

UU-T-81J
October 1, 1975
~~SUPERSEDING~~
Fed. Spec. UU-T-81H
May 15, 1967

FEDERAL SPECIFICATION
TAGS, SHIPPING AND STOCK

This specification was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers three types of shipping tags and one type of stock tag.

1.2 Types, classes and styles. The tags covered by this specification shall be of the following types and classes, as specified (see 6.2):

- Type A - Shipping tags, cloth.
- Type B - Shipping tags, paper.
- Type C - Stock tags, paper, circular.
 - Class 1 - Metal bound
 - Class 2 - Not metal bound.
- Type D - Shipping tags, spunbonded olefin.

1.3 Grades. Types A, B, C and D tags shall be of the grades indicated in tables I, II, III, and IV respectively, as specified (see 6.2).

1.4 Sizes. Tags shall be of the sizes in 3.2.4, 3.3.4, 3.4.4 and 3.5.4 for the respective types, as specified (see 6.2).

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:

Federal Specifications:

- TT-1-563 - Ink, Writing, for Fountain and Dip Pens.
- PPP-B-566 - Boxes, Folding, Paperboard.
- PPP-B-636 - Boxes, Shipping, Fiberboard.
- PPP-B-676 - Boxes, Setup.

Federal Standards:

- Fed. Std. No. 123 - Marking for Shipment (Civil Agencies).
- Fed. Test Method Std. No. 191 - Textile Test Methods.

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

(Single copies of this specification and other Federal Specifications required by activities outside the Federal Government for bidding purposes are available without charge from Business Service Centers at the General Services Administration Regional Offices in Boston, New York, Washington, DC, Atlanta, Chicago, Kansas City, MO, Fort Worth, Denver, San Francisco, Los Angeles, and Seattle, WA.

UU-T-81J

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.)

Military Standards:

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-129 - Marking for Shipment and Storage.

(Copies of Military Specifications and Standards required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless a specific issue is identified, the issue in effect on date of invitation for bids or request for proposal shall apply.

Technical Association of the Pulp and Paper Industry (TAPPI) Publication:

T401 - Fiber Analysis of Paper and Paperboard.
T403 - Bursting Strength of Paper.
T410 - Weight Per Unit Area (Basis Weight or Substance) of Paper and Paperboard.
T411 - Thickness (Caliper) of Paper and Paperboard.
T414 - Internal Tearing Resistance of Paper.
T456 - Wet Tensile Breaking Strength of Paper and Paperboard.

(Application for copies should be addressed to the Technical Association of the Pulp and Paper Industry, One Dunwoody Park, Atlanta, GA 30341.)

National Motor Freight Traffic Association, Inc., Agent:

National Motor Freight Classification.

(Application for copies should be addressed to the American Trucking Associations, Inc., Tariff Order Section, 1616 P Street, N.W., Washington, DC 20036.)

Uniform Classification Committee, Agent:

Uniform Freight Classification.

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

3. REQUIREMENTS

3.1 Standard sample. The types A, B and D tags furnished under this specification shall be comparable in cleanliness and color with the standard comparison sample furnished for bid or request for proposal (see 6.3). Type A tags furnished under this specification shall also be comparable as to fill and sizing with the standard comparison sample.

3.2 Type A, cloth shipping tags.

3.2.1 Materials, type A.

3.2.1.1 Tags, type A. Type A shipping tags shall be cloth (see 3.2.2).

3.2.1.2 Patch, type A. The patch shall be made from 100 percent chemical woodpulp when tested as specified in 4.2.1.1 and shall have a $7/32 \pm 1/32$ inch diameter hole. The edge of the hole shall be not less than $5/32$ inch from the edge of the patch in any direction. The thickness of the patch shall be not less than 0.010 inch.

UU-T-81J

3.2.1.3 Wire, type A. When applicable, the wire shall be .025 inch diameter tag wire. The wire shall be tinned, annealed, or galvanized at the supplier's option.

3.2.1.4 Twine, type A. When applicable, the twine shall be either a polished cotton or a natural color synthetic, at the supplier's option, and shall conform to the requirements specified in 3.2.1.4.1 or 3.2.1.4.2, as applicable.

3.2.1.4.1 Cotton, type A. Polished cotton twine shall be 6 ply and shall have a minimum breaking strength of 13.0 pounds and a minimum length of 1050 yards per pound when tested, as specified in 4.2.1.1.

