

Australian/New Zealand Standard®

**Textile floor coverings—
Tests and measurements****Method 18: Burning behaviour—
Tablet test at ambient temperature**

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CS/86, on Burning Behaviour of Textile Products, Floor Coverings and Furniture. It is equivalent to, and has been reproduced from ISO 6925:1982 *Textile floor coverings—Burning behaviour—Tablet test at ambient temperature*.

In Australia, the Standard will supersede AS 2111.18—1980, *Methods of test for textile floor coverings—Determination of fire propagation properties—Fire propagation of the use-surface using a small ignition source*.

As this Standard is reproduced from an international Standard, the following applies:

- (a) Its number appears on the cover and title page, while the international publication number appears only on the cover.
- (b) In the source text, 'this International Standard' should read 'this Australian/New Zealand Standard'.
- (c) A full point substitutes for a comma when referring to a decimal marker.
- (d) **Clause 5.4 Delete** Item (a) and *substitute* the following:
'(a) in the standard atmosphere in accordance with AS 2001.1; or'

References to International Standards should be replaced by equivalent Australian Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
139	Textiles—Standard atmospheres for conditioning and testing	2001 2001.1	Methods of test for textiles Conditioning procedures
1957	Machine-made textile floor coverings—Sampling and cutting specimens for physical tests	2119	Method for sampling and cutting specimens of textile floor coverings for testing
2859	Sampling procedures and tables for inspection by attributes	1199	Sampling procedures and tables for inspection by attributes

Textile floor coverings — Burning behaviour — Tablet test at ambient temperature

1 Scope and field of application

This International Standard specifies a method for the assessment of the burning behaviour, often superficial, of textile floor coverings in a horizontal position when exposed to a small source of ignition under controlled laboratory conditions.

The method specified in this International Standard is applicable to all types of textile floor coverings whatever their construction or their fibre composition. The method may also be applicable to unfinished material. In this case, the result does not indicate the behaviour of the material in the condition in which it is used.

The results obtained on specimens in a horizontal position, as specified in this International Standard, do not apply to the behaviour of the textile floor covering when used in another position, particularly in a vertical position.

The present method should be used solely to assess the properties of materials or systems in response to heat and flame under controlled laboratory conditions and should not be used for the evaluation or regulation of the hazard of textile floor coverings under actual fire conditions. The method has been used extensively in the trade for acceptance testing and is considered satisfactory as a test for acceptance of merchandise, provided that an appropriate sampling plan such as one selected from ISO 2859 is used.

2 References

ISO 139, *Textiles — Standard atmospheres for conditioning and testing*.

ISO 1957, *Machine-made textile floor coverings — Sampling and cutting specimens for physical tests*.

ISO 2859, *Sampling procedures and tables for inspection by attributes*.

3 Principle

Exposure of a specimen in a horizontal position to the action of a small ignition source (methenamine tablet) under specified conditions and measurement of the resulting damaged length.

4 Apparatus and materials

4.1 Test box, with inside dimensions of 300 mm × 300 mm × 300 mm and made from hard, fire-resistant insulation board with similar thermal properties to asbestos cement board, not less than 6 mm thick. The chamber is open at the top and has a flat removable base made of the same material as above. The joints shall be air tight.

NOTE — Any other test chamber giving identical results may be used.

4.2 Square metal plate, 230 mm × 230 mm, 6,5 ± 0,5 mm thick, with a 205 mm diameter hole cut in the centre of the plate.

4.3 Desiccator(s), for storing the methenamine tablets (see 4.9) and the bone dry specimens (see 5.4.6). It is recommended that self-indicating silica gel is used as desiccant.

4.4 Circulating air oven, ventilated, forced draught and thermostatically controlled at 105 ± 2 °C throughout the enclosure.

4.5 Glove, disposable, of polyethylene, polypropylene or rubber.

4.6 Rule, graduated in millimetres.

4.7 Vacuum cleaner, of which all surfaces in contact with the specimen are flat and smooth.

4.8 Laboratory fume hood, of about 2 m³ capacity, capable of being closed and having its draught turned off during the test. The front or one of the sides of the hood shall be glass in order to permit observation of the specimen during the test.

4.9 Methenamine tablet.¹⁾

Tablets of hexamethylenetetramine, flat, having a mass of 150 ± 5 mg and a diameter of 6 mm.

NOTE — Storage of the tablets in a desiccator reduces the tendency to crack upon ignition.

1) Methenamine tablets are available commercially. Details may be obtained from the ISO Central Secretariat or from the Secretariat of ISO/TC 38.