MIL-C-43675A(GL)

29 June 1971 SUPERSEDING MIL-C-43675(GL) 20 October 1969

#### MILITARY SPECIFICATION

## CLOTH, INTERLINING, COTTON WARP AND RAYON FILLING

- 1. SCOPE
- 1.1 This specification covers the requirements for interlining cloth constructed from cotton warp yearns and rayon filling yearns.
  - 2. APPLICABLE DOCUMENTS
- \* 2.1 The following documents, of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

#### SPECIFICATION

**FEDERAL** 

PPP-P-1134 - Packaging and Packing of Cotton and Cotton-Synthetic Fiber Blend Fabrics (Excluding Duck Fabrics).

#### STANDARDS

**FEDERAL** 

FED-STD-4 - Glossary of Fabric Imperfections FED-STD-191 - Textile Test Methods

MILITARY

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes

(Copies of specifications, standards, drawings and publications required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer).

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2.2 Other publications.— The following document forms a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

Rules and Regulations Under the Textile Fiber Products Identification Act

(Copies may be obtained without charge from the Federal Trade Commission, Washington, D. C. 20580).

## 3. REQUIREMENTS

3.1 Standard sample.— The finished cloth shall be equal to or better than the standard sample with respect to all characteristics for which the standard sample is referenced (see 6.3).

#### 3.2 Material.-

- 3.2.1 Yarns. The yarns shall be as specified in 3.2.1.1 and 3.2.1.2 when tested as specified in 4.3.
  - 3.2.1.1 Warp (cotton) .- The warp yarn shall be a singles cotton yarn.
  - 3.2.1.2 Filling (rayon) .- The filling yarn shall be a 2 ply rayon yarn.
  - 3.3 Color.- The color of the cloth shall be natural.
- 3.4 Physical requirements.— The physical requirements of the finished cloth shall be as specified in table I when tested as specified in 4.3.

TABLE I .- Physical requirements

| Weight oz/sq.yd. | Yarns per inch |         | Breaking strength (lbs) |         | Stiffness<br>load - pounds |             |         |              |
|------------------|----------------|---------|-------------------------|---------|----------------------------|-------------|---------|--------------|
| minimum          | Warp           | Filling | Warp                    | Filling | Wan.                       | arp<br>max. | Filmin. | ling<br>max. |
| 7.0              | 50             | 35      | 75                      | 65      | 0.0020                     | 0.0080      | 0.120   | 0.20         |

- 3.4.1 Weave .- The weave shall be plain, one up, one down.
- 3.4.2 Width. The width of the cloth shall be as specified (see 6.2) and shall be the minimum acceptable width inclusive of selvages.
- 3.5 Finish. The cloth shall be given a clear permanent finish to equal the degree and character of the standard sample.

- 3.6 Shrinkage. The cloth shall not shrink more than 4.0 percent in the warp direction nor more than 4.0 percent in the filling direction when tested as specified in 4.3.
- 3.7 Length and put-up. Unless otherwise specified (see 6.2), the cloth shall be furnished in continuous lengths each not less than 20 yards. The cloth shall be put up on full width rolls as specified in PPP-P-1134.
- 3.8 Fiber identification. Each roll shall be labeled, ticketed, or invoiced for fiber content in accordance with the Textile Fiber Products Identification Act.
- \* 3.9 Workmanship.- The finished cloth shall conform to the quality and grade of product established by this specification. The occurrence of defects shall not exceed the applicable acceptable quality levels.

### 4. QUALITY ASSURANCE PROVISIONS

- 4.1 Responsibility for inspection.— Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the supplier may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.
- 4.1.1 Certificate of compliance. Where certificates of compliance are submitted, the Government reserves the right to check test such items to determine the validity of the certification.
- 4.2 Inspection. Sampling for inspection shall be performed in accordance with MIL-STD-105, except where otherwise indicated hereinafter.
- 4.2.1 Component and material inspection.— In accordance with 4.1 above, components and materials shall be tested in accordance with all the requirements of referenced specifications, drawings and standards unless otherwise excluded, amended, modified or qualified in this specification or applicable purchase documents.
- 4.2.2 Examination of the end item. Defects found during this examination shall be classified in accordance with 4.2.2.1 through 4.2.2.3.2.

