INCH-POUND

A-A-55186 <u>12 March 1993</u>

#### COMMERCIAL ITEM DESCRIPTION

# PONCHO, WET WEATHER, HEAVY DUTY

The General Services Administration has authorized the use of this Commercial Item Description in preference to MIL-P-3003.

<u>Abstract</u>. This commercial item description covers a heavy duty poncho of one size with hood intended for use as a rain garment, ground sheet, blanket, sleeping bag cover, or shelter half.

Salient Characteristics. The poncho shall be camouflage green, made of vinyl coated nylon and shall have sides and ends that are hemmed. The side hems shall be equipped with reinforced snap fasteners for closing or snapping ponchos together. Each corner and equidistant from the corners of the hems shall have eight grommets for attaching tent pin lines. The poncho shall have a 3/4 to 7/8 inch neck reinforcement bias cut piece and a hood with drawcord for face opening adjustment (See Figures 1 and 2). The ends of the drawcord shall be knotted.

<u>Coated cloth</u>. The coated cloth utilized in the fabrication of the poncho shall be a nylon, vinyl coated cloth, color Camouflage Green CG 483. The cloth shall meet the following requirements:

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Defense Personnel Support Center, Clothing and Textiles Directorate, Attn: DPSC-FSSD, 2800 South 20th Street, Philadelphia, PA 19101-8419, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 8405

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<u>Characteristic</u>	Requirement	Test Method
Weight Breaking strength, pounds	6.0 oz./sq. yd.	ASTM D 3776 ASTM D 5034
Warp	90	
Filling Tearing strength, grams	80	ASTM D 1424
Warp	768	110111 10 1121
Filling	576	አአመሮድ ነጋማ
Hydrostatic resistance, psi Initial	40	AATCC 127
After strength	20	
After water immersion Adhesion of coating, lbs./2-inch width	20	ASTM D 3776
Initial	6.0	
After water immersion Stiffness, centimeters (warping)	5.0 8.0	ASTM D 1388

Grommets and snap fasteners. The grommets shall be brass, black, with toothed washers. The snap fasteners shall consist of a socket and stud-eyelet combination, with male (right side) and female (left side) components. The cloth for reinforcing the grommets and snap fasteners shall be lightly coated cotton cloth weighing a minimum of 7.5 oz sq/yd and having a minimum breaking strength of 75 pounds in both warp and filling. The light coating on both sides shall be accomplished with a polymerized or copolymerized vinyl chloride resin plasticized with either phosphate or phthalpate testers. A certificate of compliance will be accepted as evidence that the material conforms to these requirements.

<u>Drawcords</u>. The drawcords shall be a water and mildew-resistant finish (copper-8-quinolinolate), textile braid, dyed Camouflage Green CG 483, with the ends either tipped or resin coated, and shall meet the following requirements:

Characteristic	Requirement
Diameter	4/32 inch diameter, solid
Weight per 144 yards ounces, (min.)	21.0
Number of carriers	8
Ends per carrier	2
Yarn Ply, Braid	3 .
Picks per inch, (min.)	10
Breaking strength	
pounds, (min.)	80

Cord clamp. The cord clamp shall consist of a lock body and lock wheel. The lock body shall conform to Fastex No. 238-390703-00-5612, Color 6N604, or equal, and the lock wheel shall conform to Fastex No. 238-082051-00-0101, or equal. A certificate of compliance will be accepted as evidence in meeting this requirement.

<u>Seam sealant</u>. The seam sealant used to seal seams and allowable needle holes shall be a dull pigmented solvent solution of polymerized or copolymerized virgin chloride resin utilizing either a phosphate or phthalate ester type plasticizer. As an alternate, a commercially acceptable heat tape sealing of seams may be used. The use of the tape will eliminate problems which require dusting of seams.

<u>Seam dusting powder</u>. The dusting powder used on sealant areas shall be whitening, talc or other finely divided mineral material which does not support mildew growth.

Repairs on finished poncho. Repairable areas generated during manufacture of the poncho shall generally be defined as follows:

Scuffs in coating not exceeding four in number may be repaired and the size of the repair shall not exceed 2 inches in length and I inch in width.

Needle hole repairs shall not exceed 2 inches in length and 1 inch in width.

Pick-offs in the coating not exceeding four in number may be repaired and the overall size of repairs shall not exceed 1/2 inch in diameter.

Each repairable area shall be coated with a minimum of two coats of the seam sealant. The first coat shall be brushed in and worked in such a manner as to completely wet and cover the scuff, pinhole, needle, hole or pickoff. The second coat shall be brushed smoothly and evenly over the first coating. The repaired areas, after the compound is dry, shall be lightly dusted with seam dusting powder.

