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Specification for

Pressure-sensitive adhesive paper masking tape

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Aerospace Standards Policy Committee (ACE/-) to Technical Committee ACE/40, upon which the following bodies were represented:

- Adhesive Tape Manufacturers' Association
- British Aerospace plc
- Ministry of Defence

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Foreword

This British Standard prepared under the direction of the Aerospace Standards Policy Committee, is one of a series for pressure-sensitive adhesive tapes of a quality suitable for aerospace purposes and is a revision of BS 3J 11 which is superseded and withdrawn. This revision includes guidance on information to be supplied by the purchaser, and deletes reference to a toluene bath for cleaning samples. Alternative cleaning methods are specified.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard specifies requirements for pressure-sensitive adhesive paper masking tape for aerospace purposes, such as temporary masking during painting operations.

NOTE 1 The information to be supplied by the purchaser in the contract or order is listed in Appendix A.

NOTE 2 The titles of the publications referred to in this standard are listed on the inside back cover.

NOTE 3 The latest revision of an Aerospace Series standard is indicated by a prefix number.

2 Construction

2.1 The tape shall consist of a crepe paper base which has been treated to render it resistant to penetration by the solvents present in aircraft paints and dopes. The base shall be uniformly coated on one surface with a pressure-sensitive adhesive and the finished tape shall be free from ingredients which have a deleterious effect, e.g. crazing, on polymethyl methacrylate sheet.

2.2 The tape shall be supplied in roll form, with the adhesive side innermost, on a suitable core of the same width as the tape.

3 Dimensions

The tolerances on the width of the finished tape shall be one of the following:

- a) ± 1.0 mm for tapes up to and including 19 mm;
- b) ± 1.5 mm for tapes over 19 mm.

NOTE The length and width of the finished tape should be stated by the purchaser in the contract or order (see Appendix A). The finished tape is usually supplied in lengths of 50 m in one of the following widths:

- 1) 6 mm;
- 2) 12 mm;
- 3) 19 mm;
- 4) 25 mm;
- 5) 30 mm;
- 6) 38 mm;
- 7) 50 mm.

4 Freedom from defects

4.1 When the tape is unrolled there shall be no tearing of the base material.

4.2 Each roll shall be reasonably free from substantial telescoping, gapping or other forms of distortion. When unrolled the tape shall show negligible transference of the adhesive to the backing of the underlying turn.

NOTE Care should be taken not to unwind tapes rapidly at temperatures below 10 °C.

5 Samples for testing

5.1 The test samples shall be conditioned in accordance with Appendix B.

5.2 A batch of tape shall consist of a number of rolls designated as a batch by the manufacturer and substantially uniform in quality.

5.3 From each batch at least one roll shall be examined for compliance with clauses 2 to 4 inclusive, and tested for compliance with clauses 6 to 10 inclusive.

6 Breaking strength and elongation at break

When determined in accordance with Appendix C, the breaking strength of the tape shall be not less than 24 N per 10 mm width and the elongation at break shall be not less than 7 % and not more than 20 %.

7 Adhesive strength to steel

When determined in accordance with Appendix D, the adhesive strength of the tape shall be not less than 1.6 N per 10 mm width. The tape shall separate from the plate without visible off-setting of the adhesive.

8 Freedom from deleterious effect on polymethyl methacrylate (PMMA) sheet

When the tape is tested in accordance with Appendix E, there shall be no signs of crazing or other deleterious action on the PMMA strip and the strip shall be substantially free from transferred adhesive.

9 Resistance to penetration by paint solvents

When the tape is tested in accordance with Appendix F, there shall be no signs of crazing or other deleterious action on the PMMA strip and the tape shall separate from it without transfer of adhesive.

10 Resistance to adhesive transfer by paint solvents

When the tape is tested in accordance with Appendix G, it shall separate from the glass plate without transfer of adhesive.