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PERFORMANCE SPECIFICATION CLOTH, WATERPROOF, WEATHER RESISTANT

The United States Industrial Fabrics Institute makes this document available for use by Industry and Government organizations that wish to apply this specification to their products.

- 1. Scope
- 1.1 <u>Scope</u>. This specification covers the requirements for four types and four classes of weather resistant, waterproof cloth.
- 1.2 Classification. The cloth shall be in the following types and classes (see 6.2):

Type I - Cloth, Moderate strength, dimensionally stable

Type II - Cloth, High strength, dimensionally stable

Type III - Cloth, Ultra High strength, dimensionally stable

Type IV - Cloth, High strength

Class 1 - Extreme cold temperature flexibility

Class 2 - Cold temperature flexibility, flame retardant

Class 3 - Extreme cold temperature flexibility, flame resistant

Class 5 - Extreme temperature resistance, flame retardant

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2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 or 4 of this specification. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of the documents cited in sections 3 and 4 of this standard, whether or not they are listed.

2.2 Government documents.

2.2.1 <u>Specifications</u>, <u>standards</u>, <u>and handbooks</u>. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

FEDERAL STANDARDS

FED-STD-595 - Colors Used In Government Procurement

(Copies of these documents are available online at http://assist.daps.dla.mil/quicksearch/ or from the Standardization Documents Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2,2.2 Other Government Documents, Drawings, and Publications

The following other government publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation (see 6.2).

CODE OF FEDERAL REGULATIONS

Title 40

(Copies are available on line at www.access.gpo.gov or from U.S. Government Printing Office, 732 North Capitol Street NW, Washington, DC 20401.)

2.3 <u>Non-Government publications</u>. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents are those cited in the solicitation or contract (see 6.2).

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)

AATCC Evaluation Procedure 9	Visual Assessment of Color Difference of Textiles
AATCC Test Method 192	Weather Resistance: Sunshine Carbon Arc Lamp
	Exposure With and Without Wetting

(Copies of this document are available online at http://www.aatcc.org or American Association of Textile Chemists and Colorists, P.O. Box 12215, Research Triangle Park, NC 27709-2215.)

ASTM INTERNATIONAL

ASTM D 471	Standard Test for Rubber Property-Effect of Liquids
ASTM D 572	Standard Test Method for Rubber Deterioration by Heat and
	Oxygen
ASTM D 751	Standard Test Methods for Coated Fabrics
ASTM D 1776	Standard Practice for Conditioning and Testing Textiles
ASTM D 2136	Standard Test for Coated Fabrics-Low-Temperature Bend Test
ASTM D 2565	Standard Practice for Xenon-Arc Exposure of Plastics Intended for
1	Outdoor Applications
ASTM D 3776	Standard test Method for Mass per Unit Area (Weight) of Fabric
ASTM D 5035	Standard Test Method for Breaking Force and Elongation of
	Textile Fabrics (Strip Method)
ASTM D 6413	Standard Test Method for Flame Resistance of Textiles (Vertical
	Test)
ASTM G 21	Standard Practice for Determining Resistance of Synthetic
	Polymeric Materials to Fungus
ASTM G 155	Standard Practice for Operating Xenon Arc Light Apparatus for
	Exposure of Non-Metallic Materials

(Copies are available online at http://www.astm.org or from ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19426-2959.)

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)

SAE J 1966 Lubricating Oil, Aircraft Piston Engine (Nondispersant Mineral Oil), Standard

(Copies are available online at www.sae.org or from Society of Automotive Engineers, Publications Division, 400 Commonwealth Drive, Warrendale, PA 15096-0001.)

OTHER PUBLICATIONS

Repeat Insult Patch Test – Modified Draize Procedure – Principle and Methods of Toxicology, (fourth edition), A. Wallace Hayes pp 1057-1061, 2001

(Copies are available online at http://www.taylorandfrancis.co/uk/ or from Taylor and Francis, 325 Chestnut Street, Philadelphia, PA 19106.)

Marzulli, F. and H. Maibach, "Contact Allergy: Predictive Testing in Humans," Advances in Modern Toxicology, Volume 4, pp 353-372, 1977.