3.2.1.4.2 Synthetic fiber, type A. Synthetic fiber twine shall be 3 ply, each ply composed of two ends each, and shall have a minimum breaking strength of 20.0 pounds and a minimum length of 1100 yards per pound when tested, as specified in 4.2.1.1.

3.2.2 Physical requirements, type A. Type A tags shall conform to the physical requirements in table I for the applicable grade when tested, as specified in 4.2.1.1.

TABLE I. Physical requirements of type A tags

Grade designation	Thickness		Finished threads per inch, not less than (warp by filling)	Tearing resistance each direction, minimum, grams
	Minimum Inch	Maximum Inch		
No. 2 cloth	0.0080	0.0095	47 by 40	400
No. 3 cloth	0.0060	0.0080	55 by 50	350

3.2.3 Construction, type A. Type A shipping tags shall have a hole with the center located no more than $3/4$ inch from the tying end of the tag. The hole shall have a diameter of $7/32 + 1/32$ inch and shall be centered $\pm 1/16$ inch between the long edges of the tag. The hole shall be reinforced with patches firmly applied to each surface and further reinforced with a metal eyelet. The tags shall have clipped corners at the tying end. When specified, the tags shall be strung with not less than 12 inches of either tag wire or twine, as specified (see 6.2).

3.2.4 Sizes, type A. Type A tags shall be furnished in the following sizes, as specified (see 6.2), with a $\pm 1/16$ inch tolerance.

Size No.	Inches
1	2-3/4 by 1-3/8
2	3-1/4 by 1-5/8
3	3-3/4 by 1-7/8
4	4-1/4 by 2-1/8
5	4-3/4 by 2-3/8
6	5-1/4 by 2-5/8
7	5-3/4 by 2-7/8
8	6-1/4 by 3-1/8

3.2.5 Color, type A. Type A, grade No. 2 tags shall be white. Grade No. 3 tags shall be white, red, green, blue, or yellow, as specified (see 6.2) and shall conform in color to the standard comparison sample (see 3.1).

3.3 Type B.

3.3.1 Materials, type B.

3.3.1.1 Tags, type B. Type B shipping tags shall be made of paper. The fiber content of paper tags shall conform to the requirements in table II for the applicable grade when tested as specified in 4.2.1.1. All grades except 20 R and 15 R shall contain reclaimed fibers derived from one or more sources listed in 6.5. The percentage of reclaimed fibers shall be as specified (see 6.2).

TU-T-81J

TABLE II. Fiber content and physical requirements of type B tags

Grade designation	Fiber content	Basis weight			Wet tensile strength, when specified, cross direction (minimum) (Kilograms/15mm)
		Thickness (tolerance + 5 percent) (Inches)	22-1/2 by 28-1/2 inches, 500 sheets (tolerance + 5 percent) (Pounds)	Tearing resistance, total of both directions (minimum) (Grams)	
20 R	Not less than 50 percent rope fiber; remainder free from groundwood pulp.	.020	200	1,900	10.0
15 R	Not less than 50 percent rope fiber; remainder free from groundwood pulp.	.015	150	1,430	8.0
20 SU 1/	100 percent chemical wood pulp	.020	200	1,130	6.2
15 SU	100 percent chemical wood pulp	.015	150	850	5.0
13 SU	100 percent chemical wood pulp	.013	130	610	-
10 SU	100 percent chemical wood pulp	.010	100	460	-

Coated stocks, white and colored (type B tags)						
Grade designation	Fiber content	Thickness		Basis weight, 22-1/2 by 28-1/2 inches - 500 sheets		Tearing resistance total of both directions (Minimum) (Grams)
		Minimum (Inch)	Maximum (Inch)	Minimum (Pounds)	Maximum (Pounds)	
20 CSU 1/	100 percent bleached chemical wood pulp, coated.	.020	.022	200	240	1,130
15 CSU	100 percent bleached chemical wood pulp, coated.	.015	.017	150	190	850
13 CSU	100 percent bleached chemical wood pulp, coated.	.013	.015	130	170	610

1/ + 12-1/2 for thickness and weight.

UU-T-81J

3.3.1.2 Patch, type B. The patch shall be as specified in 3.2.1.2.

3.3.1.3 Wire, type B. When applicable, the wire shall be 0.018 inch diameter tag wire for tags having tearing resistance less than that of 15 SU grade and 0.025 inch diameter tag wire for tags having tearing resistance equivalent to or greater than that of 15 SU grade. The tag wire shall be tinned, annealed, or galvanized at the supplier's option.

