

Australian Standard™

Methods of test for textiles

Method 2.25.3: Physical tests—Determination of the abrasion resistance of fabrics by the Martindale method—Determination of mass loss

PREFACE

This Standard was prepared by the Standards Australian Committee TX-020, Testing of Textiles to supersede in part, AS 2001.2.25—1990, *Methods of test for textiles, Method 2.25: Physical tests—Determination of flat abrasion of textile fabrics (Martindale abrasion method)*.

The objective of this Standard is to provide manufacturers and testing bodies with a standard for specifying the testing apparatus required for the determination of the abrasion resistance determining the mass loss of fabric during testing.

This Standard is identical with and has been reproduced from ISO 12947-3:1998, *Textiles — Determination of the abrasion resistance of fabrics by the Martindale method—Part 3: Determination of mass loss* and its Corrigendum 1:2002, which has been added after the main source text.

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

- Its number appears on the cover and title page while the International Standard number appears only on the cover.
- In the source text ‘this part of ISO 12947’ should read ‘this Australian Standard’.
- A full point should be substituted for a comma when referring to a decimal marker.

The reference to International Standard should be replaced by references to the following Australian Standards:

<i>References to International Standards</i>		<i>Australian Standards</i>	
ISO		AS	
105	Textile—Tests for colour fastness	2001	Methods of test for textiles
105-A02	Part A02: Grey scale for assessing change in colour	2001.4.A02	Method 4.A02: Grey scale for assessing change in colour
139	Textiles—Standard atmospheres for conditioning and testing	2001.1	Part 1: Conditioning procedures
2859	Sampling procedures for inspection by attributes	1199	Sampling procedures for inspection by attributes
2859-1	Part 1: Sampling plans indexed by acceptable quality level (AQL) for lot-by-lot inspection	1199.1	Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection.

References to International Standards

ISO

- 12947 Textiles—Determination of the abrasion resistance of fabrics by the Martindale method
- 12947-1: Part 1: Martindale abrasion testing apparatus
- 12947-2: Part 2: Determination of specimen breakdown

Australian Standards

AS

- 2001.2.25.1 Physical tests—Determination of the abrasion resistance of fabrics by the Martindale method—Martindale abrasion testing apparatus
- 2001.2.25.2 Part 2.25.2: Physical tests—Determination of the abrasion resistance of fabrics by the Martindale method—Determination of specimen breakdown

1 Scope

This part of ISO 12947 is applicable to the determination of the mass loss of specimens covering all textile fabrics including nonwovens apart from fabrics where the specifier indicates the end performance as having a low abrasion wear life.

NOTE Further introductory comments are given in ISO 12947-1.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 12947. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 12947 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 105-A02:1993, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour.*

ISO 139:1973, *Textiles — Standard atmospheres for conditioning and testing.*

ISO 2859-1:—¹⁾, *Sampling procedures for inspection by attributes — Part 1: Sampling plans indexed by acceptable quality level (AQL) for lot-by-lot inspection.*

ISO 12947-1:1998, *Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 1: Martindale abrasion testing apparatus.*

ISO 12947-2:1998, *Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 2: Determination of specimen breakdown.*

3 Definitions

For the purposes of this part of ISO 12947 the definitions given in ISO 12947-1 and ISO 12947-2 apply.

4 Principle

A circular specimen is mounted in a specimen holder and, subjected to a defined load, is rubbed against an abrasive medium (standard fabric) in a translational movement tracing a Lissajous figure, the specimen holder being

1) To be published. (Revision of ISO 2859:1989)