(Copies of this document are available from http://chppm-www.apgea.army.mil or the U.S. Army Center for Health Promotion and Preventive Medicine, ATTN: MCHB-DC-TTE, Bldg., E-2100, Aberdeen Proving Ground, MD 21010-5422)

2.4 Order of precedence. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

- 3.1 <u>First article</u>. When specified (see 6.2), a sample shall be subjected to first article inspection, in accordance with 4.2 and 6.3.
- 3.2 <u>Standard Sample</u>. The finished cloth shall match the standard sample for shade and appearance, and shall, unless otherwise indicated, be equal to or better than the standard sample with respect to all characteristics for which the standard sample is referenced (see 6.2 and 6.4).
- 3.3 <u>Physical requirements</u>. The finished cloth shall conform to the requirements listed in Table I and 3.4 through 3.6, when tested as specified in 4.3.2.

Table I. Requirements

	Type I			Type II & IV			Type III
Characteristic	Class 1	Class 2	Class 3	Class 1	Class 2	Class 3	Class 5
Weight, oz/yd ² (max)	9.0	10.0	11.5	17.0	19.0	19.0	13.0
Breaking Strength, lbs/in (min)							
Initial:							
Warp	115	115	115	225	225	225	325
Filling	115	115	115	225	225	225	275
After Accelerated Weathering:							
Warp	92	92	92	180	180	180	260
Filling	92	92	92	180	180	180	220

Table I. Requirements (continued)

	Type I			Type II & IV			Type III
Characteristic	Class 1	Class 2	Class 3	Class 1	Class 2	Class 3	Class 5
Tearing Strength, lbs (min)							
Warp	12	12	12	45	45	45	20
Filling	10	10	10	38	38	38	20
Stiffness cm (max)(warp only)							
At 70°F	10.0	10.0	10.0	14.5	16.5	14.5	• •
At 10°F	2.2	13.0		- H(H)	22.0	(4(4)	(=:=:
At -40°F	12.0	:=::=	12.0	20.0	7.7	20.0	
Adhesion of Coating, lbs/2 inch	10.0	10.0	10.0	15.0	15.0	15.0	12.0
width (min) <u>1</u> /							
Blocking, rating (max)	(2)	(2)	(2)	(2)	(2)	(2)	(1)
Resistance to Accelerated aging	2/	***	<u>2</u> /	<u>2</u> /	- 7-	<u>2</u> /	<u>2</u> /
Flame Resistance: (max)							
After flame (sec)			10		***	10	
Char length (in)	100	\	3.5			3.5	
Flame Retardancy	- 42	<u>3</u> /	(3 <u>21 (34</u> 5)	272	<u>3</u> /		<u>3</u> /
Hydrostatic resistance (min)	4/	4/	4/	4/	4/	4/	4/
Initial & after abrasion							
Resistance to:	A		76				
Oil	5/	<u>5</u> /	<u>5</u> /	<u>5</u> /	<u>5</u> /	<u>5</u> /	**
Aromatic Hydrocarbons	<u>5/</u> <u>6/</u> <u>7/</u>	6/ 7/	<u>6</u> /	5/ 6/ 7/	<u>6</u> / <u>7</u> /	5/ 6/ 7/	
Accelerated weathering	<u>7</u> /	7/	6/ 7/	7/			
Low Temperature	5.5	43-	20000	75	* H		<u>6</u> /
High Temperature	#X#		4	3/4			8/
Mildew resistance rating (max)	0	0	0	0	0	0	0

- 1/Requirement applies if a film or coating is applied to the surface of the cloth.
- 2/ The cloth shall show no softness, stiffness, tackiness or brittleness when compared with an unexposed specimen.
- 3/ The tip of the flame shall not pass beyond the top edge of the test specimen before 42 seconds after the start of the burner flame.
- 4/ No leakage in any portion of the test specimen.
- 5/ No evidence of seepage of oil through the cloth.
- 6/ The cloth shall not crack or flake.
- 7/ The cloth shall show no evidence of cracking, crazing, blooming, chalking or appreciable color change.
- 8/ The cloth shall show no softness, tackiness or blistering.
- 3.4 <u>Color</u>: The color of finished cloth shall match the applicable color number of FED STD 595 or shall match the approved shade standard (see 3.2) for the color specified where such a sample is applicable (see 6.2 and 6.4).
- 3.5 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or

environmentally preferable materials should be used to the maximum extent possible, provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs.

3.6 <u>Toxicity</u>. The finished cloth shall not present a health hazard and shall show compatibility with prolonged, direct skin contact when tested as specified in 4.4.11.