3.3.1.4 Twine, type B. When applicable, for tags of tearing resistance less than that of 15 SU grade, strings shall be as specified in 3.2.1.4.1 or 3.2.1.4.2, at the supplier's option. For tags of tearing resistance equivalent to or greater than that of 15 SU grade, the twine shall be either a natural color synthetic fiber or a polished cotton, at the supplier's option, and shall conform to the requirements specified in 3.2.1.4.2 or 3.3.1.4.1, as applicable.

3.3.1.4.1 Cotton, type B. The polished cotton twine shall be 8 ply and shall have a minimum breaking strength of 16.0 pounds and a minimum length of 750 yards per pound when tested as specified in 4.2.1.1.

3.3.2 Physical requirements, type B. Type B tags shall conform to the requirements in table II when tested as specified in 4.2.1.1.

3.3.2.1 Wet tensile strength, type B. When specified (see 6.2), type B tags shall have the minimum wet tensile strength in the cross direction indicated in table II.

3.3.3 Construction, type B. Type B shipping tags shall have a hole with its center no more than 3/4 inch from the tying end. The hole shall have a diameter of $7/32 \pm 1/32$ inch and shall be centered $\pm 1/16$ inch between the long edges of the tag. The hole shall be reinforced with a patch firmly attached to each surface and may or may not have a metal eyelet, as specified (see 6.2). The adhesion of patches on type B tags, with or without metal eyelets, shall be such that, when dry, the patches cannot be removed without breaking them apart or tearing the surface of the tag when tested as specified in 4.3.2. The tags shall have clipped corners at the tying end. When specified, type B tags shall be strung with not less than 12 inches of wire (see 3.3.1.3) or twine (see 3.3.1.4), as specified (see 6.2).

3.3.4 Sizes, type B. Type B tags shall be furnished in the sizes indicated in 3.2.4, as specified (see 6.2).

3.3.5 Color, type B. Uncoated type B tags shall be manila; coated type B tags shall be white, yellow, red, blue, or green, as specified (see 6.2) and shall conform in color to the standard comparison sample.

3.4 Type C.

3.4.1 Materials, type C.

3.4.1.1 Tags, type C. Type C stock tags shall be made from paper. Class 1 tags shall be chemical wood pulp, and reclaimed fibers derived from one or more sources listed in 6.5. The percentage of reclaimed fibers shall be as specified (see 6.2). Colored class 1 tags shall be made of 20 CSU; white tags shall be from 20 CSU or 20 SU white bleached manila at the supplier's option. Class 2 tags shall be made from 20 VF vulcanized fiber.

3.4.1.2 Binding, type C. Class 1 tags shall have a metal binding of commercial quality; class 2 tags shall be without metal binder.

3.4.1.3 Twine, type C. The twine shall be minimum 3 ply rayon or polished cotton twine, having a minimum breaking strength of 9 pounds and a minimum length of 1,050 yards per pound. The twine shall be passed through the tag hole and knotted at the ends.

3.4.2 Physical requirements, type C. Type C tags shall conform to the requirements in table III for the applicable class and grade when tested as specified in 4.2.1.1.

OU-T-81J

TABLE III. Physical requirements of type C tags

Class	Thickness		Basis weight, 22-1/2 x 28-1/2 inches, 500 sheets		Bursting strength, minimum Points
	Min. Inch	Max. Inch	Min. Pounds	Max.	
1	0.019	0.022	190	240	155
2	0.018	0.022	280	310	280

3.4.3 Stringing, type C. Type C stock tags shall be strung with 9 or 12 inches of twine, as specified (see 6.2).

3.4.4 Sizes, type C. Type C, style I, classes 1 and 2 tags shall be 11/16, 15/16 inch, 1-1/4, 1-9/16, 1-7/8, and 2-1/4 inches in diameter, as specified. A tolerance of $\pm 1/16$ inch shall be permitted.

3.4.5 Colors, type C. Type C tags shall be white or light (white) manila color, yellow, red, blue or green for class 1 tags and white or pearl for class 2 tags, as specified (see 6.2), and shall conform in color to the standard comparison sample (see 3.1).

