

# Australian Standard™

AS 1683.2

## Methods of test for elastomers

### Method 2: Latex, rubber— Determination of total solids content

#### PREFACE

This Standard was prepared by the Standards Australia Committee RU-003, Analysis and Testing of Elastomers to supersede AS 1683.2—1974, *Methods of test for rubber, Method 3: Solids content of latex*.

The objective of this Standard is to provide manufacturers and users of elastomeric materials with a method for the determination of the solids content of natural rubber latex concentrate and synthetic rubber latex.

This Standard is identical with and has been reproduced from ISO 124:1997, *Latex, rubber—Determination of total solids content*.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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 Standard number appears only on the cover.
- (b) In the source text, ‘this International Standard’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

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
289 Rubber latex—Sampling	1683 Methods of test for rubber 1683.1 Method 1: Sampling of latex



NOTES

**WARNING** — Persons using this International Standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

## 1 Scope

This International Standard specifies a method for the determination of the solids content of natural rubber latex concentrate and synthetic rubber latex. The method is not necessarily suitable for latex from natural sources other than *Hevea brasiliensis*, for vulcanized latex, for compounded latex or for artificial dispersions of rubber.

## 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 123:1985, *Rubber latex — Sampling*.

## 3 Principle

A test portion is heated to constant mass in an oven under specified conditions, either at atmospheric pressure or under vacuum. The total solids content is determined by weighing before and after heating.

NOTE — The determination of the residue after drying for a specified period of time is the subject of ISO 1625, *Plastics — Polymer dispersions — Determination of non-volatile matter (residue) at specified temperatures* (to be published — revision of ISO 1625:1977).

## 4 Apparatus

Ordinary laboratory apparatus, plus the following:

- 4.1 **Flat-bottomed dishes**, lipless, of diameter approximately 60 mm.
- 4.2 **Oven**, capable of being maintained at  $70\text{ °C} \pm 2\text{ °C}$  or  $105\text{ °C} \pm 5\text{ °C}$ .
- 4.3 **Vacuum oven**, capable of being maintained at  $125\text{ °C} \pm 2\text{ °C}$  and at a pressure below 20 kPa<sup>1</sup>.
- 4.4 **Analytical balance**, capable of being read to 0,1 mg.

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<sup>1</sup> 1 kPa = 1 kN/m<sup>2</sup>