4. VERIFICATION

- 4.1 <u>Classification of inspections</u>. The inspection requirements specified herein are classified as follows:
 - a. First article inspection (see 4.2).
 - b. Conformance inspection (see 4.3).
- 4.2 <u>First article inspection</u>. When first article inspection is required (see 6.2) it shall consist of the examinations of 4.3.1, shade matching in accordance with paragraph 4.4.10 and tests for the characteristics specified in Table II. First article samples shall be as specified in the contract (see 6.2 and 6.3). When product, formula or process changes are made, or when requested by the contracting entity, a sample representing current production shall be sampled and subjected to the first article inspection tests outlined in Table II.
- 4.3 <u>Conformance inspection</u>. Conformance inspection shall include the examination of 4.3.1 and the tests of 4.3.2 through 4.4.13. Sampling shall be as specified in the contract or purchase order (see 6.2).
- 4.3.1 <u>Yard-by-yard examination</u>. Requirements for visual yard-by-yard examination of the cloth will be as specified in the contract or purchase order (see 6.2). The inspection lot size, classification of defects and acceptable defect limits as a minimum shall be provided in the contract or purchase order or as agreed upon between the buyer and the seller (see 6.2).
- 4.3.2 End item testing. The cloth shall be tested for the characteristics listed in Table II. The methods of testing specified wherever applicable and as listed in Table II shall be followed. The lot shall be unacceptable if any sample unit fails to meet any requirement specified. All test reports shall contain the individual values utilized in expressing the final results. The sample unit shall be 5 continuous yards full width of cloth. The lot size shall be expressed in units of 1 yard. The sample size shall be as follows:

Lot size (yards)

Sample size (sample units)

3,000 or less

2

3,001 to and including 22,000

3 5

22,001 and over

TABLE II. End item tests

		First Article	Confor- mance
Characteristics	Test method	Inspection	Inspection
Weight	ASTM D 3776 Method C	X	X
Breaking strength:			
Initial	ASTM-D-5035 (1C-E or 1C-T)	X	X
After accelerated weathering	ASTM-D-5035 (1C-E or 1C-T)	X	
	and 4.4.1.		
Tearing Strength	ASTM D 751, Procedure B	X	X
Stiffness:	4.4.2		
At 70° F $\pm 2^{\circ}$ F		X	X
At $10^{\circ}\text{F} \pm 2^{\circ}\text{F}$ and -40°F		X	X
Adhesion of coating:	ASTM D 751	X	X
Blocking	ASTM D 751 and 4.4.3	X	X
Accelerated aging	ASTM D 572 1/	X	X
Flame resistance	ASTM D 6413	X	X
Flame retardancy	ASTM D 6413 2/	X	X
Hydrostatic Resistance			
Initial	ASTM D 751 and 4.4.4.1	X	X
After abrasion	ASTM D 751 and 4.4.4.2	X	X
Oil Resistance	SAE J 1966 and 4.4.5	X	X
Resistance to:	400		
Aromatic hydrocarbon	ASTM D 471 and 4.4.6	X	X
Accelerated weathering	4.4.1 and 4.4.7	X	
Low temperature	ASTM D 2136 and 4.4.8	X	X
High Temperature	ASTM D 2136 and 4.4.9	X	X
Color	FED STD 595 and 4.4.10	X	X
Toxicity	4.4.11	X	X
Mildew resistance	ASTM G 21 and 4.4.12	X	

^{1/} Only one specimen shall be tested.

^{2/} Except that the specimen shall be observed for an additional 30 seconds after burner flame turn off. If the tip of the flame passes beyond the top edge of the specimen at any time during the 42 seconds after the burner is turned on, the specimen shall be reported as a test failure. Five specimens shall be tested in the warp direction and the results reported individually as "pass" or "fail".

4.4 Methods of inspection.

4.4.1 <u>Accelerated weathering procedure</u>. One specimen, 8 by 6 inches minimum, with the short dimension warpwise and one specimen, 8 by 6 inches, minimum, with the short dimension filling wise shall be subjected to the either procedure below:

AATCC Method 192 Opt 4 (carbon arc) except that the filters shall be removed .The swatches shall be exposed one above the other, in the quadrant of the accelerated weathering apparatus for 100 hours. The swatches shall be changed from the top to bottom racks and vice versa each time the carbons are changed (approximately 17 to 20 hours). At the conclusion of the exposure period, the swatches shall be removed from the apparatus and allowed to dry and condition at Standard Conditions.

