INCH POUND
GL/PD 10-08
3 September 2010

PURCHASE DESCRIPTION

PATCH KIT, INTEGRATED, FLAME RESISTANT (IPK)

This purchase description is approved for use by all Departments and Agencies of the Department of Defense (DoD).

1. SCOPE.

1.1 Scope. This purchase description covers the requirements for a Flame Resistant, Pressure Sensitive Adhesive, Integrated Patch Kit (IPK) which is designed to be used by military personnel in the United States Army as a means to make field expedient repairs in a field environment to their Flame Resistant uniforms.

1.2 Classification. This description covers one type of patch in two classes and two sizes.

1.2.1 Classes.

Class 1 - Universal Camouflage Pattern (UCP)
Class 2 - Operation Enduring Freedom Camouflage Pattern (OCP) (see 6.6)

1.2.2 Schedule of sizes: Two Patch Sizes:

Size S (Square) – 4 inches X 4 inches contained in a waterproof bag with a finished dimension of 5-3/4 (± 1/4) inches X 5-1/4 (± 1/4) inches.

Size R (Rectangle) – 4 inches X 3 inches contained in a waterproof bag with a finished dimension of 5-1/4 (± 1/4) inches X 4-1/4 (± 1/4) inches.

2. APPLICABLE DOCUMENTS.

2.1 General. The documents listed in this section are specified in sections 3, 4 or 5 of this specification. This section does not include documents cited in other sections of this specification 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 cited in sections 3, 4 and 5 of this specification, whether or not they are listed.

Comments, suggestions, or questions on this document should be addressed to: U.S. Army Natick Research, Development and Engineering Center, Natick MA. ATTN: RDNS-WPW-C.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. 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 SPECIFICATIONS

FED-STD-4 Glossary of Fabric Imperfections

2.2.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those specified in the solicitation or contract.

DRAWINGS

U.S. ARMY NATICK SOLDIER CENTER

2-1-2519 Universal Camouflage Pattern
2-1-2519-1 ARPAT Camouflage Pattern Desert Sand 500
2-1-2519-2 ARPAT Camouflage Pattern Urban Gray 501
2-1-2519-3 ARPAT Camouflage Pattern Foliage Green 502

(Copies of drawings are available from the U.S. Army Natick Research Development and Engineering Center, Natick Soldier Center, ATTN: RDNS-WPW-C, Natick, MA 01760)

PURCHASE DESCRIPTIONS

GL/PD 07-12 CLOTH, FLAME RESISTANT

(Copies of documents required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those specified in the solicitation or contract.

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)

AATCC Test Method 8 - Colorfastness to Crocking; AATCC Crockmeter Method
AATCC Test Method 15 - Colorfastness to Perspiration
AATCC Test Method 16 - Colorfastness to Light
AATCC Test Method 61 - Colorfastness to Laundering: Accelerated
AATCC Test Method 81 - pH of Water-Extract from Bleached Textiles

AATCC Test Method 135 - Dimensional Changes of Fabrics after Home Laundering
AATCC Evaluation Procedure 1 - Gray Scale for Color Change
AATCC Evaluation Procedure 2 - Gray Scale for Staining
AATCC Evaluation Procedure 8 - AATCC 9-Step Chromatic Transference Scale
AATCC Evaluation Procedure 9 - Visual Assessment of Color Difference of Textiles

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

AMERICAN SOCIETY FOR QUALITY (ASQ)

ANSI/ASQ Z1.4 - Sampling Procedures and Tables for Inspection by Attributes

(Copies are available online at http://www.asq.org or from the American Society for Quality, 600 North Plankinton Avenue, Milwaukee, WI 53203.)

ASTM INTERNATIONAL

ASTM D 1424 - Standard Test Methods for Tearing Strength of Fabrics by Falling Pendulum (Elmendorf) Type of Apparatus
ASTM D 3776 - Standard Test Methods for Mass per Unit Area (Weight) of Fabric
ASTM D 5034 - Standard Test Methods for Breaking Strength and Elongation of Textile Fabrics (Grab Test)
ASTM D 6413 - Standard Test Method for Flame Resistance of Textiles (Vertical Test)

(Copies of documents are available online at http://www.astm.org or from ASTM INTERNATIONAL, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.)

