 or better / 96%	AATCC 100
Migratory (Initial)	96%	AATCC 100
Migratory (25 Launderings)	Log 3 or better / 96%	ASTM-E 2149
Non- Migratory (Initial)	Log 3 or better / 96%	ASTM -E 2149
Non- Migratory (25 Launderings)	Log 3 or better / 96%	

- 1/ The back side of the cloth shall face the water; the free stream air velocity shall be 550 ± 50 FPM as measured 2 inches above the fabric specimen. The air flow shall be measured at least 2 inches from any other surface. The test shall be run for 24 hours and weight measurements shall be taken at only the start and completion of the test. At the start of the 24 hour test period, the air gap between the water surface and the back of the specimen shall be $3/4 \pm 1/16$ inch.
- 2/ The samples shall be laundered using AATCC-135, Table I (III,V, iii).
- 3/ The procedure for ASTM D 5822 shall be followed except that knit seam strength shall be evaluated, the test shall use a 3 inch gauge length. Seam strength shall be measured at the shoulder and underarm seams.
- 4/ Pilling visual appearance shall be measured using the scale in ASTM D 3511.

3.3.1 Antimicrobial The antimicrobial treated material shall be evaluated for Staphylococcus aureus, Corynebacterium diphtheria and pseudomonas aeruginosa and trichophyton mentagrophytes to determine antibacterial activity. Tested by AATCC TM 100 for all migratory anti-bacterial treatments, and ASTM E 2149 when the material is hydrophobic and is non-migratory anti-bacterial treated. A requirement of 96% reduction after 1 hour initially and after 25 launderings. Laundering shall be performed in accordance with AATCC TM 135. Testing shall be conducted at an AATCC/ASTM approved laboratory.

3.2 Thread. Thread for all seaming and stitching shall be in accordance with standard commercial practice. The color of the thread shall be a good match to the basic material. The finished thread shall have no chemical finishes or treatments, other than those commonly used on commercial threads.

3.3 Labels

3.4.1 Label/markings. A commercial type tagless heat transfer label shall include size, contractor's name, contract number, National Stock Number (NSN), fiber and laundering (care) information. The label shall have "good" colorfastness to laundering when tested in accordance with AATCC-61.

3.4.2 Bar code label. 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, or the bar code and UPC code tags may be attached as a sticker to the outside of the individual poly bag. The tags shall be clearly legible and readable by a scanner. The bar coding element shall be a 13 digit national stock number (NSN). There shall be a 12 digit UPC number assigned for all NSN's

by the contracting activity. The initials "UPC" must appear beneath the code. The bar code for NSN and UPC type shall be a medium to high 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 it causes no damage to the item. This UPC code must also be placed on all shipping cartons on which the NSN appears.

3.5 Finished measurements. The t-shirt shall conform to the finished measurements:

SIZES	1/2 Chest(A)	Back Length (B)	1/2 Neck Opening (C)	Shoulder (D)	Armhole Opening (E)	Over Sleeve (F)	Sleeve Opening (G)
X-small	17	26	7	3	9	5	6
Small	18	27	7 ½	4	9 ½	5 ¾	6 ½
Medium	20	28	8	5	10	6 ½	7
Large	22	29	8 1/2	6	10 ½	7 ¼	7 ½
X-Large	24	30	9	7	11	8	8
XX-Large	26	31	9 ½	8	11 ½	8 ¾	8 1/2
Tolerance	± 1/2	+1, - 1/2	± 1/4	± 1/4	± 1/4	± 1/4	± ¼

Method of measuring:

- (A) 1/2 Chest: Lay t-shirt flat but not stretched, measure across from folded edge to folded edge, approximately 1 inch below the armhole (see Figure 1).
- (B) Back Length: Lay t-shirt flat but not stretched, measure from collar joining seam on center back to bottom of shirt (see Figure 1).
- (C) 1/2 Neck Opening: Grasp collar at center back and center front, forming a straight line, but do not stretch, and measure.
- (D) Shoulder: Measure from collar seam to armhole seam, along shoulder seam (see Figure 1).
- (E) Armhole Opening: Lay t-shirt flat but not stretched, and measure from the intersection of top of sleeve and shoulder seam to bottom of underarm seam.
- (F) Over Sleeve: Lay t-shirt flat but not stretched, measure from the top of sleeve at shoulder seam to the bottom of sleeve.
- (G) Sleeve Opening: Lay t-shirt flat but not stretched, measure from folded edge to folded edge along bottom of sleeve.

QUALITY ASSURANCE PROVISIONS

5.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description and conform to the producer's own standards and quality assurance practices used for similar products offered for sale in the commercial market. The Government reserves the right to require proof of such conformance.

4 Visual examination. Each t-shirt shall be examined for the following defects:

<p>Material defects Any hole, cut, tear, mend, drop stitch, loose knit, miss knit, slub, streak, knitted in waste, permanent fold, pleat or crease; any spot or stain, discoloration or color not as specified, any shaded part, any objectionable odor</p>
<p>Seams and stitching Loose or tight stitching tension, broken or missing thread or stitch, needle chew; any part caught in an unrelated operation or stitching; raw edge, thread breaks, thread ends not removed. Any seam puckered, distorted, pleated, irregular or open.</p>
<p>Workmanship Any component part omitted, twisted, not specified size, missing, misplaced, or poorly shaped. Measurement of item not as specified; design not as specified.</p>
<p>Labels Label(s) missing, incorrect, or illegible; bar code or UPC code label omitted or not readable by scanner; human-readable interpretation (HRI) omitted or illegible; bar code not visible on folded, packaged item; bar code label causes damage to the item.</p>

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

6. PACKAGING.

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

7.2 Source of non-Government documents

AATCC Test Methods

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

ASTM Test Methods

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

Custodian:

MC

PREPARING ACTIVITY:

DLA – CT

