

UU-L-1644A

December 5, 1975

SUPERSEDING

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FEDERAL SPECIFICATION

LABELS, PAPER, PRESSURE-SENSITIVE ADHESIVE

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. The specification covers nonremovable blank paper labels, coated with a pressure-sensitive adhesive.

1.2 Classification.

1.2.1 Classes and styles. Labels shall be furnished in the following classes and styles as specified (see 6.2).

Class A - File folder labels.

Style 1 - Rectangular with corners rounded.

Style 2 - Rectangular with corners rounded and colored identification stripe.

Class B - Address labels.

Style 1 - Rectangular with corners rounded.

Style 2 - Rectangular with corners rounded and colored identification stripe.

Class C - General purpose labels, with marginal pin-feed holes.

Style 1 - Rectangular with corners rounded.

Class D - General purpose labels, with slot-feed holes.

Style 1 - Rectangular with corners rounded.

Class E - Prescription labels.

Style 1 - Rectangular with corners rounded.

1.2.2 Sizes. Labels shall be furnished in the sizes specified for each type and class (see section 3 and 6.2).

2. APPLICABLE DOCUMENTS

2.1 The following documents, of the issues 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:

PPP-B-566 - Boxes, Folding, Paperboard.

PPP-B-636 - Boxes, Shipping, Fiberboard.

PPP-B-676 - Boxes, Setup.

UU-P-121 - Paper, Bond and Writing, White and Colored.

Federal Standards:

Fed. Std. No. 123 - Marking for Shipment (Civil Agencies).

Fed. Test Method Std. No. 101 GEN - Preservation, Packaging, and Packing
Materials: Test Procedures.

Fed. Test Method Std. No. 101/2050 - Adhesion of Pressure-Sensitive Tapes.

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(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.

(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) Standards:

- T 402 - Standard Conditioning and Testing Atmospheres for Paper, Board, Pulp Handsheets, and Related Products.
- T 410 - Weight Per Unit Area (Basis Weight or Substance) 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.)

Technical Manual of the American Association of Textile Chemists and Colorists.

(Copies of AATCC Color Index may be obtained from the Executive Secretary, AATCC National Headquarters, Lowell, MA, or the Howes Publishing Corporation, 44 East 23rd Street, New York, NY.)

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 Materials. Materials shall conform to the requirements hereinafter specified. Materials not definitely specified shall be of the quality used for the purpose in commercial practice.

3.1.1 Paper. Paper shall consist of fibrous cellulosic material which may include reclaimed fibers having a basis weight of 58 to 70 pounds (25" x 38" - 500 sheets). The paper shall have a smooth finish and shall be receptive to writing with ink without feathering or spreading when tested as specified in 4.4.2.

3.1.2 Pressure-sensitive adhesive. Pressure sensitive adhesive shall require no heat, moisture, or other preparation prior to application. Labels shall tack quickly to test surfaces and shall adhere without curling or breaking. The adhesive shall display either a minimum adhesion of 60 oz/inch width when tested as specified in 4.4.3.2, or failure shall be due to fiber separation from the substrate when tested as specified in 4.4.3.1.

3.1.3 Release liner. Release liner or backing sheet must be coated with a release coating of silicone, fatty acid metal complexes, or acrylic polymer. The release coating must be of sufficient density or thickness to allow deliberate manual peel off of the label, and to prevent accidental peel off or separation of the label from the carrier, when the carrier sheet with label is passed over the outside of an object with a convex surface, having a diameter of approximately one inch. The label shall not separate from the backing sheet. The backing sheets for class C and D labels shall be such that they will not tear in the pin-feed or slot-feed operation.

3.2 Construction. Labels shall be made of paper conforming to 3.1.1, completely coated on one side with a uniform film of adhesive as specified in 3.1.2, and shall be mounted on a release liner or carrier sheet as specified in 3.1.3 to prevent blocking and from which the labels will easily release.

3.3 Styles, sizes, and classes.

3.3.1 Styles. Labels shall be style 1 or 2, as specified (see 6.2). Style 1 shall be rectangular with corners rounded, and all white in color. Style 2 shall be similar to style 1 except that a colored identification stripe, $3/32 \pm 1/32$ inch wide shall be printed on the long edge of the label.

3.3.2 Sizes. Labels shall be die-cut to the size as specified (see 6.2). A tolerance of plus or minus $1/32$ inch is permitted for dimensions over one inch, and plus or minus $1/64$ inch for dimensions under one inch for all label dimensions specified hereinafter.

