

PPP-T-66E
PPP-T-66E
December 20, 1976
SUPERSEDING
Fed. Spec. PPP-T-66D
July 28, 1966

FEDERAL SPECIFICATION

TAPE, PACKAGING, VINYL PLASTIC FILM

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 the requirements for a vinyl plastic film pressure-sensitive adhesive tape designed for sealing against moisture, sealing interior packaging, and for use in identification and marking (see 6.1).

1.2 Classification. The tapes covered by this specification shall be of the following types and classes, as specified (see 6.3):

Type I - General purpose.
Class 1 - Transparent
Class 2 - Colored

Type II - Printable

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 Specification:

PPP-T-680 - Tape, Pressure Sensitive Adhesive:
Packaging and Packing Of.

Federal Standard:

Fed. Test Method Std. No. 147 - Tapes, Packaging, Adhesive and Gummed:
Methods of Inspection, Sampling, and
Testing.

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3. REQUIREMENTS

3.1 Materials. The backing material shall consist of modified polyvinyl chloride or polyvinyl chloride-vinyl acetate film. The manufacturer shall certify that the backing material complies.

3.2 Adhesive. The adhesive shall be pressure-sensitive, and shall require no moisture, heat or other special preparation prior to application of the tape. The adhesive shall completely cover one side of the tape backing.

3.3 Rolls. The tape shall be uniformly and evenly wound in rolls, adhesive side in, on cores of sufficient rigidity to prevent distortion of the rolls under normal conditions of transportation, storage, and use. The inside diameter of the core shall be 3 inches or 1 inch, $-0 + 1/16$ inches, as specified (see 6.3). No more than two splices will be permitted in any roll. All splices shall be such that they will not separate when the roll is unwound in test or application.

3.4 Length and width. The width of the tape shall be $1/4$, $1/2$, $3/4$, 1, $1-1/2$, 2, 3, or 4 inches as specified in the contract or order (see 6.3). The following width tolerances shall be permitted:

<u>Tape Width</u>	<u>Tolerance (inches)</u>
Under $3/4$ inch	$\pm 1/32$
$3/4$ inch to under 2 inches	$\pm 1/16$
2 to 4 inches	$\pm 3/32$
Over 4 inches	$\pm 1/8$

The length shall be evenly wound in 36 yard rolls, with a minus tolerance of 1%.

3.5 Colors. Type I, Class 2 tape shall be furnished in blue, green, yellow, orange, red, brown, black, white or other commercially available colors as specified (see 6.3). Type II shall be furnished in white or yellow as specified (see 6.3).

3.6 Transparency. Type I, Class 1 tape shall be sufficiently transparent to allow easy reading of 10 point type when one layer of tape is pressed down over the type.

3.7 Printing. Type II tape shall be capable of being printed as recommended by the manufacturer. Any offsetting of the print on unwinding the roll at a rate of 15 - 20 inches per second shall not adversely affect the legibility of the printing.

3.8 Physical Properties. The tape shall meet the requirements listed in table I when tested as described in Section 4.

3.9 Workmanship. The tape shall be free of defects which detract from its appearance or impair its serviceability. The adhesive shall be a smooth uniform coating, covering the entire area of one side of the tape. Edges shall be straight, true, and unbroken.

TABLE I. Physical Properties

	Type I		Type II		Paragraph
	Min.	Max.	Min.	Max.	
Adhesion, oz./in.					
Initial	15	-	15	-	4.3.2
Elongation at break, percent	100	-	100	-	4.3.2
Resistance to creep, inches	-	3/16	-	3/16	4.3.2
Shrinkage, percent	-	5	-	5	4.3.2
Stretch Force, <UT> at 10 percent elongation	-	10	11	-	4.3.2
Tear resistance, lbs.	1.5	-	2.5	-	4.3.2
Tensile strength, lb./in. width	12	-	12	-	4.3.2
Thickness, inches	-	0.0065	-	0.0075	4.3.2
Water solubility, percent	-	2.0	-	2.0	4.3.2
Water vapor transmission rate, g./100sq. in./24 hr	-	5.5	-	5.5	4.3.2

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 Sampling and examination

4.2.1 End item examination. Sampling and examination of the item shall be as specified in Section 7 of Fed. Test Method Std. No 147.

4.2.2 End item testing. Sampling and examination for the end item testing shall be as specified in Section 7 of Fed. Test Method Std. No. 147 at an Acceptable Quality Level (AQL) of 4 percent.

4.2.3 Examination of preparation for delivery. The examination of preparation for delivery shall be performed in accordance with PPP-T-680.

4.3 Tests.

4.3.1 Preparation for testing. The specimen rolls shall be selected and conditioned as specified in Method 4 of Fed. Test Method Std. No. 147.

4.3.2 Test methods. The following tests shall be conducted as described in Fed. Test Method Std. No 147.

	Method
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Adhesion	10
Elongation	34
Resistance to creep	39
Shrinkage	38
Stretch force	34
Tear resistance	42
Tensile strength	34
Thickness	36
Water solubility	74
Water vapor transmission rate	70

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5. PREPARATION FOR DELIVERY

5.1 Packaging and packing. Packaging and packing shall be in accordance with the requirements of PPP-T-680. The level of packaging and packing shall be A, B or C, as specified in the contract or order (see 6.3)

5.2 Marking. Containers of tape shall be marked in accordance with the requirements of PPP-T-680.

6. NOTES

6.1 Intended uses. Both types I and II tapes are intended for uses such as sealing out moisture and applications requiring the flexibility, toughness, and conformability normally possessed by a plasticized vinyl film.

6.2 Some of the typical applications have been as follows:

- (a) Sealing screwcaps, stoppers, or slipcover closures of plastic, metal, and glass. The tape widths recommended are 3/4 and 1 inch.
- (b) Marking lanes, designating traffic aisles, loading and storage areas, etc. The tape widths recommended are 2 and 3 inches.
- (c) Sealing openings on mechanical equipment.
- (d) Color code identification of pipelines, e.g., steam lines and waterlines.
- (e) Sealing of interior packaging.
- (f) Printed type II tape is suitable for use on the applications mentioned in a, c, d, e, and other similar applications where a printed legend and the properties of a vinyl plastic tape are required.

6.3 Ordering data. Purchasers should select the preferred options permitted in this specification, and include the following information in procurement documents:

- (a) Title, number, and date of this specification.
- (b) Type and class of tape required (see 1.2).
- (c) Length and width of tape required (see 3.4).
- (d) Color of tape required (see 3.5).
- (e) Required inside core diameter (see 3.3).
- (f) Any printing required, when applicable (see 3.7).
- (g) Selection of applicable levels of packaging and packing (see 5.1).
- (h) Marking required (see 5.2).

6.4 Storage. The tape should be stored in the original container in a cool location. It should not be stored in close proximity to steam pipes, radiators, or other sources of heat, or in a location where it may be exposed to direct rays of the sun.

MILITARY INTERESTS:

DOD has waived coordination on revisions and amendments to this Federal Specification until further notice.

CIVIL AGENCY COORDINATING ACTIVITIES:

DOT-FRA
ERDA
GPO
NASA-JFK
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VA-DMS

PREPARING ACTIVITY: GSA-FSS

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