3.5 Type D, spunbonded olefin shipping tags.

3.5.1 Materials, type D.

3.5.1.1 Tags, type D. Type D shipping tags shall be made of 100 percent spunbonded olefin (see 6.2).

3.5.1.2 Patch, type D. The patch shall be as specified in 3.2.1.2.

3.5.1.3 Wire, type D. The wire shall be as specified in 3.2.1.3.

3.5.1.4 Twine, type D. The twine shall be as specified in 3.2.1.4.

3.5.2 Physical requirements, type D. Type D tags shall conform to the physical requirements in table IV for the applicable grade when tested as specified in 4.2.1.1.

TABLE IV. Physical requirements for type D tags

Grade designation	Weight	Nominal thickness inch	Tearing resistance
	22-1/2 x 28-1/2-500 (Average) pounds		total both directions (minimum) grams
8 SBO	33 \pm 5%	.008	730
9 SBO	45 \pm 5%	.009	770

3.5.3 Construction, type D. Type D shipping tags shall have a hole with a center located no more than 3/4 inch from the tying end of the tag. The hole shall have a diameter of $7/32 \pm 1/32$ inch and shall be centered $\pm 1/16$ inch between the long edges of the tag. The hole shall be reinforced with patches firmly applied to each surface and further reinforced with a metal eyelet. The tags shall have clipped corners at the tying end. When specified, the tags shall be strung with not less than 12 inches of either tag wire or twine, as specified (see 6.2).

3.5.4 Sizes. Type D tags shall be furnished in the sizes indicated in 3.2.4, as specified (see 6.2).

3.5.5 Color. Type D tags shall be natural white, or coated white, yellow, red, blue or green as specified (see 6.2) and shall conform in color to the standard comparison sample.

UU-T-81J

3.6 Color bleeding and fading. Types B and C colored tags shall not bleed when immersed for 5 minutes in distilled water at $23^{\circ} \pm 2^{\circ}\text{C}$., nor fade when dried after immersion when tested as specified in 4.3.2.

3.7 Curl. Tags having a curl produced in the course of manufacture which cannot be straightened shall not be acceptable.

3.8 Surface. Tags shall have a good printing and writing surface and shall show no feathering when tested as specified in 4.3.2.

3.9 Workmanship. Tags shall be clean, free from holes, wrinkles, creases, dirt, oil, and wax spots. Unbound tags shall have clean cut edges.

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 that 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 in accordance with the provisions of MIL-STD-105, except where otherwise indicated hereinafter.

4.2.1 Inspection of materials and components. In accordance with 4.1 above, components and materials shall be inspected and tested in accordance with all the requirements of referenced specifications, drawings, and standards unless otherwise excluded, amended, or qualified in this specification or applicable purchase documents.

4.2.1.1 Testing of components. The component materials shall be tested for the applicable characteristics in table V. The lot size for determining the sample size shall be expressed in units of one thousand square feet of paper for the paper component, one hundred square yards of cloth for the cloth component, one hundred square yards of spunbonded olefin for the spunbonded olefin component, one thousand lineal feet of twine for the twine component, and 100 square feet of patch material for the patch component. The test sample unit shall be ten randomly selected pieces of paper tag component each with an area of 100 square inches, two pieces of the cloth tag component with an area of 36 square inches, two pieces of the spunbonded olefin component with an area of 36 square inches, five 30 yard pieces of the twine component, and two pieces of the patch component, with an area of 36 square inches, as applicable. No more than one sample unit shall be taken from the same unit package when practicable. Failure to meet specific requirements shall result in rejection of the lot. The sample size shall be level S-1. The lot shall be unacceptable if one or more sample units fail to meet any test requirement specified or the composite fails in any test. When applicable, the supplier shall submit to the contracting officer or his authorized representative a certificate of compliance certifying that the tag wire was tinned, annealed, or galvanized.

UU-7 913

TABLE V. Testing of components

Characteristic	Specification Requirement	Reference Test method	Requirements applicable to		Number of determinations per sample unit	Results reported as numerically to nearest
			Comp.	Samp. unit		
Cloth component (type A tags):						
Thickness	Table I	5030*	X		5	0.0001 inch
Thread count (warp by filling)	Table I	5050*	X		5	thread
Tearing resistance					per direction	
Warp	Table I	5132*	X		5	0.1 gram
Pilling	Table I	5132*	X		5	0.1 gram
Paper component (type B tags):						
Fiber content (stock)	Table II	T401**2/	X		2 on composite	5 percent
Thickness	Table II	T411**	X		10	0.0001 inch
Basis weight (22-1/2 by 28-1/2 - 500)	Table II	T410**	X		1	pound
Tearing resistance (total of both directions)	Table II	T414**	X		10 (5 per direction)	gram
Tensile strength, wet,	Table II	T456**	X		10	0.1 kg/15 mm
Spunbonded olefin component (type D tags):						
Thickness	Table IV	5030*	X		5	0.0001 inch
Tearing resistance (total of both directions)	Table IV	5132*	X		10 (5 per direction)	gram
Type C tags:						
Fiber content (stock)						
Class 1	3.5.1	T401 *2/	X		2 on composite	5 percent
Class 2	3.5.1	T401 *2/	X		2 on composite	5 percent

