

INCH-POUND

A-A-55302

November 5, 1996

COMMERCIAL ITEM DESCRIPTION

SOCKS, WINTER (WOOL AND COTTON)

The General Service Administration has authorized the use of this commercial item description in preference to MIL-S-405.

1. **SCOPE**. This commercial item description covers one type of seamless wool and cotton winter socks. The socks are intended for use by personnel of the Department of Defense.

2. **SALIENT CHARACTERISTICS**

2.1 **Description**. The socks shall be seamless with a terry tuft stitch to the inside of the entire sock. The top shall be finished with nonraveling, overedged stitching, or a rib elastic cuff and the toes shall be closed. The color of the socks shall be natural (unbleached).

2.2 **Materials**.

2.2.1 **Merino knitting yarn**. The knitting yarn shall be made from fleece, pulled sheep's wool, or a combination of both not lower in grade than 50's U.S. Standard, and cotton, blended in such proportion that the finished socks will contain not less than 75 percent wool when tested in accordance with Table I. Cotton core yarn will not be acceptable.

2.2.2 **Cotton-tie-yarn**. The cotton tie yarn used for backing or binding the terry or tuft stitch shall unbleached, 2-ply, not finer than 20/2 when tested in accordance with Table I.

2.2.3 **Looping yarn**. When looping yarn is used for looping the toes a 2-ply worsted yarn not finer than 20/2 worsted count, or a 2-ply cotton yarn not finer than 12/2 cotton count shall be used.

Beneficial comments recommendations, additions, deletions, clarification's, 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 8440

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

A-A-553022.2.4 Thread.

2.2.4.1 Overedging thread. If applicable, the thread for overedging the sock shall be spun from combed cotton yarns and shall have a soft finish. The finished thread shall have no chemical finishes or treatments other than those used on commercial threads and no finish or treatment shall be applied for the purpose of increasing breaking strength. The color of the thread shall be natural (unbleached) and conform to the requirements in Table I.

2.2.4.2 Thread for seamed toes. The thread for seaming toes shall be stretch nylon or equivalent and shall conform to the requirements in Table I.

TABLE I. - Requirements.

CHARACTERISTICS	REQUIREMENTS	TEST METHOD
Bursting strength (fabric of the finished socks)	Not less than 70 pounds	ASTM D3787
Nonfibrous material (finished socks)	The starch and protein content including chloroform-soluble and water-soluble material not exceed 4.0% (max.)	ASTM D629, (Section 9)
Dimensional stability (finished socks)	Shrink or elongate: total of 8.0% (max.)	AATCC 99 Paragraphs 10 and 13, Test IAW NOTE: The Determination of % Relaxation Dimensional Change Sections 10-12 shall not apply.
Alkali solubility (treated wool or finished socks)	Not to increase 6.0% (max.) over the untreated material and shall not total more than 18.0%	AATCC 20a
Nylon seaming thread (for toe closure)	The thread shall be 3-ply with a breaking strength (min./lbs.) of 1.7.	ASTM D2556 <u>1/</u>
Cotton-tie-yarn	Breaking strength (min./lbs.) 1.9	ASTM D2556 <u>1/</u>
Overedging thread (cotton)	The thread shall be 3-ply, with a breaking strength (min./lbs.) of 1.7.	ASTM D2556 <u>1/</u>
Stretch (finished socks)	Cross-stretch not less than 7 inches on the leg and not less than 6-1/2 inches on the foot (see Figure 1, B and C)	FED-STD 191, TM 7540, <u>2/</u>
Weight per dozen pairs (conditioned)	Table II	Scale

1/ Machine speed shall be 12 +/- 0.5 in/min. and a 10 inch gauge length shall; be used.

2/ A 10-pound weight shall be used and shall be allowed to hang for 30 seconds.

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2.3 Sizes and measurements. The finished socks shall conform to the measurements in Tables II and III.

TABLE II. - Measurements and weights.

SIZES	(A) LENGTH 1/ (INCHES)	(B) FOOT LENGTH 1/ (INCHES)	CONDITIONED WEIGHT PER DOZEN PAIRS (OUNCES)
7	12-1/2	7	52
8	12-1/2	8	56
9	12-1/2	9	62
10	12-1/2	10	64
11	12-1/2	11	66
12	12-1/2	12	68
13	12-1/2	13	70
14	12-1/2	14	72
Tolerance	+/- 1/2	-0, +3/4	Minimum

1/ Refer to Figure 1.

TABLE III. - Number of courses.

FOOT COURSES, MINIMUM 1/			
SOCK SIZES	4-1/2 INCH CYLINDER	5 INCH CYLINDER	LEG COURSES MINIMUM 2/
7	-----	45	80
8	-----	50	80
9	50	55	80
10	55	60	80
11	60	65	80
12	65	70	80
13	70	75	80
14	75	80	80

1/ Foot courses shall be counted from first short butt toe gore needle to first short butt heel gore needle (refer to D of Figure 1).

2/ Leg courses shall be counted from first short butt heel gore needles to top of leg (refer to E of Figure 1).