3.3.3 Classes. Labels shall be of the classes hereinafter indicated, unless otherwise specified (see 6.2). The style specified shall be furnished attached to the backing release paper in sheets, fan-folded strips or rolls, as specified (see 6.2).

3.3.3.1 Class A, file folder labels. Class A file folder labels shall be either style 1 or 2, as specified (see 6.2), size $3-1/2" \times 5/8"$. Identification stripes for style 2 labels shall be light blue, green, orange, dark red, yellow, goldenrod, gold, or silver, as specified (see 6.2).

3.3.3.1.1 Form. File folder labels shall be furnished 248 labels attached to a fanfolded release paper backing. Labels shall be one across and fanfolded every eight labels.

3.3.3.2 Class B, address labels. Class B labels shall be either style 1 or 2, as specified (see 6.2). Identification stripes on style 2 labels shall be red, yellow, blue, as specified (see 6.2). Size shall be $3-1/2" \times 1-1/8"$.

3.3.3.2.1 Form. Address labels shall be assembled as indicated in 3.3.3.1.1.

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3.3.3.3 Class C, general purpose labels with marginal pin-feed holes. Labels shall be style 1 and shall be attached to a backing sheet (see 3.3.3.3.2) marginally perforated with holes for use with a pin-feed platen or a tractor feed.

3.3.3.3.1 Dimensions. Class C labels shall be of the dimensions below, as specified (see 6.2); the backing sheet shall have the width indicated.

Label width* (inches)	Label length* (inches)	Width of backing sheet (inches)
3-1/2	15/16	4-1/2 + 1/4
4	1-7/16	5 + 1/4
5	15/16	6 + 1/4
4	1-7/16	13-7/32 + 1/32 ≠

* See 6.3. Dimensional tolerances in 3.3.2 shall apply.

≠ Three labels across the width of the backing sheet.

3.3.3.3.1.1 Three-wide label. The last entry in the above table describes an ADP (automated data processing) label sheet in which three labels are placed across the width of the backing sheet. The backing sheet shall be vertically perforated between the first and second and between the second and third labels. These two vertical perforations shall extend the length of the backing sheet and shall be parallel to an imaginary line passing through the centers of the marginal aligning holes. The backing sheet shall be horizontally perforated every 12 + 1/32 inches. The horizontal perforation shall be perpendicular to an imaginary line passing through the centers of the marginal aligning holes. The backing sheet with labels shall be flatfolded at the horizontal perforations. There will be 24 labels between the horizontal perforations of the backing sheet. These labels will be furnished in a continuous strip for a total of 15,000 labels.

3.3.3.3.2 Backing sheet. The backing paper shall have 5/32 inch diameter holes running vertically along each margin. The holes shall be spaced 1/2 inch apart from center to center and the centers of the holes shall be located 1/4 inch 0-plus, 1/16 inch minus from the edge of the backing sheet. Vertical lines passing through the centers of any two marginal holes on the same line shall be at 90° to the vertical lines through the centers of the holes.

3.3.3.3.3 Spacing. The vertical spacing between two consecutive labels shall be constant and at least 1/16 inch.

3.3.3.3.4 Form. Class C labels except three-wide labels shall be furnished in a continuous strip of 1,000 labels, fanfolded every 12 inches.

3.3.3.4 Class D, general purpose labels, slot-feed. Class D labels shall be style 1, size 3-1/4" x 2" and mounted on a release backing having slots for feeding through automatic printers. The adhesive for the labels shall conform to 3.1.2 and shall also adhere to glass or polyethylene bottles and shall be capable of withstanding temperatures between minus 40 and plus 140°F without curling or breaking.

3.3.3.4.1 Backing sheet. The backing sheet shall be 3-1/2 inches wide and shall have horizontal slit perforations across its width every 2-1/4 inches of the length. Labels shall be centered between the width of the backing sheet and the horizontal perforations. A horizontal feed slot, 1/8 inch high by 1/2 to 5/8 inch wide shall be centered on the horizontal slit perforations between labels.

3.3.3.4.2 Form. Labels shall be furnished fanfolded every 9 inches, 11-1/4 inches, or 13-1/2 inches as specified (see 6.2).

3.3.3.5 Class E, prescription labels. Class E labels shall be style 1, size 2-1/2" x 1-1/2" and furnished in roll form. Labels shall adhere to all types of prescription bottles, and paper containers, including silicone-treated glass, and plastic bottles (including polyethylene & polyvinyl chloride), and metal containers, and shall adhere to both round and flat surfaces.

