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**CKS**  
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*\*This standard references other standards*  
Edition 2  
1999

**CKS**

**CKS 245**

**Masking tape**

## **CKS 245**

Ed. 2

### **Notice**

This specification was approved by the Department of Trade and Industry in June 1999.

Except for purposes of tender or contract no person may claim or create the impression that commodities comply with this specification.

### **Foreword**

Edition 2 cancels and replaces the first edition (CKS 245:1970).

**Attention is drawn to the normative references given in clause 2 of this specification. These references are indispensable for the application of this specification.**

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## **Masking tape**

### **1 Scope**

This specification covers requirements for two types of pressure-sensitive adhesive masking tape designated as type 1 and type 2. Type 1 tape is intended for temporary masking during painting, varnishing and other finishing operations and has temperature-resistant characteristics. Type 2 tape is intended for general use in offices, drafting applications, non-permanent applications and non-critical painting.

#### NOTES

- 1 The information to be specified in tender invitations and in each order or contract is given in annex A.
- 2 Recommendations for the storage and usage of adhesive masking tape are given in annex B.
- 3 The shelf-life of the masking tape is approximately 12 months, depending on the storage conditions.

### **2 Normative references**

The following standards contain provisions which, through reference in this text, constitute provisions of this specification. All standards are subject to revision and, since any reference to a standard is deemed to be a reference to the latest edition of that standard, parties to agreements based on this specification are encouraged to take steps to ensure the use of the most recent editions of the standards indicated below. Information on currently valid national and international standards can be obtained from the South African Bureau of Standards.

AS/NZS 1635.8.1, *Methods of test for pressure-sensitive adhesive tape – Method 8.1: Length.*

ASTM D1000, *Standard test method for pressure-sensitive adhesive-coated tapes used for electrical and electronic applications.*

BS 4J 11, *Specification for pressure-sensitive adhesive paper masking tape.*

FINAT test method No. 1, *Peel adhesion (180°) at 300 mm per minute.*

FINAT test method No. 9, *"Quick-Stick" tack measurement.*

ISO 186, *Paper and board – Sampling to determine average quality.*

ISO 187, *Paper, board and pulps – Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples.*

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ISO 534, *Paper and board – Determination of thickness and apparent bulk density or apparent sheet density.*

ISO 1924-2, *Paper and board – Determination of tensile properties – Part 2: Constant rate of elongation method.*

ISO 9184-3, *Paper, board and pulps – Fibre furnish analysis – Part 3: Herzberg staining test.*

PSTC-9M, *Accelerated aging of pressure-sensitive tapes.*

### 3 Definitions

For the purposes of this specification, the following definitions apply:

**3.1 defective:** A roll of masking tape, or a set of specimens of masking tape, the average properties of which have been determined and that fails in one or more respects to comply with the relevant requirements of this specification.

**3.2 end-face:** The radial side of the roll of masking tape.

**3.3 gapping:** Openings between the layers of the masking tape on a roll.

**3.4 maximum service temperature exposure and time limitation:** The highest temperature at which the masking tape will still be functional and the time limitation at this temperature.

**3.5 minimum service temperature:** The lowest temperature at which the masking tape will still be functional.

**3.6 normal service temperature:** The temperature at which the masking tape performs at its best.

**3.7 pressure-sensitive adhesive:** A distinct category of adhesives that, in the dry form, is permanently tacky at room temperature and firmly adheres to a variety of surfaces upon contact, without the need for more than slight pressure.

**3.8 tack:** The property that enables an adhesive to form a bond with a surface of another material upon brief contact under light pressure.

**3.9 telescoping:** The sideways sliding of the layers of masking tape on a roll, one over the other, such that the roll looks like a funnel or a telescope.

### 4 Requirements

#### 4.1 Material

##### 4.1.1 Paper

When the masking tape is tested in accordance with 6.3.10, the paper shall be found to have been made from chemically processed wood fibres. The paper shall be crêped or flat, as required (see annex A).

#### 4.1.2 Adhesive

The adhesive shall be in a smooth and continuous layer on one side of the paper only.

#### 4.1.3 Freedom from defects

**4.1.3.1** The masking tape shall be free from deleterious defects that might impair its appearance or its serviceability (or both) and it shall be such that it is fit for its purpose.

**4.1.3.2** When the masking tape is unrolled, there shall be no tearing of the paper and no transfer of adhesive to the paper of the underlying layer, either before or after accelerated aging.

#### 4.1.4 Physical properties

Masking tape shall be of type 1 or type 2, as required (see annex A). It shall comply with the relevant requirements of table 1.

**Table 1 — Physical properties of masking tape**

| 1  | 2  | 3    | 4          | 5    | 6                     |
|--|--|------|------------|------|-----------------------|
| Property   | Requirements (average)                           |      |            |      | Test method subclause |
|  | Type 1   |      | Type 2     |      |                       |
|  | Crêped   | Flat | Crêped     | Flat |                       |
| Tensile strength, kN/m, min.                                     | 3,2  | 4,0  | 3,2        | 4,0  | 6.3.3                 |
| Elongation at break, %.  | 7,0 – 20,0                                       | –    | 7,0 – 20,0 | –    | 6.3.3                 |
| Adhesion strength to steel, kN/m, min.                           |  |      |            |      |                       |
| Initial .....  | 0,22   | 0,22 | 0,22       | 0,22 | 6.3.4                 |
| After accelerated aging .....                                    | 0,22   | 0,22 | 0,22       | 0,22 |                       |
| Tack, kN/m, min.   |  |      |            |      |                       |
| Initial .....  | 0,01   | 0,01 | 0,01       | 0,01 | 6.3.8                 |
| After accelerated aging .....                                    | 0,01   | 0,01 | 0,01       | 0,01 |                       |
| Thickness, mm, max.  | 0,25   | 0,25 | 0,25       | 0,25 | 6.3.9                 |
| High temperature adhesion, before and after accelerated aging    | No separation within 180 s, no adhesive transfer |      | N/A        | N/A  | 6.3.7                 |
| Freedom from deleterious effect on polymethyl methacrylate sheet | No signs of crazing and no adhesive transfer     |      | N/A        | N/A  | 6.3.5                 |
| Resistance to penetration by paint solvents                      | No signs of crazing and no adhesive transfer     |      | N/A        | N/A  | 6.3.6                 |

## 4.2 Construction

### 4.2.1 General

The masking tape shall be supplied in roll form, on a suitable core, with the adhesive side facing the core. Each roll shall be essentially free from telescoping, gapping and other forms of distortion.