OTHER PUBLICATIONS

Repeat Insult Patch Test - Modified Draize Procedure –
Principles and Methods of Toxicology, (fourth edition), A Wallace Hayes (editor),
pp 1057 – 1060, 2001.

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

2.4 Order of precedence. Unless otherwise noted here 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 First article. When specified (see 6.2), a sample shall be subjected to first article inspection (see 6.3) in accordance with 4.2.

3.2 Standard sample. The finished flame resistant (FR) Patch (all Classes) shall match the standard sample for shade and appearance, and shall, unless otherwise indicated, be equal to or better than a standard sample with respect to all characteristics for which the standard sample is referenced (see 6.4).

3.3 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.

3.4 Materials.

3.4.1 Basic material (all Classes). The FR Patch shall be made of 1 basic fabric (see 3.4.1.1) coated with a pressure sensitive adhesive backing (see 3.4.1.2) and inserted into a waterproof bag (see 3.4.1.3).

3.4.1.1 Patch material (all Classes). The FR Patch cloth shall be woven flame resistant cloth and shall meet the requirements as specified in Table I, Table II, Table III, Table IV and the tests specified in 4.6. The cloth shall be Class 1, Universal Camouflage Pattern for the UCP uniforms and Class 2, Operation Enduring Freedom Camouflage Pattern for the OCP uniform or a camouflage pattern and uniform as specified in the contract or procuring documents.

3.4.1.2 Pressure sensitive adhesive coating. The pressure sensitive adhesive (PSA) shall be an acrylic copolymer base evenly applied to the back of the flame resistant patch for all Classes and shall not prevent the applied patch from meeting the requirements of Table IV. The PSA back coating shall be covered with an appropriate release liner.

3.4.1.3 Bag Material (all Classes).. The bag material shall be a thickness of 15 mils and shall be waterproof. The color shall be clear.

3.5 Color.

3.5.1 Labile sulfur. Dyes and compounds containing elementary sulfur capable of oxidation to sulfuric acid shall not be used.

3.5.2 Visual shade matching. The color and appearance of the cloths specified in 3.4.1 shall match the standard sample when tested as specified in 4.5.2.2.

3.5.3 Colorfastness. The finished cloth in 3.4.1.1 shall conform to the colorfastness requirements listed below in Table I and Table IA unless otherwise specified in the contract or procurement documents when tested as specified in 4.6.

TABLE I. Colorfastness requirements (Class 1 - Universal Camouflage Pattern)

	Laundering (3 cycles) 1/ (min.)	Light (20/40 hrs or 85/170 kJ) 2/ (min.)	Perspiration (Acid & Alkaline) 1/ (min.)	Crocking (Wet/Dry) 3/ (min.)
FR Patch cloth – All Colors	3	3-4 / 3	3	3/4

1/ Rated using AATCC Evaluation Procedure 1, Gray Scale for Color Change and AATCC Evaluation Procedure 2, Gray Scale for Staining.
2/ Rated using AATCC Evaluation Procedure 1, Gray Scale for Color Change
3/ Rated using AATCC Evaluation Procedure 8, AATCC 9 –Step Chromatic Transference Scale

TABLE IA. Colorfastness requirements (Class 2 - Operation Enduring Freedom Camouflage Pattern).

Colors Evaluation	Laundering (4 cycles) 1/,2/ (min.)	Light (40 hrs or 170 KJ) 2/, 3/ (min.)	Perspiration (acid & alkaline) 1/, 2/ (min.)	Crocking (Wet/Dry) 2/, 4/ (min.)
All colors	3-4		3-4	3.5
Dk. Green 528, Brown 529, Dark Brown530		3-4		
Cream 524, Tan 525, Pale Green 526, Olive 527		3		

1/ Rated using AATCC Evaluation Procedure 1, Gray Scale for Color Change and AATCC Evaluation Procedure 2, Gray Scale for Staining.
2/ For Operation Enduring Freedom Camouflage Pattern- all color evaluations shall be performed on the solid color area and not the tonal area.
3/ Rated using AATCC Evaluation Procedure 1, Gray Scale for Color Change
4/ Rated using AATCC Evaluation Procedure 8, AATCC 9-Step Chromatic Transference Scale.