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\* 4.2.2.1 Yard-by-yard examination. The required yardage of each roll shall be examined and defects clearly noticeable at normal inspection distance (3 feet) shall be classified as listed. The defects found shall be counted regardless of their proximity to each other, except when two or more defects represent a single local condition of the cloth, only one shall be scored. A continuous defect shall be counted as one defect for each yard or fraction thereof in which it occurs. The sample unit shall be 1 yard, full width of the finished cloth. The acceptable quality level shall be 4.0 defects per 100 units (yards). The sample size shall be in accordance with inspection level I of MIL-STD-105. The lot size shall be expressed in units of one yard each. The number of rolls selected shall be in accordance with table II.

### Defects

Hole, cut or tear
Smash, multiple floats
Knot 1/
Grease or oil stain
Embedded crease or wrinkle

- 1/ To be scored when larger than limit shown for knots on figure 4 of FED-STD-4.
- \* 4.2.2.2 Overall examination. Each defect shall be counted no more than once in each roll examined. The sample unit shall be one roll. The sample size (number of rolls selected as sample) and the acceptance number shall be as shown in table II.

## Defects

Width less than specified 1/
Overall uncleanness 1/
Objectionable odor
Not labeled in accordance with the
Textile Fiber Products Identification
Act

1/ Shall not be scored unless it occurs for more than 5 yards per roll.

TABLE II.- Sample size

| Lot size (yards)                   | Sample size (rolls) | Acceptance<br>number |
|------------------------------------|---------------------|----------------------|
| Up to 1200 1/                      | 3                   | 0                    |
| 1201 up to and including 3200      | 5                   | 0                    |
| 3201 up to and including 10,000    | <b>.</b> 8          | 0                    |
| 10,001 up to and including 35,000  | 13                  | 1                    |
| 35,001 up to and including 150,000 | 20                  | 2                    |
| 150,001 and over                   | 32                  | 3                    |

<sup>1/</sup> If a lot contains fewer than three rolls, each roll in the lot shall be examined.

## 4.2.2.3 Length examination.-

- \* 4.2.2.3.1 Individual rolls.— The rolls shall be examined for gross length. Any gross length found to be less than the minimum specified or more than 2 yards less than the gross length marked on the ticket shall be considered a defect with respect to length. The sample unit shall be one roll. The sample size (number of rolls selected as sample) and the acceptance number shall be as shown in table II.
  - 4.2.2.3.2 Total yardage in sample. The lot shall be unacceptable if the total of the actual gross lengths of rolls in the sample is less than the total of the gross lengths marked on the roll tickets. The rolls examined shall be those selected for the examination of individual rolls.
- \* 4.2.3 Examination of preparation for delivery requirements.— An examination shall be made in accordance with the provisions of PPP-P-1134 to determine that packaging, packing and marking comply with the section 5 requirements.
  - 4.3 Testing of the end item.— The methods of testing specified in FED-STD-191, wherever applicable and as listed in table III shall be followed. The physical and chemical values specified in section 3, except when otherwise indicated, apply to the results of the determinations made on a sample unit for test purposes as specified in the applicable test methods. All test reports shall contain the individual values utilized in expressing the final result. The sample unit shall be 3 1/2 yards, full width of the finished cloth. The lot size shall be expressed in units of 1 yard. The sample size shall be as follows and the lot shall be unacceptable if one or more sample units fail to meet any requirement specified.

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| Lot size (yards)               | Sample size (units) |  |  |
|--------------------------------|---------------------|--|--|
| 800 or less                    | 2                   |  |  |
| 801 up to and including 22,000 | 3                   |  |  |
| 22,001 and over                | 5                   |  |  |

TABLE III.- Test methods

| Characteristic          | Requirement<br>paragraph | Test<br>method   |  |  |
|-------------------------|--------------------------|--|--|--|
| Cotton yarn:            |                          |  |  |  |
| Material identification | 3.2.1.1                  | 1200 1/  |  |  |
| Ply (singles)           | 3.2.1.1                  | $\begin{array}{cc} 1200 & \underline{1}/\\ \text{Visual} & \underline{2}/ \end{array}$ |  |  |
| Rayon yarn:             |                          |  |  |  |
| Material identification | 3.2.1.2                  | 1500 1/  |  |  |
| Ply                     | 3.2.1.2                  | $\begin{array}{cc} 1500 & \underline{1}/\\ \text{Visual} & \underline{2}/ \end{array}$ |  |  |
| Weight                  | 3.4                      | 5041   |  |  |
| Yarns per inch:         |                          |  |  |  |
| Warp                    | 3.4                      | 5050   |  |  |
| Filling                 | 3.4                      | 5050   |  |  |
| Breaking strength:      |                          |  |  |  |
| Warp                    | 3.4                      | 5100   |  |  |
| Filling                 | 3.4                      | 5100   |  |  |
| Stiffness:              |                          |  |  |  |
| Warp                    | 3.4                      | 5202   |  |  |
| Filling                 | 3.4                      | 5202   |  |  |
| Weave                   | 3.4.1                    | Visual <u>2</u> /  |  |  |
| Finish                  | 3.5                      | Visual 2/  |  |  |
| Shrinkage:              |                          |  |  |  |
| Warp                    | 3.6                      | 5550   |  |  |
| Filling                 | 3.6                      | 5550   |  |  |

 $<sup>\</sup>underline{1}/$  A certificate of compliance shall be submitted and will be acceptable for the stated requirements.