Thread. The thread for seaming the poncho shall be a general purpose polyester thread, with normal elongation, twisted soft multiple cord, unbonded with a soft finish, and dyed Olive Drab S-1, C.A. 66022. Water and isopropyl alcohol only may be used for lubrication for sewing purposes of the thread or the coated cloth. The thread shall meet the following requirements:

<u>Characteristic</u>	Requirement	<u>Requirement</u>	
Letter Size Nominal Tex size	AA 35	В 50	
Plies	2, 3 or 4	2 or 3	
Final twist (t.p.i.) (min.)	9.0	7.0	
Length per yards (min.)	13,200	8.500	
Breaking strength, pounds			
(min.)	3.0	4.3	
Elongation, percent (max.)	26	26	

<u>Label/marking</u>. Each poncho shall have a combined contractor and instruction marking (See Figure 1). The marking shall be legibly printed directly on the coated cloth with black marking in letters 1/4 inch high and shall contain the following data:

Nomenclature
Stock Number
Name of contractor
Date and number of contract
Multipurpose ponchos
Rain garment and ground sheet
Blanket or sleeping bag cover (snap the
two long edges together)
Tent (snap two ponchos together as
side walls)
Floor (third poncho will snap inside
tent as a floor)
Two open tents will go to end with
common center pole

The marking shall retain good legibility and shall show "fair" fastness to crocking both wet and dry in accordance with AATCC 8, Colorfastness to Crocking.

Patterns. The government shall furnish a single size pattern. The contractor is responsible for grading patterns for additional sizes. The pattern generally provides for a seam allowance of 1/2 inch allowance for all seams except that the sides and edges of hood facing pieces where 1/4 inch seam allowance is provided and where 3/8 inch seam allowance is provided for separate side and end facings. Commercial patterns may be used in lieu of the government furnished pattern provided they conform to the cited design and finished measurements.

<u>Dimensions</u>. The dimensions of the finished poncho and location of snap fasteners and grommets shall be as indicated in Figure 1. Tolerance for measurement of distance between size peripheral hem snap fasteners and grommets shall be 1/4 inch. The hood shall be  $18 \pm 1/2$  inches in height and  $14-1/2 \pm 1/2$  inches in width. The drawcord shall be a sufficient length to allow face opening to be fully extended.

<u>Workmanship</u>. The finished ponchos shall conform to the quality of product established by this document. The occurrence of defects shall not exceed the applicable acceptable quality levels.

Product Demonstration Model. When required, offerers shall submit samples of their intended production. The Product Demonstration Model will consist of units independently developed. Product Demonstration Models will be analyzed and evaluated by the government. Evaluation criteria and basis for award are contained in the solicitation. Product Demonstration Models will be retained by the government. One (1) Product Demonstration Model approved by DPSC under the resultant contract will serve as a manufacturing standard for the corresponding production items delivered under this contract. Offerers are advised that the Product Demonstration Model does not relieve the successful offerer of his responsibility to perform in accordance with the Commercial Item Description specified above.

#### Quality Assurance

Certification. The contractor shall certify that the product offered meets the salient characteristics of this description and that the product conforms to the producer's own drawings, specifications, standards and quality assurance practices. 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. Reliance on contractor QA systems shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the government for acceptance comply with all requirements of the contract.

Examination. Poncho lots shall be inspected in accordance with "Sampling Procedures and Tables for Inspection by Attributes", ANSI/ASQC 21.4, published by the American Society for Quality Control.

<u>Visual Examination</u>. The ponchos shall be examined for the defects listed below. The lot size shall be expressed in units of ponchos. The sample unit is one poncho. The inspection level shall be II and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.5.

<u>Defects</u>. The ponchos shall be examined for the following defects: any spot or stain, threads not trimmed, excessive dusting powder; any component omitted, misplaced, damaged defective, not firmly or securely affixed causing serviceability to be affected; any component or requirement omitted or not as specified; drawcord too short to allow face opening to be fully extended; any grommet, snap fastener, stud or socket improperly clinched, or reversed; any label incorrect or illegible; any blisters, hard permanent creases or wrinkles, or imbedded foreign material; any needle chews, mends, cuts, holes, tears, burns; any scuff, pinholes, or pick-off or needle hole uncoated; measurements or dimensions of item or component parts not as specified.

Note: Material defects and workmanship damages to the coating of the coated cloth shall be determined by visual examination using through-lighting on the finished poncho. The through-lighting equipment shall conform to the following requirements:

A table with a clear glass top, lighted with a minimum of two parallel 25 watt fluorescent bulbs spaced 6 to 6 inches apart (distance between bulbs). The top of the glass shall be 9 to 10 inches above the top of the bulbs. The inside of the light housing shall be flat white. The table, sides, and ends shall be 6 to 8 inches from the bulbs.