3.6 Pattern execution (UCP, OCP or other camouflage pattern). The pattern on the printed finished cloth shall be reproducible to the standard sample in respect to design, colors and registration of the respective areas, and shall present definite sharp demarcations with a minimum of feathering or spew. Each pattern area shall show solid coverage for the UCP, and solid and tonal areas for the OCP; skitteriness exceeding that shown on the standard sample in any of the printed areas will not be acceptable. All visual evaluations on the OCP standard sample shall be performed on the solid color area and not the tonal areas. The pattern repeat for Class 1, Universal Camouflage Pattern shall be 36.00 inches (+1.25,-2.50). The pattern repeat for Class 2, Operation Enduring Freedom Camouflage Pattern shall be 25.225 inches (+1.25,-2.50).

3.7 Spectral reflectance. The reflectance values shall conform to the requirements listed below in Table II for Class 1 and Table IIA for Class 2 or another camouflage pattern as specified in the contract or procuring activity.

TABLE II. Infrared reflectance requirements (FR Patch Material) - Class 1, UCP

Reflectance values (percent %) Universal Camouflage Pattern						
Wavelength, Nanometers (nm)	Desert Sand 500		Urban Gray 501		Foliage Green 502	
	Min	Max	Min	Max	Min	Max
600	28	44	12	26	8	18
620	30	46	14	26	8	18
640	34	48	14	28	8	20
660	38	56	14	30	10	26
680	44	60	18	34	10	26
700	46	66	24	38	12	28
720	48	68	26	42	16	30
740	48	72	30	46	16	30
760	50	74	32	48	18	32
780	54	76	34	48	18	34
800	54	76	34	50	20	36
820	54	76	36	54	22	38
840	56	78	38	54	24	40
860	56	78	40	56	24	42

TABLE IIA. Infrared reflectance requirements (FR Patch Material) - Class 2, OCP

Reflectance values (percent %) Operation Enduring Freedom Camouflage Pattern 1/						
Wavelength, Nanometers (nm)	Cream 524 & Tan 525		Pale Green 526, Olive 527 and Brown 529		Dark Green 528 and Dark Brown 530	
	Min.	Max.	Min.	Max.	Min.	Max.
600	22	44	12	30	3	11
620	24	45	12	30	3	11
640	24	45	12	32	4	12
660	25	45	12	32	4	12
680	28	45	14	34	4	13
700	28	46	14	34	6	16
720	30	48	16	36	6	20
740	32	50	18	36	10	25
760	36	50	20	40	14	30
780	38	52	22	40	18	35
800	40	54	22	42	22	40
820	44	56	24	44	24	42
840	46	57	26	44	27	43
860	48	58	28	46	29	45

1/ All spectral reflectance evaluations shall be performed on the solid color area and not the tonal area.

3.8 Material and end item requirements.

3.8.1 Base material physical requirements. The base cloth (all Classes) (see 3.4.1.1) shall conform to the physical requirements listed in Table III, when tested as specified in 4.6.

TABLE III. Physical requirements - base fabric (all Classes)

Characteristic	Requirement
Weight (oz/yd^2)	
minimum	6.0
maximum	7.0
Tear Strength, pounds (min.)	
Warp	4.0
Fill	4.0
Breaking Strength, pounds (min)	
Warp	100
Fill	80
Dimensional Stability, % (max.)	
After 5 Cycles	
Warp	-5.0
Fill	-5.0

3.8.2 Flame resistance. The Patch cloth as specified in 3.4.1 shall be applied to flame resistant uniform cloth that conforms to GL/PD-07-12, Type I (all Classes) and shall be applied in accordance with the directions on the instruction card in the patch kit (see 3.10.1). The finished applied patch shall be tested for flame resistance in accordance with the test method in Table V and shall meet the requirements listed in Table IV.