ASTM D2565, Table 1 (xenon arc), Cycle 1 for an exposure period of 500 hours. The light source shall be controlled at an irradiance 0.35 W/(m2 nm) at 340 nm. using Daylight filters as specified in ASTM G155, TABLE 1 Relative Ultraviolet Spectral Power Distribution Specification for Xenon Arc with Daylight Filters. Consult with ASTM G155 for all instrument design requirements, as well as the recommended maintenance, calibration, and operating procedures.

NOTE: Monitoring of chamber air, relative humidity, irradiance, and black panel temperature is recommended.

4.4.2 <u>Stiffness</u>. Samples shall be subjected to the procedure below except that the apparatus and test specimens shall be conditioned at the specified temperature for a minimum of 4 hours before testing and the test shall be performed in a still atmosphere at that temperature:

Stiffness of Cloth, Directional; Self-Weighted Cantilever Method

- a. Apparatus (Figure 1).
 - 1. Two rolls, each one inch in diameter and approximately 4.25 inches (108mm) in length held together by spring pressure, one of which shall be turned slowly be means of a worm drive. The line of contact of the rolls shall coincide with the axis of rotation of the supporting framework.
 - 2. Pointer attached to the framework to indicate the relative angular position of the framework with respect to a rotating circular scale calibrated in degrees.
 - 3. Slow gear adjustment for convenient rotating of the framework and rolls clockwise and counter-clockwise. The instrument shall be adjusted to operate at a uniform rate of one revolution per minute + 5 seconds.
 - 4. Scale, graduated to 0.1 mm and attached to a metal base, suitable for measuring the extended length of the mounted specimen, i.e., the distance from the nip of the rolls to the end of the specimen above the rolls.
- b. Test specimen. The specimen shall be a rectangle of cloth 1-1/4 inches (32 mm) by 6 to 12 inches (152 to 305 mm) with the longer dimension parallel to the direction of the yarns being tested: unless otherwise specified, the warp or machine direction of the sample shall be tested. The specimen shall be cut with clean straight edges. The specimen shall be selected from material which has not been creased or folded in any manner.

c. <u>Number of determinations</u>. Unless otherwise specified, five specimens from the warp or machine direction shall be tested from each sample unit.

d. Procedure

- 1. Condition test specimens in accordance with ASTM D-1776 and test with specimens and apparatus in that environment, unless otherwise specified.
- 2. The measure of directional flex-stiffness shall be the length of the specimen remaining above the nip of the rolls which, when the test instrument is rotated clockwise and counter-clockwise through 90 degrees ± 2 degrees, just falls to the left and right of the line perpendicular to the nip of the rolls. It is this length of specimen which yields the flexibility criteria being measured. The specimen shall be considered to have fallen to the right or left when the specimen, during the course of clockwise and counter-clockwise rotation, passes across the line perpendicular to the nip of the rolls as indicated by the pointer fastened to the rotating framework. This length of the specimen shall be determined as follows:
 - a. Initial adjustment of test instrument. The apparatus shall be placed in the test position and leveled with the axis of the clamping surface (nip of the rolls) horizontal and the pointer, fastened to the rotating framework, in the vertical position.
 - b. One end of the specimen shall be inserted between the rolls with the lengthwise edges of the specimen perpendicular to the nip of the rolls.
 - c. The specimen shall be positioned and shall be of sufficient length to allow it to bend to the left of the line perpendicular to the nip of the rolls, which when the apparatus is rotated, with continuous uniform motion in the clockwise direction it will fall to the right of the perpendicular line.
 - d. At the point the specimen falls to the right, the instrument shall be stopped and the adjustable circular scale moved to make the zero position on the scale coincide with the pointer fastened to the rotating framework. The instrument shall then be rotated with continuous uniform motion ± 2 degrees from this point in the counter-clockwise direction. The specimen should not fall to the left of the perpendicular line at this point.
 - e. If the specimen falls to the left then the instrument shall be rotated in the clockwise direction until the pointer is vertical. The specimen shall be shortened and reset with a bend to the left and the above procedure repeated.

