

HH-T-0025 (GSA-FSS)
January 17, 1964

INTERIM FEDERAL SPECIFICATION
 TAPE, PRESSURE-SENSITIVE ADHESIVE, PLASTIC
 (FOR ELECTROPLATING)

This Interim Federal Specification was developed by the General Services Administration, Federal Supply Service, Standardization Division, Washington, D. C. 20407, based upon currently available technical information. It is recommended that Federal agencies use it in procurement and forward any recommendations for changes to the preparing activity at the address shown above.

1. SCOPE AND CLASSIFICATION

1.1 This specification covers a transparent vinyl plastic pressure-sensitive tape of one type for use in stop off masking during electroplating operations.

2. APPLICABLE SPECIFICATIONS, STANDARDS, AND OTHER PUBLICATIONS

2.1 Specifications and standards. The following specifications and standards, of the issue in effect on date of invitation for bids, form a part of this specification to the extent specified herein:

Federal Specifications:

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

Federal Standards:

Federal Test Method Std. 147 - Gummed and Pressure-Sensitive Tapes:
 Methods of Testing

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 SEE LAST PAGE.

Military Standards:

MIL-STD-414 - Sampling Procedures and Tables for Inspection by Variables
 for Percent Defective

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

3. REQUIREMENTS

3.1 Construction. The tape shall consist of a transparent vinyl plastic backing that is resistant to water and most chemicals used in electroplating operations, and one side shall be completely coated on one side with a pressure-sensitive, water resistant homogeneous adhesive applied in a smooth layer. The tape shall be such as to ensure performance in plating baths up to 170°F., and shall require no solvent, heat, or other preparation prior to application.

3.2 Rolls. The tape shall be 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 minus 0 plus 1/16 inches. No more than three splices will be permitted in each roll of tape. Any splices shall be such that they will not separate when the roll is unwound in test or application.

3.3 Length and width. The tape shall be furnished in 36 yard long rolls. The width shall be as specified in the contract or order. A width tolerance of + 1/16 inches for rolls up to 2 inches wide and + 1/8 inch for rolls over 2 inches wide shall be allowed.

3.4 Physical properties. The test values must meet the following requirements based on MIL-STD-414 at an AQL of 4 percent.

3.4.1 Adhesion. When tested as specified in 4.4 the adhesion shall be 15 ounces per inch of width minimum.

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3.4.2 Tensile. When tested as specified in 4.4 the tensile shall be 18 pounds per inch of width minimum.

3.4.3 Elongation. When tested as specified in 4.4 the elongation shall be 150 percent minimum at break.

3.4.4 Thickness. When tested as specified in 4.4 the thickness shall be between 0.006 and 0.009 inches.

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

4. SAMPLING, INSPECTION, AND TEST PROCEDURES

4.1 The supplier is responsible for performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may use his own or other facility acceptable to the Government. Inspection records of examination and tests shall be kept complete and available to the Government as specified in the contract or order. The Government reserves the right to perform any of the inspections set forth in this specification where such inspections are deemed necessary to insure that supplies and services conform to the prescribed requirements.

4.2 Lot size. For purposes of sampling, an inspection lot for acceptance inspection and test shall consist of all materials made by the same process, from the same components, by one manufacturer under the same conditions and during a continuous manufacturing process.

4.3 Acceptance sampling. Lot acceptance sampling of the end item shall be in accordance with Table II for determining the characteristics as indicated in Table I on each lot submitted for acceptance. The lot size for the purpose of determining the sample size, shall be expressed in terms of 100 square yards. The sample unit, as referenced herein, is defined as the amount of material required to perform all of the tests one time. The number of sample units shall be determined in accordance with Table II.

TABLE II

| Lot Size | Number of Sample Units | |
|----------------|------------------------|--------------------|
| | Normal Inspection | Reduced Inspection |
| up to 25 | 3 | 1 (see 3) |
| 26 to 40 | 3 | 2 (see 3) |
| 41 to 300 | 3 | 3 |
| 301 to 500 | 4 | 3 |
| 501 to 800 | 5 | 3 |
| 801 to 1300 | 7 | 3 |
| 1301 to 3200 | 10 | 4 |
| 3201 to 8000 | 15 | 5 |
| 8001 to 22000 | 20 | 7 |
| 22001 and over | 25 | 10 |

(1) This table is based on MIL-STD-414, Table A-2, B-1 and B-2, Inspection Level I; except reduced sampling is provided for lots of 40 units and under.

(2) Reduced inspection may be instituted only after all requirements of MIL-STD-414, paragraph 4.4 are satisfied.

(3) Reduced inspection for small lots may be used if the preceding three consecutive lots within the past year have passed all requirements. There is no comparison to Table B-2 of MIL-STD-414; rather any single value failing the requirements of Table I is cause for resampling at the normal inspection level.

4.4 Testing procedures.

4.4.1 Test conditions. Unless otherwise specified in the test method the rolls of tape shall be conditioned for 24 hours at $73 \pm 3.5^\circ\text{F}$. and 50 ± 2 percent Relative Humidity and shall be tested under these conditions.

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4.4.2 Test methods. The following tests shall be conducted as described in Federal Test Method Standard No. 147, except that one specimen per sample unit shall be tested:

| | |
|---------------------------|-----------|
| Adhesion to steel - - - - | Method 10 |
| Tensile at break - - - - | Method 30 |
| Elongation at break - - - | Method 30 |
| Thickness - - - - - - - - | Method 36 |

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 shall be A, B or C and the level of packing shall be A, B or C as specified in the contract or order.

5.2 Marking. Containers of tape shall be marked in accordance with the requirements of PPP-T-680, and those documents forming a part of that specification.

6. NOTES

6.1 Intended uses. This tape is primarily intended for stop off masking during electroplating operations, including both flat strip and overlapping masks. It may also be used to give abrasion resistance to protect parts during rough handling.

6.2 Ordering data. Purchasers should exercise any desired options offered herein and procurement documents should specify the following:

- (a) Title, number and date of this specification.
- (b) Width of tape required (see 3.3).
- (c) Selection of applicable levels of packaging and packing.

6.3 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.

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ADDENDUM

INSTRUCTIONS ON OBTAINING COPIES OF
FEDERAL SPECIFICATIONS AND STANDARDS

(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, Standards and Handbooks 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 25, D. C.

(Single copies of this specification and other, product specifications required by activities outside the Federal Government for bidding purposes are available without charge at the General Services Administration Regional Offices in Boston, New York, Washington, D. C., Atlanta, Chicago, Kansas City, Mo., Dallas, Denver, San Francisco, and Auburn, Wash.

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