

Australian Standard™

AS 1683.3

Methods of test for elastomers

Method 3: Latex, rubber, natural concentrate—
Determination of dry rubber content

PREFACE

This Standard was prepared by the Standards Australia Committee RU-003, Analysis and Testing of Elastomers to supersede AS 1683.3—1974, *Methods of test for rubber*, Method 11: *Dry rubber content of natural rubber latex*.

The objective of this Standard is to provide manufacturers and users of elastomeric materials with a method for the determining the dry rubber content of natural rubber.

This Standard is identical with and has been reproduced from ISO 126:1995, *Latex, rubber, natural concentrate—Determination of dry rubber content*.

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	
123	Rubber latex—Sampling	1683 1683.1	Methods of test for rubber Method 1: Sampling of latex
124	Rubber latices—Determination of total solids content	1683.2	Method 2: Latex, rubber— Determination of total solids content



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 dry rubber content of natural rubber latex concentrate.

The method is not necessarily suitable for latices from natural sources other than *Hevea brasiliensis*, or for compounded latex, vulcanized latex or artificial dispersions of rubber, and is not applicable to synthetic rubber latices.

2 Normative references

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

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

ISO 124:1990, *Rubber latices — Determination of total solids content*.

3 Definition

For the purposes of this International Standard, the following definition applies.

3.1 natural rubber latex concentrate: Natural rubber latex containing ammonia and/or other preservatives and which has been subject to some process of concentration.

4 Principle

A test portion of latex concentrate is diluted to 20 % total solids content and acidified with acetic acid. The coagulated rubber is then formed into a sheet and dried at 70 °C.

5 Reagents

During the analysis, use only reagents of recognized analytical grade and only distilled water or water of equivalent purity.

5.1 Acetic acid, 20 g/dm³ aqueous solution (for use with latex concentrate preserved with ammonia).

5.2 Acetic acid, 50 g/dm³ solution (for use with latex concentrate preserved with potassium hydroxide).

Add 50 g of glacial acetic acid to 500 cm³ of propan-2-ol and dilute with water to 1 dm³.