3. Determination of flex-stiffness.

a. After initial adjustment the instrument is rotated until the pointer is vertical. The length of the specimen is shortened by a small increment, set with a bend to the left and the instrument is rotated with continuous uniform motion clockwise until the specimen falls to the right of the perpendicular line. The instrument is stopped and the zero position of the adjustable scale is made to coincide with the pointer. The instrument is rotated, with continuous uniform motion, in the counter-clockwise direction 90 ± 2 degrees when the instrument is immediately reversed in the clockwise direction and rotated, with continuous uniform motion, to return the point to zero. The specimen shall have fallen immediately to the left of perpendicular at 90 ± 2 degrees and shall fall immediately to the right of the perpendicular as the pointer reaches zero.

- b. If the specimen does not fall to the left when it is rotated the required 90 ± 2 degrees in the counter-clockwise direction the pointer is rotated to the vertical position, the specimen is shortened another small increment and the procedure repeated.
- c. When the specimen has reached the length such that it falls to the left and right of the line perpendicular to the nip of the rolls the instrument is stopped with the pointer in a vertical position.
- d. Without tension the specimen above the rolls shall be extended and the length measured from the nip of the rolls to the end of the extended specimen, to the nearest mm.
- e. The length of the extended specimen is recorded as the directional flexstiffness of the specimen.
- e. <u>Report</u>. The directional flex-stiffness of the sample unit tested shall be reported as the average of the specimens tested in the warp or machine direction. Each individual value used to calculate the average shall also be reported.
- f. Notes A self-weighted cantilever machine of the type described in this method is identified as the Clark Paper Softness-Stiffness Tester.

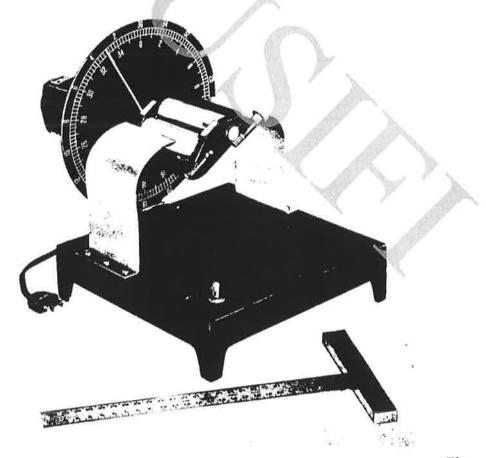


Figure 1

4.4.3 <u>Blocking</u>. ASTM D 751 Blocking Resistance at Elevated Temperatures. The specimens shall be exposed at an oven temperature of 180°F + 2°F for 30 minutes.

4.4.4 Hydrostatic resistance.

- 4.4.4.1 ASTM D-751, Hydrostatic Resistance Procedure B (Pressure Application by a Rising Column of Water), Procedure 2 with the hydrostatic head fixed at 50 centimeters and applied to the test specimen for 10 minutes. The back side of the cloth shall contact the water. The report shall only include "measurement of the appearance of water drops". Leakage of any specimen shall be considered a test failure. Leakage is defined as the appearance of water at three or more different places within the 4-1/2 inch diameter test area.
- 4.4.4.2 A new specimen, 10 by 10 inches, shall be abraded by means of a 2-inch square piece of grade 1/0 garnet paper which shall be uniformly loaded with an 8.0 ± 0.1 ounce weight. The specimen shall be abraded on the face by moving the weighted garnet paper filling-wise five times in each direction. The specimen shall then be turned over and abraded on the back by moving the weighted garnet paper warp-wise five times in each direction. The abraded 2-inch square area shall then be placed face up across the center line of the clamping head so that the center of the abraded area will coincide with the center of the exposed part of the specimen. Hydrostatic resistance shall then be determined as specified in 4.4.4.1.
- 4.4.5 Oil resistance. One 8 by 8 inch specimen shall be placed on a wood frame. The inside dimensions of the frame shall be 6 inches by 6 inches by 1 inch. The specimen shall be forced into the frame by a wood block 5-3/4 by 5-3/4 inches (with round corner) to form a basin of uniform depth. The edges of the cloth shall be tacked to the frame and the block removed. Lubricating oil, conforming to Grade 50 of SAE J 1966 shall be rapidly poured into the basin to a 1/2 inch depth. After the oil has been in the basin for 1 hour, the bottom of the fabric specimen forming the basin shall be examined to determine if oil has seeped through or permeated the cloth.
- 4.4.6 Resistance to aromatic hydrocarbon fluid. One, 1 by 6 inch specimen with the long dimension parallel to the warp shall be immersed for 5 minutes in aromatic hydrocarbon fluid conforming to Reference fuel D of ASTM D 471. The specimen shall be dried at room temperature for 2 hours (± 5 minutes) and then be creased sharply on itself, with the face side toward the outside of the fold. A similar specimen, except with the long dimension parallel to the filling shall be tested in the same manner.
- 4.4.7 Resistance to accelerated weathering. The cloth shall be subjected to the accelerated weathering procedure specified in 4.4.1. After completion of the procedure, each specimen shall be folded by hand, face out, sharply upon itself and visually examined along the fold for cracking and crazing. Each specimen shall then be opened flat and examined for blooming, chalking or appreciable color change (An appreciable color change is one that is noticeable on first glance when comparing the tested specimen with the original unexposed cloth).
- 4.4.8 Resistance to low temperature. ASTM D 2136 at minus 70± 5°F