3.3.3.5.1 Backing sheet. The backing sheet shall be 2-5/8 inches wide (maximum) and perforated between labels.

3.3.3.5.2 Form. Labels are to be centered and placed approximately 1/16" apart on the backing sheet in a continuous roll with 3000 labels per roll. Labels are wound on a three-inch inside diameter core, with a ten-inch maximum outside diameter.

3.4 Workmanship. Labels shall be free of adhesive on the writing surface. Pinfeed and slot-feed holes shall be cleanly punched and free of confetti. There shall be no breaks in the fanfolded packs and no labels shall be missing from the backing sheet. The backing sheet shall be free of die-cuts or slits or any other defects that may affect serviceability.

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.

4.2 Component and material inspection. In accordance with 4.1 above, the supplier is responsible for insuring that components and materials used were manufactured, examined and tested in accordance with this specification or referenced subsidiary specifications.

4.3 Sampling for inspection. Sampling for inspection and lot inspection acceptance shall be in accordance with MIL-STD-105, unless otherwise specified. For purposes of sampling a lot shall consist of all boxes of labels of one style, class, and size offered for delivery at one time.

4.3.1 End item inspection. Each lot of labels, sampled in accordance with 4.3, shall be examined visually for defects in accordance with 4.3.1.1, dimensionally in accordance with 4.3.1.2. Labels shall be tested in accordance with 4.3.3.

4.3.1.1 Visual examination. Each package of labels sampled in 4.3 shall be examined for the defects in table III. The inspection level shall be S-4 and the Acceptable Quality Level (AQL) shall be 4.0 defects per hundred units.

TABLE III. Visual defects in the end-item

Examine	Defect
Design and construction	Not class or style specified. Labels not die-cut; edges not smooth. Labels do not release easily from backing sheet. Color identification not as specified. (Class A and B only) Pin-feed holes or slot-feed missing. (Class C or D only) Confetti remaining in holes. Labels missing from pack. Die-cut in backing or carrier. Tear perforation missing (when applicable). Backing sheet not continuous on class C, D, or E labels.

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4.3.1.2 Dimensional examination. Boxes of labels selected in 4.3 shall be examined for dimensional defects cited in section 3. The sample unit shall be one box of labels. The inspection level shall be S-2 and the Acceptable Quality Level (AQL) shall be 4.0 defects per hundred units. Any dimension not within the tolerances cited shall be considered a defect.

4.3.2 Examination of the preparation for delivery. An examination shall be performed to determine compliance with the packaging, packing and marking requirements of section 5. Defects shall be scored as specified in table IV. Sampling shall be in accordance with MIL-STD-105. The sample unit shall be one container fully prepared for delivery. The lot shall be the number of containers offered for delivery at one time. The inspection level shall be S-2 with an AQL of 4.0, expressed in terms of percent defective.

TABLE IV. Examination of preparation for delivery

Container	Not as specified.
Contents	Not as specified.
Marking	Omitted; incorrect; illegible, improper size, location, sequence, or method of application.
Material	Component missing or damaged.
Workmanship	Bulging or distortion of container. Cushioning, inadequate or improper.

4.3.2.1 Examination of closure, waterproofing and banding of containers. When shipping containers are required to comply with PPP-B-636, examination for defects in closure, waterproofing and banding shall be in accordance with the appendix of PPP-B-636.

4.3.3 Testing of the end-item. Each lot of labels shall be tested in accordance with the applicable methods in 4.4 for conformance with the requirements in section 3. The sample unit shall be one package of labels and the sample size for test shall be selected in accordance with inspection level S-2; however, not less than five sample units shall be tested. Failure of any sample unit to meet the requirement for all characteristics shall be cause for rejection of the lot.

4.4 Test methods.

4.4.1 Paper characteristics. The paper shall be tested in accordance with the applicable TAPPI methods below:

Atmospheric conditioning	T 402
Basis weight	T 410

4.4.2 Ink receptivity. Characters shall be written on two labels from each sample unit using a steel pen and an ink consisting of a one percent aqueous solution of acid red 1, color index number 18050 or acid green 3 color index number 42085 (see 6.4). To be acceptable, the written characters shall not show feathering or spreading of the ink.

4.4.3 Adhesion.

4.4.3.1 Class A, B, C. Four labels shall be firmly pressed in contact with bond paper (type III of UU-P-121). To be considered satisfactory, the labels shall immediately tack to the test surfaces without curling or tearing and shall not strip from the test surfaces without fiber separation.