TABLE V. Testing of components (cont'd)

TABLE V. Testing of components (cont'd)					
Characteristic	Specification reference Requirement	Requirements applicable to determinations		Number per sample unit	Results reported as numerically to nearest
		Comp. Test method	Samp. aver. unit		
Type C tags (cont'd):					
Thickness	Table III	T411**	X	10	0.0001 inch
Basic weight (22-1/2 by 28-1/2-500)	Table III	T410**	X	.1	pound
Bursting strength	Table III	T403**	X	10 (5 each side)	point
Patch component:					
Thickness:					
Type A	3.2.1.2	T411**	X	4	0.0001 inch
Type B	3.2.1.2	T411**	X	4	0.0001 inch
Type D	3.2.1.2	T411**	X	4	0.0001 inch
Fiber content:					
Type A	3.2.1.2	T401**2/	X	2 on composite	5 percent
Type B	3.2.1.2	T401**2/	X	2 on composite	5 percent
Type D	3.2.1.2	T401**2/	X	2 on composite	5 percent
Twine component:					
Type A, B and D tags with tearing strength: less than grade 15 SU:					
Tensile strength:					
Cotton	3.2.1.4.1	4102 *	X	10	0.5 pound
Synthetic	3.2.1.4.2	4102 *	X	10	0.5 pound

UU-T-01J

UU-7-813

TABLE V. Testing of components (cont'd)

Characteristic	Specification reference		Requirements applicable to		Number of determinations per sample	Results reported as numerically to nearest
	Requirement	Test method	Comp. aver.	Samp. unit		
Length per pound:						
Cotton	3.2.1.4.1	4010 *	X		5	yard
Synthetic	3.2.1.4.2	4010 *	X		5	yard
Type B tags with tearing strength equal to or greater than grade 15 SU:						
Tensile strength:						
Cotton	3.3.1.4.1	4102 *	X		10	0.5 pound
Synthetic	3.2.1.4.2	4102 *	X		10	0.5 pound
Length per pound:						
Cotton	3.3.1.4.1	4010 *	X		5	yard
Synthetic	3.2.1.4.2	4010 *	X		5	yard
Type C:						
Tensile Strength	3.4.1.3	4102 *	X		10	0.5 pound
Length per pound	3.4.1.3	4010 *	X		5	yard

* Indicates test method of Fed. Test Method Std. No. 191.

** Indicates test method of TAPPI.

1/ Test specimens shall be immersed for not less than 24 hours in distilled water at $20^{\circ} \pm 2^{\circ}\text{C}$ prior to testing.

2/ Composite shall be made by mixing small pieces selected from all sample units.

UU-T-81J

4.3 Inspection of the end item.

4.3.1 Examination of the end item. The end item shall be examined for the defects set forth in the applicable subparagraphs at the inspection levels and the acceptable quality levels in 4.3.1.5. Random samples shall be drawn from each lot of end items for examination of visual, dimensional, count, and preparation for delivery defects. The lot size, for purposes of determining the sample size in accordance with MIL-STD-105, shall be expressed in units of boxes of 500 or 1000 tags for examinations under 4.3.1.1, 4.3.1.2, and 4.3.1.3 and in units of shipping containers in the end item inspection lot for examination under 4.3.1.4.

4.3.1.1 Examination for defects in appearance, workmanship, and construction. The sample unit for this examination shall be one tag randomly selected from each sample box of tags. Both sides of the tag shall be examined for the defects listed in table VI. Not more than one sample unit shall be taken from the same box.