The table shall be in a darkened area.

The darkened area shall be defined as follows: The surface to be examined shall be illuminated with not more than 25 foot candles or artificial or natural light with the test lights out. The poncho shall be examined with the outside of the poncho towards the table light.

<u>Dimensional Examination</u>. The finished ponchos shall conform to the dimensions specified. Any dimension that is not within the established tolerance shall be classified as a defect. The sample unit shall be one poncho; the inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 2.5.

<u>Packaging Examination</u>. The fully packaged shipping containers shall be examined in accordance with defects listed below. The lot size shall be the number of shipping containers in the inspection lot. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units, shall be 1.5.

Examination	Defect
Marking	Omitted; incorrect; illegible; of improper size, location, sequence or method of application.
Material	Any component missing, damaged, or not as specified
Workmanship	Inadequate application of components, such as: incomplete closure of container flaps, loose strapping, improper taping, or inadequate stapling
Content	Number of ponchos in container is more or less than required
	NSN shown on one or more items not as specified on shipping container
Palletization	Length, width, or height exceeds specified maximum requirements
	Pallet type not as specified
	Load not bonded as specified

Regulatory Requirements. The offeror/contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practicable.

End Item Performance Testing.

Water Resistance of Cloth; Low Range, Hydrostatic Pressure Method.

Unless otherwise specified, the test specimen shall be a square cloth measuring 8 inches by 8 inches. Five specimens shall be tested from each sample unit.

# Water Resistance of Cloth; Low Range, Hydrostatic Pressure Method.

The surface of the specimen to be exposed to water shall be clamped over the orifice of the inverted conical well. Water shall be introduced into the well and the air above the cloth vented. The hydrostatic head measured at the appearance of a drop or drops of water at three different places of the test area shall be recorded to the nearest 0.5 inch. Drops of water penetrating the specimen at the clamped edge of the specimen or within 1/8 inch of this edge shall not be counted. The hydrostatic pressure resistance of the sample unit shall be the average results obtained from the specimens tested and shall be reported to the nearest 0.5 inch as required. Drops of water penetrating the specimen at the clamped edge of the specimen or within 1/8 inch of this edge shall not be counted.

## Temperature, Low; Effect on Coated Cloth

Unless otherwise specified, the test specimen shall be a square cloth measuring 8 inches by 8 inches. Three specimens shall be tested from each sample unit.

The specimen shall be exposed at a temperature of  $20^{\circ} \pm 2^{\circ}$  F for 30 minutes. The specimen shall then be creased  $180^{\circ}$  in the center in the warp and filling directions and running the center of the steel roller over the fold a single time. The specimen shall be opened between the two creasing operations. The pressure on the specimen shall be the weight of the roller, and the roller temperature shall be as that of the specimen. The specimen shall be visually examined for signs of cracking or flaking. The resistance to low temperatures shall be expressed as the change in hydrostatic resistance. Any indication of cracking or flaking of the exposed and unexposed specimens shall be reported.

#### Packaging.

#### Overseas.

Packaging. Each poncho shall be folded.

<u>Packing</u>. Twenty ponchos shall be packed in a fiberboard box conforming to style RSC-L, grade 275 of PPP-B-636. The inside dimensions of the box shall be approximately 23-1/2 inches in length, 15 inches in width and 12 inches in depth. The box shall be closed in accordance with the appendix of PPP-B-636.

<u>Palletization</u>. Boxes shall be palletized on a 4-way entry pallet in accordance with load type Ia of MIL-STD-147. Each prepared load shall be bonded with bonding means C and D, or film bonding means F or G. Pallet pattern shall be number 3 in accordance with the appendix of MIL-STD-147.

Marking. Marking shall be in accordance with MIL-STD-129.

## Domestic.

<u>Packaging</u>, <u>Packing</u>, <u>Palletization and Marking</u>. Packaging, packing, palletization and marking shall be in accordance with ASTM D 3951.

# Sources of Supply

An instrument found suitable for determining the illumination of the test surface is Weston Illumination Meter, Model 756, made by Daystrom, Inc., Weston Instrument Division, Newark, NJ 07114.

A source of supply for clamp, cord, lock body and lock wheel is available from Fastex Division, Illinois Tool, Inc., 1996 Algonquin Road, Des Plaines IL 60016.