2.4 Finishing and pairing. The socks shall be scoured and boarded and be matched and paired so that there will be no greater difference in overall foot length or leg length than 1/2 inch.

2.5. Label/markings. Each sock shall have the size and fiber content marking applied below the instep and centered between the ankle and toe. The marking shall be clearly legible and show good fastness to laundering transference in accordance with AATCC-61, Test 1A. The size numbers shall be not less than 7/8 inch in height. All other letters and numbers shall be a

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minimum of 1/8 inch in height. Each pair of socks shall have a commercial-type label containing the contractor's name, contract number and National Stock Number (NSN).

2.6 Bar code label. Each pair of socks shall have a printed bar code label which is clearly legible and readable by scanner. The bar coding element shall be a 13 digit national stock number (NSN). The label 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.

3. **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).

4. **QUALITY ASSURANCE PROVISIONS**

4.1 Product conformance. The product provided shall meet the salient characteristics of this commercial item description, conform to the producers standards and quality assurance practices, and be the same product offered for sale in the market. The Government reserves the right to require proof of such conformance.

4.2 Visual examination. The socks shall be examined for the defects listed: Any holes, runs, dropped stitches, thin areas, mends, or slubs; burn or scorch; any component part omitted or poor workmanship; label missing, incorrect or illegible; measurement of item not as specified; 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.

5. **PACKAGING**. The preservation, packing, and marking shall be as specified in the contract or purchase order.

6. **NOTES**

6.1 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

U.S. Department Of Agriculture
Methods of Test for Grades of Wool

(Applications for copies should be addressed to the U.S. Department of Agriculture, Agricultural Marking Service, Washington , DC 20402.)

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6.2 Sources of non-Government documents

ASTM Test Methods

(Applications for copies should be addressed to American Society For Testing and Materials, 100 Barr Harbor Dr., W. Conshohocken, PA 19248-2959.)

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)

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

MILITARY INTERESTS:

Custodian:

Navy - NU

Army - GL

Air Force - 99

Civil Agency Coordinating Activity:

GSA - FSS

Preparing Activity:

DLA - CT

Review Activity:

Army - MD

Air Force - 32, 45, 82

Navy - MC

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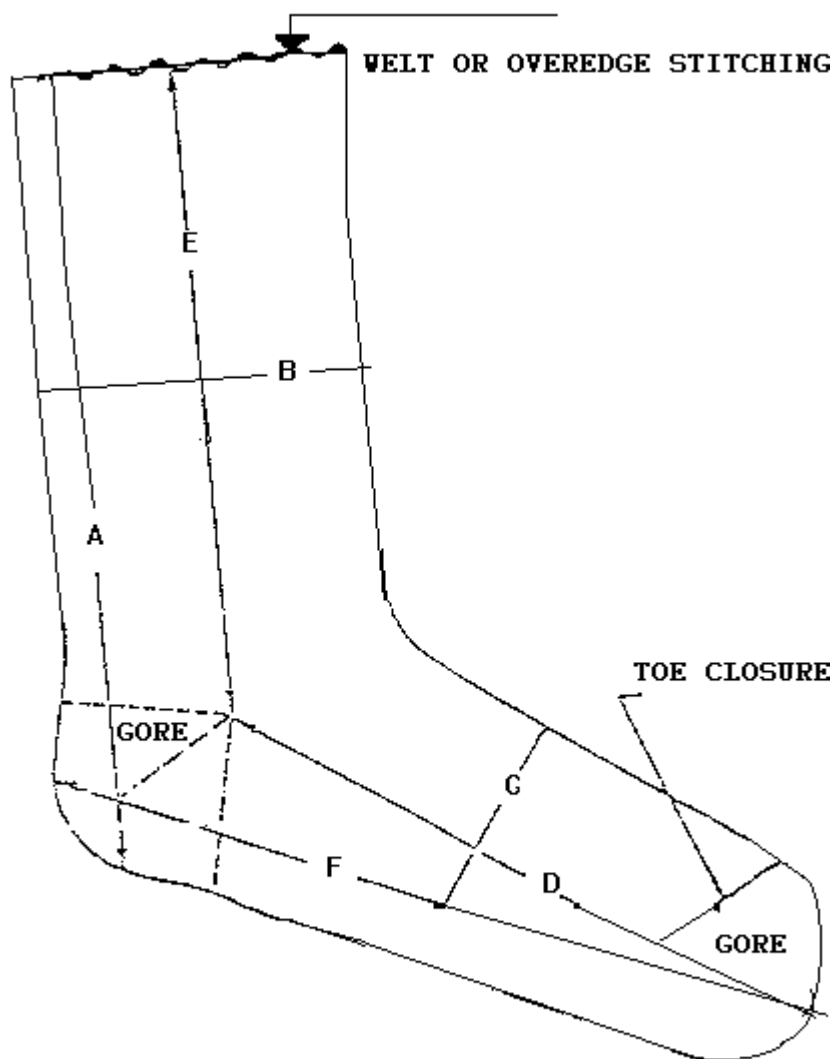


FIGURE 1. SOCK'S, WINTER (WOOL AND COTTON)