- One determination per sample unit and the results reported as "pass" or "fail".
  - 5. PREPARATION FOR DELIVERY
- 5.1 Put-up and packaging. Put-up and packaging shall be level A or C as specified (see 6.2).
- \* 5.1.1 Levels A and C.- The cloth shall be put-up and packaged in accordance with the applicable requirements of PPP-P-1134.
  - 5.2 Packing .- Packing shall be level A, B or C as specified (see 6.2).
- \* 5.2.1 Levels A, B and C.- The cloth shall be packed in accordance with the applicable requirements of PPP-P-1134.
- \* 5.3 Marking.- In addition to any special marking required by the contract or order, shipments shall be marked in accordance with the applicable requirements of PPP-P-1134.
  - 6. NOTES
  - 6.1 Intended use. The cloth is intended for use as interlining material for the Garrison and Service Caps.
    - 6.2 Ordering data.- Procurement documents should specify the following:
      - (a) Title, number and date of this specification.
      - (b) Width of cloth required (see 3.4.2).
      - (c) Length if other than specified (see 3.7).
      - (d) Selection of applicable levels of put-up, packaging and packing (see 5.1 and 5.2).
  - 6.3 Standard sample. For access to standard sample, address the procuring office issuing the invitation for bids.
  - 6.4 The margins of this specification are marked with an asterisk (\*) to indicate where changes, (additions, modifications, corrections, deletions) from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and suppliers are cautioned to evaluate the requirements of this document based on the entire content, irrespective of the marginal notations and relationship to the last previous issue.

Custodian:

Preparing activity:

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Review activity:

Project No. 8305-A089

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|  | SPECIFICATION ANALYSIS SHEET  |  |  |  |  |
|--|---|--|--|--|--|
| use of the speci<br>is provided for<br>can be procured<br>will be apprecial<br>and suggestions<br>referenced docum | : This sheet is to be filled out<br>fication in procurement of product<br>obtaining information on the use<br>with a minimum amount of delay<br>ted. Fold on lines on reverse sid<br>submitted on this form do not conent(s) or serve to amend contract | its for ultimate use by the Depa<br>of this specification which wil<br>and at the least cost. Comme<br>ie, staple in corner, and send to<br>constitute or imply authorizatio | rtment of Defense. This sheet<br>I insure that suitable products<br>nts and the return of this form<br>o preparing activity. Comment |  |  |
| SPECIFICATION  | Cloth, Interlining, Cot   | ton Warp And Rayon Fill  | ing MIL-C-43675A(GL)   |  |  |
| ORGANIZATION   |   |  |  |  |  |
| CITY AND STATE   | :   | CONTRACT NUMBER  |  |  |  |
|  | OVERNMENT CONTRACT  | BUBCONTRACT  |  |  |  |
| MENT USE!  | T OF THE SPECIFICATION CREAT<br>AGRAPH NUMBER AND WORDING.  | ED PROBLEMS OR REQUIRED IN   | TERPRETATION IN PROCURE-   |  |  |
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| B. RECOMMEN  | DATIONS FOR CORRECTING THE  | DEFICIENCIES   |  |  |  |
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| 2. COMMENTS ON   | ANY SPECIFICATION REQUIREME   | NT CONSIDERED TOO RIGID  |  |  |  |
| ·  |   | ·  |  |  |  |
| 3. IS THE SPECIFIC   | CATION RESTRICTIVE?   |  |  |  |  |
| _  | NO (If "yea", in what way?)   |  |  |  |  |
|  |   |  |  |  |  |
| 4. REMARKS (Affact affact to form and  | h any pertinent data which may be of<br>I place both in an envelope addresse  | use in improving this specification<br>d to preparing activity)  | n. If there are additional papers,   |  |  |
| SUBMITTED BY (Pri  | nted or typed name and activity - Op.   | tional)  | DATE   |  |  |
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