TABLE IV. Flame resistance requirements (base fabric with applied patch) - all Classes

Characteristic	Requirement
Afterflame, (maximum seconds) 1/, 2/, 3/ Initial and after 25 laundering cycles	2
Afterglow, (maximum seconds) 1/, 2/, 3/ Initial and after 25 laundering cycles	25
Char length, (maximum inches) 1/, 2/ 3/ Initial and after 25 laundering cycles	5
Melting or Dripping (observation)	None

1/ Values are maximum average values tested in accordance with ASTM D 6413. Melt/drip on any sample constitutes a failure.
2/ 25 laundering cycles for base material required during First Article inspection and at the start of each new contract.
3/ Home launderings shall be conducted in accordance with AATCC Test Method 135 (1, V, Ai).

3.8.3 pH. The pH of the water extract of all cloths shall be a minimum of 5.0 and a maximum of 8.50 when tested as specified in 4.6.

3.8.4 Toxicity. The finished FR Patch (all Classes) and the waterproof bag shall not present a health hazard and shall show compatibility with prolonged, direct skin contact when tested as specified in 4.6.2. Chemicals recognized by the Environmental Protection Agency (EPA) as human carcinogens shall not be used.

3.8.5 End item requirements.

3.8.5.1 Waterproof bag. The sealed waterproof bag (with FR Patch (all Classes) and instructions enclosed) shall withstand 25 laundering cycles without leaking or damage to contents when tested as specified in Table V.

3.8.5.2 Applied patch. The patch (all Classes) when applied according to the directions enclosed in the patch kit shall withstand 10 launderings without delamination when tested as specified in Table V.

TABLE V. Component and end item testing - all Classes.

Characteristic	Requirement reference	Item tested	Test method
Visual Shade Matching	3.5.2	Component - material	4.5.2.2
Colorfastness:	3.5.3		
Laundering (after 3 cycles)	Tables I and IA	Component – material	AATCC 61, Test 2A
Light (after 20/40 hours or 85/170 KJ	Tables I and IA	Component – material	AATCC 16, Option 1 or 3
Perspiration (Acid and Alkaline)	Tables I and IA	Component – material	AATCC 15
Crocking (Wet and Dry)	Tables I and IA	Component – material	AATCC 8
Spectral reflectance	3.7, Tables II and IIA	Component - material	4.6.1
Weight (Base fabric)	3.8.1, Table III	Component – material	ASTM D 3776
Tear Strength	3.8.1, Table III	Component - material	ASTM D 1424

TABLE V. Component and end item testing - all Classes.- Continued

Characteristic	Requirement reference	Item tested	Test method
Breaking Strength	3.8.1, Table III	Component - material	ASTM D 5034 (G-E or G-T)
Dimensional Stability	3.8.1, Table III	Component - material	AATCC 135, (1, V, Ai)
Flame Resistance	3.8.2		
Initial	Table IV	Component – material	ASTM D 6413
after 25 launderings	Table IV	Component – material	AATCC 135 (1, V, Ai), & ASTM D 6413
Initial	Table IV	End item – applied patch	ASTM D 6413
pH	3.8.3	Component – material	AATCC 81
Toxicity	3.8.4	Component – bag & End item applied patch	4.6.2
Waterproof testing on bag	3.8.5.1	Component-Bag with FR Patch enclosed	Visual
Laundering durability of applied patch (after 10 launderings)	3.8.5.2	End item applied patch	AATCC 135 (1, V, Ai)

3.9 Design and construction (all Classes). The patch shall be a die cut square with rounded corners of the base material (see 3.4.1.1) and have a pressure sensitive adhesive (see 3.4.1.2) applied to the back side. The finished patch shall be packaged in a clear waterproof bag with square corners (see 3.4.1.3) with the specified camouflage visible on one side and the application instructions/ directions visible on the other side unless otherwise specified in the contract or solicitation (see Figure 2). The finished FR Patch in the sealed waterproof bag shall lay flat in the bag with no visible tears, or foreign matter present.

3.9.1 Finished measurements. The patch and waterproof bag shall conform to the finished measurements specified in Table VI. The release liner shall be slightly larger than the finished dimensions of the FR Patch as specified in Table VI.

