

AEROSPACE MATERIAL SPECIFICATION

Submitted for recognition as an American National Standard



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Tapes, Pressure Sensitive Adhesive, for Masking During Paint Stripping Operations

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1 SCOPE:

1.1 Scope:

This specification covers tapes for masking during paint stripping operations (see 6.1).

1.2 Classification:

1.2.1 Types: The masking tapes shall be of the following types, as specified (see 6.2);

Type I - Three- hour protection

Type II - Seventy-two-hour protection

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1.2.2 Sizes: The tapes shall be 1, 2, or 3 inches wide, or as specified in the contract or order (see 6.2).

2. APPLICABLE DOCUMENTS:

The following publications, 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.

2.1 U.S. Government Publications:

Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

MIL-P-5425	Plastic, Sheet, Acrylic, Heat Resistant
MIL-P-7962	Primer Coating, Cellulose-Nitrate Modified Alkyd Type, Corrosion Inhibiting, Fast Drying (For Spray Application Over Pretreatment Coating)
MIL-C-8514	Coating Compound, Metal Pretreatment, Resin-Acid
MIL-A-8625	Anodic Coatings, For Aluminum and Aluminum Alloys
MIL-L-19537	Lacquer; Acrylic-Nitrocellulose, Gloss (For Aircraft Use)
MIL-C-22750	Coating, Epoxy-polyamide
MIL-P-23377	Primer Coating, Epoxy-polamide, Chemical and Solvent Resistant
MIL-R-81294	Remover, Paint, Epoxy System
MIL-STD-105	Sampling Procedures and Tables for Inspection by Attributes
FED-STD-147	Tapes, Pressure-Sensitive and Gummed; Methods of Inspection, Sampling and Testing
QQ-A-250/5	Aluminum Alloy Alclad 2024, Plate and Sheet
TT-R-248	Remover, Paint and Lacquer, Solvent Type
PPP-T-680	Tape, Pressure Sensitive Adhesive, Packaging and Packing of

3. REQUIREMENTS:

3.1 Material:

The tapes shall consist of backing coated on one side with a pressure-sensitive adhesive requiring no moisture, heat, or other special preparation prior to application.

3.1.1 Backing: The backing shall be uniform in texture and shall perform satisfactorily as a masking tape when used with paint stripping compounds referenced herein (see 6.1.1 and 6.1.2).

3.1.2 Adhesive:

The adhesive shall be pressure-sensitive, water insoluble, homogeneous, and coated in a smooth and evenly distributed layer on one side of the backing. The adhesive shall cause the tapes to adhere immediately and firmly to clean, dry surfaces to which the tape is generally applied for masking in paint stripping operations, without wrinkling, curling, breaking, or lifting. There shall be no separation of the adhesive from the backing upon unwinding the rolls or upon removal from surfaces after application of paint stripping materials. There shall be no liner over the adhesive.

3.2 Finished tape:

- 3.2.1 Rolls: The tapes shall be uniformly and smoothly wound in rolls, with the adhesive side in, on suitable cores having an inside diameter of 3, - 0, + 1/16 inches. The cores shall have sufficient rigidity to prevent distortion of the roll under normal conditions of use. The tapes shall be in one continuous strip, except that any single roll may contain three splices. The length of tape in the rolls shall be not less than 60 yards.
- 3.2.2 Width: The width shall be as specified in the contract or order. Tolerances of + 1/16 inch, - 1/32 inch will be allowed.
- 3.2.3 Marking of rolls: Each roll of tape furnished on Government order or contract shall be marked in or on the edge of the core with numerals or letters indicating the month and year of manufacture. In addition, the manufacturer's name and designation of the product shall be stamped in the core.

3.3 Performance:

The tape shall conform to the requirements of Table I, when tested as specified in Section 4.

TABLE I. PHYSICAL PROPERTIES

Test	Type I requirement	Type II requirement	Test paragraph
Unwind (lbs/in. width), max.	2.0	3.0	4.4.1
Tensile strength (lbs/in. width), min.	20	22	4.4.1
Elongation, percent, max.	25	-	4.4.1
Water solubility	2.0 percent (max.)	2.0 percent (max.)	4.4.1
Adhesion:			
To 2024 (alclad) aluminum (oz./in. width), min.	16	50	4.4.2
To painted surface (acrylic) (oz./in. width), min.	15	50	4.4.2
To backing (oz./in. width), min.	8	18	4.4.2
Resistance to paint stripping compounds	No optical changes in the test panel due to softening or crazing attack by the stripper compound.		4.4.3

3.4 Workmanship:

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. Tape shall adhere to the work snugly, without wrinkling, curling, lifting, or buckling.

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 supplies and services conform to prescribed requirements.

4.1.1 Inspection of components and materials: In accordance with 4.1 above, the supplier is responsible for insuring that materials and components used were manufactured, tested, and inspected in accordance with the requirements of referenced subsidiary specifications and standards to the extent specified or, if none, in accordance with this specification. In the event of conflict, this specification shall govern.

4.2 Quality conformance inspection:

Quality conformance inspection of the end item shall be conducted in accordance with Table II for the characteristics as indicated therein on each lot which is to be submitted for Government acceptance.

4.2.1 Lot for quality conformance inspection: The lot size, for the purpose of determining the number of sample units for testing, shall consist of all tape of the same type, manufactured by the same process, from the same components at one time at one plant by one manufacturer, under the same conditions within a weekly period.

4.2.2 Samples for quality conformance inspection: The sample unit as referenced herein is defined as the amount of tape required to perform all of the tests required. A sample unit shall consist of three two-inch rolls of tape of specified type randomly selected from each lot presented for examination. The lot size shall be expressed in units of rolls. The sampling shall be as follows:

<u>Lot size in rolls</u>	<u>Sample unit</u>
1000 or less	3
1001 to 10,000	5
10,001 or more	7

4.2.2.1 Failure of any sample unit to meet the requirements shall be cause for rejection of the lot. In the event that the lot does not contain rolls of tape of the width required for test samples, the manufacturer shall supply tape of the required width for use as test samples. The additional tape shall be made by the same process, from the same components, and by the same manufacturer as the tape of the lot being tested.

4.2.3 Shipment from a previously accepted inspection lot may be accepted without reinspection and may be released upon presentation of the test report for the lot.