TABLE VI. Visual examination defects

Examine	Defect
Material	
Type A	Not cloth
Type B and C	Not paper
Type D	Not spunbonded olefin
Color and cleanliness	Not color specified Does not compare favorably to standard sample
Coating (when applicable)	Any spot, streak or other uncoated area Not uniform
Curl	Tag cannot be flattened manually
Workmanship	Any hole (other than required hole for stringing), tear cut, puncture, crease, fold, crack or delamination Any ragged, uneven or crushed edge
Clipping of corners (types A, B and D)	Corners at tying ends not clipped
Patches (types A, B and D)	Not present on both sides of tag Not firmly affixed Not reinforced with a metal eyelet (mandatory for type A, and D and when specified for type B) Hole missing or not approximately centered in patch Torn, cut, distorted, mutilated
Binding (type C)	Metal binding missing from class 1 tags Metal binding present on class 2 tags Metal binding corroded, crushed, mutilated or not firmly affixed
Stringing Types A, B and D when specified	Missing Not inserted through tag hole Not wire or twine as specified Length of string less than 12 inches Cotton twine not 6 ply (for type A and D tags and type B tags with tearing resistance less than grade 15 SU) Cotton twine not 8 ply (for type B tags with tear resistance equivalent to or greater than grade 15 SU) Synthetic twine not 3 ply Not two ends each for each ply of synthetic twine
Type C	Not 3 ply polished cotton or rayon twine String not knotted at ends Knot loose Length of string less than 9 or 12 inches, as specified

UU-T-81J

4.3.1.2 Dimensional examination. The sample unit for this examination shall be one tag randomly selected from each sample box of tags. The sample unit shall be examined for the defects listed in table VII. Not more than one sample unit shall be taken from the same box.

TABLE VII. Dimensional examination defects

Examine	Defect
Size of tag	Varies from specified size by more than 1/16 inch in any dimension (length, width or diameter as required)
Hole (types A, B and D only)	
Centering	Off center by more than 1/16 inch
Diameter of hole	More than 1/4 inch Less than 3/16 inch
Hole position	Center of hole located more than 3/4 inch from tying end Any point on circumference of hole less than 3/16 inch from nearest edge of patch
Narrowest dimension of patch (measure thru center of hole)	Less than 9/16 inch
Wire gauge, when applicable	Wire diameter less than specified for the applicable type and grade

4.3.1.3 Examination for average count. The sample unit for this examination shall be one intermediate package. The quantity of unit packages per intermediate package and the quantity of tags in one unit package from the sample package shall be counted. The lot shall be unacceptable if the average number of tags per unit package or unit packages per intermediate package for all sample units examined is less than the specified or indicated quantity (see 5.1).

4.3.1.4 Examination of preparation for delivery requirements. An examination shall be made to determine whether the packaging, packing, and marking complies with the section 5 requirements. Defects shall be scored in accordance with the list below. The sample unit shall be one shipping container fully prepared for delivery except that it need not be closed. The lot size shall be the number of shipping containers in the end item inspection lot.

Examine	Defect
Marking (exterior and interior)	Omitted, incorrect, illegible, of improper size, sequence or method of application.
Materials	Any component missing, damaged or not as specified.
Workmanship	Bulged or distorted containers.
Weight	Weight of contents per shipping container is more than required.

4.3.1.4.1 Examination of intermediate package. When intermediate packages are required to comply with PPP-B-566 or PPP-B-676, examination for defects in the closure shall be in accordance with the appendix of the applicable specification.

4.3.1.4.2 Examination of shipping container. When shipping containers are required to comply with PPP-B-636, examination for defects in the closure, water-proofing and reinforcing shall be in accordance with the appendix of PPP-B-636

4.3.1.5 Inspection levels and acceptable quality levels (AQL's) for examination. The inspection levels for determining the sample size and acceptable quality levels (AQL's) expressed in defects per 100 units shall be as follows:

UU-T-81J

<u>Paragraph</u>	<u>Inspection levels</u>	<u>AQL's</u>
4.3.1.1	I	2.5
4.3.1.2	S-2	2.5
4.3.1.3	S-2	NA
4.3.1.4	S-1	2.5

4.3.2 Testing of the end item. The end item shall be tested for the characteristics in table VIII for each lot of material. The sample unit shall be ten tags randomly selected from each sample intermediate package. No more than one sample unit shall be drawn from the same intermediate package. The sample size shall be level S-1. All test reports shall contain the individual values utilized in expressing the final results. The lot shall be unacceptable if one or more sample units fail to meet any test requirement specified.

TABLE VIII. Testing of the end item

Characteristic	Specification reference		Number determinations per sample unit	Results reported as Pass or fail 1/
	Requirement	Test method		
Patch adhesion				
Type B.	3.3.3	4.4.1	1	X
Color bleeding and fading for types B & C	3.6	4.4.2	1	X
Printing and writing qualities	3.8	4.4.3	1	X

1/ If failure is indicated, report description of failure.