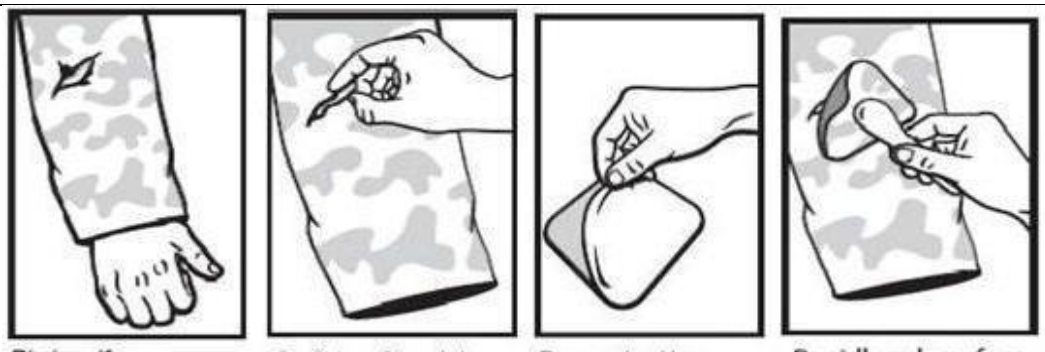
TABLE VI. Finished measurements (inches)

Item	Size	Direction	Dimension (inches)	Tolerance (inches)
FR Patch (all Classes)	S	Length Width	4 4	±1/8 ±1/8
	R	Length Width	4 3	±1/8 ±1/8
Waterproof Bag	S	Length Width	5-3/4 5-1/4	±1/4 ±1/4
	R	Length Width	5-3/4 4-1/4	±1/4 ±1/4

3.10 Components.

3.10.1 Labels and instructions. The FR Patch Instruction Card shall be the same size and shape as the FR Patch and shall be included behind the FR Patch (all Classes and sizes) within the sealed bag as specified in 3.4.1.3. The basic design in Figure 1 below shall be followed for the instruction card.

Manufacturers Information



TEAM SOLDIER CERTIFIED GEAR
U.S.ARMY

This product meets the manufacturing and performance testing requirements as authorized by the Program Executive Office - Soldier
Authorization Number xxxx
NSN Number xxxxxxxxxxxxx.
This product is produced under Government contract.

FIGURE 1. Patch kit, integrated, flame resistant (IPK) instruction card – all Classes

3.10.1.1 Figure. Figures 1 and 2 are furnished for informational purposes only. If there are any inconsistencies between the written document and the figures, the written document shall control.

3.10.2 Barcoding. Bar codes (if applicable) shall be as specified in the solicitation and/or contract (see 6.2).

3.11 Workmanship. The waterproof bag containing the FR patch (all Classes) shall be inserted in the specified pocket of the specified end item unless otherwise specified in the contract or solicitation and shall be uniform in quality and free from irregularities or defects as listed in 4.5.2.1 which could adversely affect performance, reliability or durability.

4. VERIFICATION

4.1 Classification of inspection. The inspection requirements specified herein are classified as follows:

a. First article inspection (see 4.2).
b. Conformance inspection (see 4.3)

4.2 First article inspection. A first article, submitted in accordance with 3.1, shall be inspected, examined for appearance, color and finished defects as specified in 4.5 and tested for the characteristics as specified in 4.6.

4.3 Conformance inspection. Conformance inspection shall include the examination of 4.5 and the tests of Table V and 4.6.1 through 4.6.2 as specified in 6.2. Sampling for inspection shall be performed in accordance with ANSI/ASQ Z1.4 and with acceptance quality limits as specified in the contract and/or order, except where otherwise indicated (see 6.2).

4.4 Inspection conditions. Unless otherwise specified, all inspections shall be performed in accordance with all the requirements of referenced documents, unless otherwise excluded, amended, modified or qualified in this specification or applicable procurement documents (see 6.2).

4.5 Examination.

4.5.1 End item examination. The finished examination sample size, acceptance quality limits and acceptance criteria shall be specified in the solicitation or contract (see 6.2).

4.5.2 End item visual examination. Each FR patch (all Classes) shall be subjected to visual examination. All defects as listed below shall be scored in accordance with 4.5.2.1 and Table VII which are clearly noticeable at normal viewing and affect serviceability and appearance. Material defects are defined in Section 1 of FED-STD-4. If needed, closer inspection will be performed to verify compliance to specification requirements. Shade shall be evaluated at a distance of 3 feet.