<u>Source of Government Documents</u>. Copies of Military and Federal documents are available from:

Standardization Documents Order Desk Bldg. 4D 700 Robbins Avenue Philadelphia, PA 19111-5094

#### Sources of Nongovernment Documents.

ANSI/ASQC  ${\tt Z1.4}$  - Sampling Procedures and Tables For Inspection By Attributes

(Applications for copies should be addressed to American National Standards Institute, 1430 Broadway, New York, NY 10018-3308.)

### ASTM Test Methods

(Applications for copies should be addressed to American Society For Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

# AATCC Test Methods

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

Custodians:

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Navy - NU

Review Activities:

Army - MD

Navy - MC

Civil Agency Coordinating

Activity:

GSA - FSS

Preparing Activity:

DLA - CT

Project No. 8405-0204

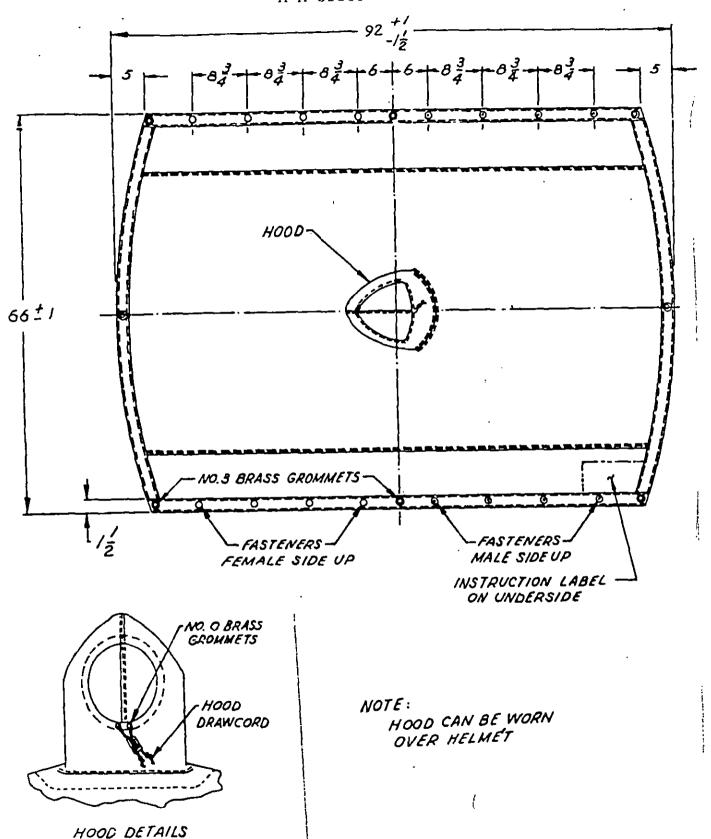
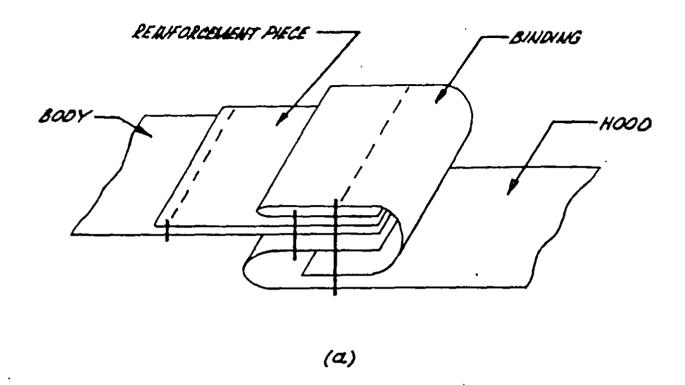


FIGURE 1 - PONCHO, WET WEATHER, HEAVY DUTY



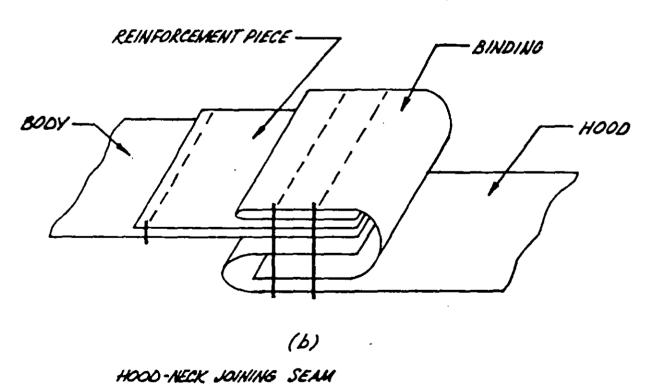


FIGURE 2 - PONCHO, WET WEATHER, HEAVY DUTY

# STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

# **INSTRUCTIONS**

- 1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
- 2. The submitter of this form must complete blocks 4, 5, 6, and 7.
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NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

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