4.4.3.2 Class D, E. The adhesive labels shall be tested in accordance with Federal Test Method Std. No. 101, Method 2050, paragraph 6.1 for adhesion to steel. The specimen size shall be the label size.

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5. PREPARATION FOR DELIVERY

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

5.1.1 Levels A and B. Labels of one class, style, and size shall be packaged as follows:

5.1.1.1 Class A and B unit container. Class A or B labels of one description only in the form as specified in 3.3.3.1.1 shall be packaged in a paperboard box normally used by the industry for the labels.

5.1.1.1.1 Class A and B intermediate container. Twelve (12) unit containers of class A or B labels packaged as specified in 5.1.1.1 shall be intermediately packaged in a box conforming to PPP-B-566, PPP-B-676 or PPP-B-636. The box shall be closed to prevent accidental opening. Alternatively, the box shall be of the colors normally used by the industry.

5.1.1.2 Class C and D. Class C or D labels of one description only in the form as specified in 3.3.3.3.4 or 3.3.3.4.2, respectively, does not require packaging.

5.1.1.3 Class E unit container. Each roll of class E labels of one description only in the form as specified in 3.3.3.5.2 shall be secured to prevent unwinding and shall be wrapped in plastic film normally used by the industry. No intermediate packaging is required.

5.1.2 Level C. Labels of one description only shall be packaged to afford adequate protection against damage during shipment from the supply source to the first receiving agency.

TABLE V. Quantities per container

Class	Unit Container	Intermediate Container	Shipping Container
A	248 labels	12 boxes	30 intermediate boxes
B	248 labels	12 boxes	30 intermediate boxes
C			
3-1/2 x 15/16	5,000 labels	none	10 boxes
4 x 1-7/16	5,000 labels	none	4 boxes
5 x 15/16	5,000 labels	none	6 boxes
D	5,000 labels	none	4 boxes
E	3,000 labels	none	8 wrapped rolls

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

5.2.1 Level A. Labels in quantities as specified (see 6.2) shall be packed in a box conforming to PPP-B-636, class weather resistant. The box shall be closed, waterproofed and banded in accordance with the appendix to PPP-B-636.

5.2.2 Level B. Labels packaged as specified in 5.1 in quantities specified in Table V shall be packed in a box conforming to PPP-B-636, class domestic. The box shall be closed in accordance with the appendix of PPP-B-636.

5.2.3 Level C. Labels, in quantities as specified (see 6.2), shall be packed in a container complying with the Uniform Freight Classification Rules or National Motor Freight Classification Rules, as applicable. The containers shall be packed to assure carrier acceptance and safe arrival at destination.

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5.3 Marking. The unit, intermediate and shipping containers shall be marked in accordance with Fed. Std. No. 123 for civil agencies and MIL-STD-129 for military agencies, as applicable.

6. NOTES

6.1 Intended use. Pressure-sensitive labels are used for identification and are applicable to a wide range of surfaces.

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) Style and class of label (see 1.2.1).
- (c) Size of label (see 1.2.2).
- (d) Color of label or identification stripe (see 3.3.3.1 and 3.3.3.2).
- (e) Form (see 3.3.3.4.2).
- (f) Applicable level of packaging and packing (see 5.1 and 5.4).
- (g) Marking document required (see 5.3).
- (h) Quantities required (see 5.3.2).

6.3 Dimensional requirements for special applications: To be consistent with the standard method of specifying length and width of continuous forms of ADP use, the following shall apply:

6.3.1 The width of the label is the measurement perpendicular to the perforated edge of the backing sheet.

6.3.2 The length of labels are measured between horizontal edges as placed on the backing sheet.

6.4 Color designations are those listed in the Technical Manual of the American Association of Textile Chemists and Colorists. Acid Red 1, Color Index Number 18050, may be obtained from Textile Aniline and Chemical Company. Acid Green 3, Color Index Number 42085, may be obtained from the following: Sandoz, Incorporated; National Aniline Division of Allied Chemical Corporation; Geigy Chemical Corporation; and American Cyanamid Corporation.

MILITARY CUSTODIANS:

Army - GL
Navy - SA
Air Force - 69

Preparing activity:

GSA-PSS

Review activities:

Army - GL, MD, MU
Navy - SA
Air Force - 69

User activities:

Army - MO, SM
Navy - SA
Air Force - 69

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