4.5.2.1 Demerit points. Demerit points shall be assigned as follows:

For defects up to 3 inches in any dimension	- one point
For defects exceeding 3 inches, but not exceeding 6 inches in any dimension	- two points

The following defects, when present, shall be scored four points for each finished patch:

Objectionable odor
Overall uncleanness
Uneven weaving throughout
Pattern design not equal to the standard sample
Incorrect color in any part of the pattern
Pattern repeat not equal to the standard sample
Skitteriness (mottled, uneven color) of pattern exceeds that shown by the standard sample
Excessive feathering or spew (fuzziness at color boundaries) of pattern as compared to the standard sample
Excessive grinning (off register, gap where ground shade shows through) of pattern as compared to the standard sample
Excessive haloing or trapping (overlapping of colors) of pattern as compared to standard sample

TABLE VI . FR Patch Kit, Integrated visual examination

Examination	**Defect**	**Classification** **Major**	**Minor**
Material	Incorrect, not as specified (see 3.3.1 and 3.3.1.1) Hole, cut, tear, run, thin place, dye streak, color not as specified, misweave visible mends.	101 102	
Cleanness	Spot/stain more than 1/4 inch, odor, affecting appearance or serviceability	103	201
Release liner	Omitted, incorrect or damaged. Not as specified		
Instruction card	Omitted, incorrect, illegible, not where specified Bar code/UPC code omitted (if applicable), not readable by scanner;	104 105	
Patch Kit Integrated (IPK)	Patch material or adhesive backing damaged Puncture in waterproof bag Patch or packaging not as specified herein or in accordance with the contract or purchase order Patch or packaging not serving intended purpose	106 107 108	202

4.5.2.2 Visual shade matching. The color and appearance of the cloth utilized in the finished FR patch (all classes) shall match the standard sample using the AATCC Evaluation Procedure 9, Option A or C, with sources simulating artificial daylight D75 illuminant with a color temperature of 7500 (± 200)°K illumination of 100 (± 20) foot candles, and shall be a good match to the standard sample under incandescent lamplight at 2856 (± 200)°K.

NOTE: For Operation Enduring Freedom Camouflage Pattern all visual evaluations shall be performed on the solid color area and not the tonal area.

4.5.3 End item dimensional examination. The FR patch (all Classes) in its sealed bag shall be examined for conformance to the finished measurement requirements as specified in 3.9.1. When a measurement deviates from a dimension and tolerance specified it shall be scored as a defect.

4.6 Component and end item testing. Component and end item testing for all Classes shall be as specified in Table V and 4.6.1 and 4.6.2.

4.6.1 Spectral reflectance (all Classes). Spectral reflectance data shall be obtained from 600 to 860 nanometers (nm) at 20 nm intervals on a spectrophotometer relative to the barium sulfate standard, the preferred white standard. Other white reference materials may be used provided they are calibrated to absolute white, e.g. magnesium oxide or vitrolite tiles. The spectral band width shall be less than 26 nm at 860 nm. Reflectance measurements shall be made by either the monochromatic or polychromatic mode of operation. When the polychromatic mode of operation is used, the spectrophotometer shall operate with the specimen diffusely illuminated with the full emission of a continuous source that simulates either CIE Source A or CIE Source D65. Photometric accuracy of the spectrophotometer shall be within 1 percent and wavelength accuracy within 2 nm. The diameter for standard aperture size used in the color measurement device shall be 0.3725 inches or larger for the Universal camouflage pattern and Operation Enduring Freedom Camouflage Pattern or as specified for other camouflage patterns specified in the contract or procuring documents (see 6.2). Any color having spectral reflectance values falling outside the limits at four or more of the wavelengths specified shall be considered a test failure.

4.6.1.1 Spectral reflectance (Camouflage patterns as specified). The spectral reflectance values of other camouflage patterns shall be as specified in the contract or procuring documents.

4.6.2 Toxicity test. 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 patch 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 3.8.4) can be demonstrated with historical use data, toxicity testing may not be required (see 6.2).