4.4 Tests.

4.4.1 Patch adhesion, type B. Carefully bend the tag so that the patch separates sufficiently to provide an area for gripping with the fingers. Rapidly pull the patch away from the tag at an angle of 180 degrees from the point of separation. To be considered acceptable, the patch must show fiber damage to either the tag or the patch over 90 percent of the surface area and also must not show adhesive separation in excess of 10 percent of the surface area. Failure to comply with these limits shall be identified as patch adhesive failure.

4.4.2 Color bleeding and fading (types B & C). Immerse the tag in distilled water at $23^{\circ} \pm 2^{\circ} \text{C}$ ($73.5^{\circ} \pm 3.6^{\circ} \text{F}$) for not less than 5 minutes. Remove the tag and compare the color of the distilled water used for immersion with a beaker of distilled water. The tag shall then be blotted and allowed to dry. The dried tag shall then be compared with a tag which has not been immersed. To be considered satisfactory, there shall be no evidence of color bleeding nor fading of the dried tag nor visible bleeding into the distilled water.

4.4.3 Printing and writing qualities. Lines or characters shall be drawn or written on both sides of the tag with a smooth, medium-point dip pen using an ink conforming to TT-I-563. To be considered satisfactory there shall be no feathering of the inked lines or characters.

5. PREPARATION FOR DELIVERY

5.1 Packaging. Packaging shall be level A, B or C, as specified (see 6.2).

5.1.1 Level A.

UU-T-81J

5.1.1.1 Unit packaging. Fifty or one hundred tags as specified (see 6.2), of one description only, shall be tied, banded or wired together.

5.1.1.2 Intermediate packaging. Five hundred or one thousand tags as specified (see 6.2), of one description only, shall be packaged in a snug-fitting paperboard box conforming to variety 1, style IV of PPP-B-566 or setup paperboard box conforming to type I or II, variety 1, class A, style 3 or 4 of PPP-B-676. Each box shall be securely closed in accordance with the appendix of the applicable box specification.

5.1.2 Level B. Tags shall be packaged as specified in 5.1.1.

5.1.3 Level C. Tags shall be packaged to afford adequate protection against physical damage during shipment from the supplier to the first receiving activity. Package and the quantity per package shall be the same as that normally used by the supplier for retail distribution.

5.2 Packing. Packing shall be level A, B or C as specified (see 6.2).

5.2.1 Level A. Tags of one description only, packaged as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC, grade v2s of PPP-B-636. Each fiberboard container shall be closed in accordance with method III, waterproofed in accordance with method V and reinforced as specified in the appendix of PPP-B-636. The weight of contents of each container shall not exceed 65 pounds.

5.2.2 Level B. Tags of one description only, packaged as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC, type CF (variety SW) or SF, class domestic, minimum grade 200 of PPP-B-636. Each shipping container shall be closed in accordance with the appendix of PPP-B-636.

5.2.2.1 When specified (see 6.2) the fiberboard shipping container shall be a grade V3C, V3a, or V4a fiberboard box fabricated in accordance with PPP-B-636 and closed in accordance with method III as specified in the appendix of PPP-B-636.

5.2.3 Level C. Tags, packaged as specified in 5.1, shall be packed in a manner to insure carrier acceptance and safe delivery at destination at the lowest transportation rate for such supplies. The quantity per shipping container shall be the same as that normally used by the supplier for retail distribution. Containers shall comply with the Uniform Freight Classification rules or National Motor Freight Classification rules, as applicable.

5.3 Marking.

5.3.1 Civil agencies. Interior packages and shipping containers shall be marked in accordance with Fed. Std. No. 123.

5.3.2 Military requirements. Interior packages and shipping containers shall be marked in accordance with MIL-STD-129.

6. NOTES

6.1 Intended use. Type A tags are used when maximum permanency and durability is required. Type B tags are for domestic use. The level of durability required for end use may be determined by referring to grade and tearing resistance in table II. Type C tags are designed for use on heavy or extensively handled materials and equipment. CSU (coated) grades of tag stock are not recommended for use in high humidity environments. Type D tags may be used whenever type A and B tags are used.