- 4.4.9 Resistance to high temperature. ASTM D 2136 except that the sample shall be exposed for a period of 6 hours in an electrically heated oven maintained at a temperature of $170^{\circ} \pm 2^{\circ}F$, using a 2 by 6 inch specimen.
- 4.4.10 <u>Visual shade matching (all Classes)</u>. The color and shade of the cloth shall match the standard sample when viewed using the AATCC Evaluation Procedure 9, Option A, with sources simulating artificial daylight D75 illuminant with a color temperature of 7500 (\pm 200) K illumination of 100 (\pm 20) foot candles, and shall be a good match to the standard sample under incandescent lamplight at 2856 (\pm 200) K.
- 4.4.11 <u>Toxicity Test</u>. When required (see 6.2), an acute dermal irritation study and a skin sensitization study shall be conducted on laboratory animals. When the results of these studies indicate the finished cloth is not a sensitizer or irritant, a Repeat Insult Patch Test shall be performed in accordance with the Modified Draize Procedure (see 2.3) If the toxicity requirement (see 3.6) can be demonstrated with historical use data, toxicity testing may not be required (see 6.2).
- 4.4.12 <u>Mildew resistance</u>. The cloth shall be tested for mildew resistance in accordance with ASTM G 21, with a minimum duration of 28 days. A 10x objective for a final magnification of 100x with the 10x ocular shall be used to evaluate growth.

5. PACKAGING

5.1 <u>Packaging</u>. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When packaging of material is to be performed by Department of Defense (DoD) or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the military service's system command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 <u>Intended use</u>. Type I, type II and type IV cloths are for use in the fabrication of covers and shelters. The type III cloth is intended for use in the manufacture of survival containers.

- 6.2 Acquisition requirements. Acquisition documents must specify the following:
 - a. Title, number, and date of this specification.
 - b. Type and class required (see 1.2).
 - c. When first article is required (see 3.1 and 4.2).
 - d. Number of First Article inspection samples (see 4.2).
 - e. Specification of first article sampling plan (see 4.2)
 - f. Standard sample required
 - g. Color required (see 3.4).
 - h. Width and width tolerance of cloth required.
 - i. Length of cloth required.
 - j. Conformance inspection quality acceptance limits (see 4.3).
 - k. Inspection lot size, classification of defects and acceptable defect limit for yard-by-yard examination (see 4.3.1).
 - 1. When toxicity testing is required (see 4.4.11).
 - m. Levels of preservation and packaging required (see 5.1)
- 6.3 <u>First Article</u>. When requiring a first article inspection, contracting documents should provide specific guidance to offerors. This guidance should cover whether the first article is a first article sample or a first article production item and the number of test items. These documents should also include specific instructions regarding arrangements for examinations, approval of first article test results and disposition of first articles. Pre-solicitation documents should provide Government waiver rights for samples for first article inspection to bidders offering a previously acquired or tested product. Bidders offering such products who wish to rely on such production testing must furnish evidence with the bid that prior Government approval is appropriate for the pending contract.
- 6.4 <u>Information requests</u>. For access to information such as drawings and standard samples, visit DSCP's website, http://www.dscp.dla.mil/Portal/sreqfrm.aspx.. Complete the request form, and then submit the form.
- 6.5 Subject term (key word) listing.

Fabric, Foul Weather Fabric, Shelter Fabric, Tarpaulin Fabric, Weatherproof

6.6 <u>Changes from previous issue</u>. Changes made in this specification from previous issues or superseded documents are documented and maintained by the USIFI in a Change Log. The USIFI assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the changes listed and the relationship to the previous issue.

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