5. PACKAGING.

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activities within the Military Department or Defense Agency, or within the military service's system commands. 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 Intended use. The patch is intended to be used by military personnel in the United States Army as a means to make field expedient repairs in a field environment to their flame resistant uniforms: Army Combat Uniform (FR-ACU), Air Crewman Combat Uniform (A2CU) and Improved Combat Vehicle Crewman Coverall (ICVC).

6.2 Acquisition requirements. Acquisition documents should specify the following:

a. Title, number and date of this document.
b. Class and size required (see 1.2)
c. The specific issue of individual documents referenced (see 2.1 - 2.3)
d. When first article sample is required (see 3.1, 4.2, 6.3)
e. Color required (3.4.1.1, 3.4.1.2, 3.4.1.3)
f. Camouflage pattern drawing (as applicable) (see 3.6)
g. When toxicity testing is required (see 3.8.4)
h. When barcoding (if applicable) is required (see 3.10.3)
i. Conformance inspection acceptance quality limits (see 4.3)
j. Inspection Conditions (see 4.4 & 4.5)
k. Packaging requirements (see 5.1)

6.3 First article. When a first article inspection is required (see 3.1), it will be inspected and approved under the appropriate provisions of FAR 52.209-4. The first article should be a preproduction sample. The contracting officer should specify the appropriate type of first article and the number of units to be furnished. The contracting officer should include specific instructions in acquisition documents regarding arrangements for selection, inspection, and approval of the first article.

6.4 Standard sample. For access to samples and pattern drawings, address the contracting activity issuing the invitation for bids or request for proposal.

6.5 Material sources. As listed below or equivalent performance

6.5.1 Finished Patch Kit. Source One Distributors, 3125 Fortune Way, Suite 1, Wellington, FL 33414

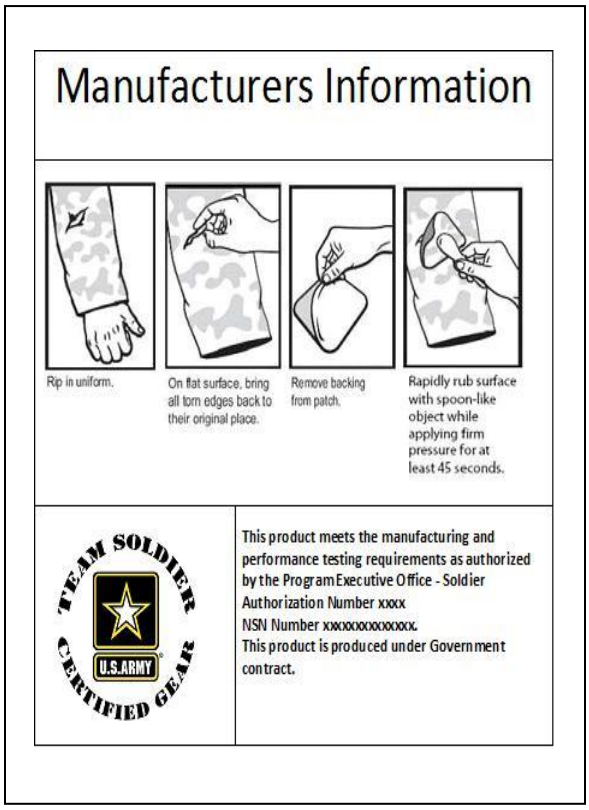
6.6 Operation Enduring Freedom Camouflage Pattern (OCP). Operation Enduring Freedom Camouflage Pattern (OCP) has previously been referred to as MultiCam® Camouflage pattern.

6.7 Subject term keyword listing:

Air Crewman Combat Uniform (A2CU)
Army Combat Uniform (ACU)
Camouflage clothing
Improved Combat Vehicle Crewman Coverall (ICVC).
Operation Enduring Freedom Camouflage Pattern (OCP)
Pressure sensitive adhesive
Repair
Universal Camouflage Pattern (UCP)

FIGURE 2. Patch kit, integrated, flame resistant (IPK)

Front view



Back view

Custodian:
Army-GL

Preparing Activity:
Army - GL