UU-T-81J

6.2 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in procurement documents:

- a. Title, number, and date of this specification.
- b. Type, class, grade, and size (see 1.2, 1.3, and 1.4).
- c. Color (see 3.2.5, 3.3.5, 3.4.5 and 3.5.5).
- d. Whether tags shall be strung with wire or twine (see 3.2.3, 3.3.3 and 3.4.3).
- e. The percentage of reclaimed fibers required (see 3.3.1.1 and 3.5.1.1).
- f. Whether or not type B tags shall have a metal eyelet (see 3.3.3).
- g. Wet tensile strength (type B) (see 3.3.2.1).
- h. Selection of the applicable levels of packaging and packing (see 5.1 and 5.2).
- i. When weather-resistant grade fiberboard shipping containers are required for level B packing (see 5.2.2.1).
- j. Quantity of tags per unit package and intermediate package (see 5.1.1.1 and 5.1.1.2).

6.3 Standard comparison samples may be obtained upon application to the procuring agency issuing the invitation for bids (see 3.1).

6.4 Spunbonded olefin material shall be Dupont Tyvek or other similar material.

6.5 Reclaimed fibers identification. Reclaimed fibers shall be derived from one or more of the following sources as applicable:

PART I

(a) Paper, paperboard, and fibrous wastes from factories, retail stores, office buildings, homes, etc., after they have passed through their end-usage as a consumer item including:

1. Used corrugated boxes;
2. Old newspapers;
3. Old magazines;
4. Mixed waste paper;
5. Tabulating cards; and
6. Used cordage.

(b) All paper, paperboard, and fibrous wastes that enter and are collected from municipal solid waste.

PART II

(a) Dry paper and paperboard waste generated after completion of the paper-making process* including:

1. Envelope cuttings, bindery trimmings, and other paper and paperboard waste, resulting from printing, cutting, forming, and other converting operations;
2. Bag, box and carton manufacturing waste; and
3. Butt rolls, mill wrappers, and rejected unused stock.

(b) Finished paper and paperboard from obsolete inventories of paper and paperboard manufacturer's, merchants, wholesalers, dealers, printers, converters, or others.

(c) Fibrous by-products by harvesting, manufacturing extractive, or woodcutting processes, flax straw, lintors, bagasse, slash, and other forest residues.

(d) Wastes generated by the conversion of goods made from fibrous materials; i.e., waste rope from cordage manufacture, textile mill waste, and cuttings.

UU-T-813

(e) Fibers recovered from waste water which otherwise would enter the waste stream.

* The papermaking process is defined as those manufacturing operations up to and including the cutting and trimming of the paper machine reel into small rolls or rough sheets.

Custodians:

Army - GL
Navy - SA
Air Force - 69

Review activities:

Army - ME, AE, MD, DS
Navy - YD
Air Force - 84, 71, 80

User activities:

Army - AT, PA
Navy - MC

Preparing activity:

Army - GL

Civil Agencies Coordinating Activities:

AGR/APS
GPO
GSA-FSS

Project No. 8135-0402

U. S. GOVERNMENT PRINTING OFFICE : 1975 - 210-814/1034

Orders for this publication are to be placed with General Services Administration, acting as an agent for the Superintendent of Documents. See Section 2 of this specification to obtain extra copies and other documents referenced herein. Price 40 cents each.

INSTRUCTIONS: In a continuing effort to make our standardization documents better, the DoD provides this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (**DO NOT STAPLE**), and mailed. In block 5, be as specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wording changes which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgement will be mailed to you within 30 days to let you know that your comments were received and are being considered.

NOTE: This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification 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.

(Fold along this line)

(Fold along this line)

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 12082 WASHINGTON D. C.

POSTAGE WILL BE PAID BY THE DEPARTMENT OF THE ARMY

Commander
US Army Armement Research and Development Command
ATTN: DRDAR-TST-S
Dover, NJ 07801

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

1. DOCUMENT NUMBER

2. DOCUMENT TITLE

3a. NAME OF SUBMITTING ORGANIZATION

4. TYPE OF ORGANIZATION (Mark one)

☐ VENDOR☐ USER☐ MANUFACTURER☐ OTHER (Specify): _____

b. ADDRESS (Street, City, State, ZIP Code)

5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

6. REMARKS

7a. NAME OF SUBMITTER (Last, First, MI) - Optional

b. WORK TELEPHONE NUMBER (Include Area Code) - Optional

c. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional

8. DATE OF SUBMISSION (YYMMDD)

TO DETACH THIS FORM, CUT ALONG THIS LINE.)