SINGAPORE STANDARDS COUNCIL

SS 323 : Part F1 : 2013
(ICS 55.040)

SINGAPORE STANDARD

Methods of test for flexible plastic packaging materials

– Part F1 : Standard test method for seal strength of flexible barrier materials

(This Singapore Standard is based on ASTM F88/F88M – 09, Standard test method for seal strength of flexible barrier materials, Copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken PA 19428, USA.)

Published by
SPRING singapore
Enabling Enterprise

SS 323 : Part F1 : 2013
(ICS 55.040)

SINGAPORE STANDARD

Methods of test for flexible plastic packaging materials

– Part F1 : Standard test method for seal strength of flexible barrier materials

Standards
SPRING Singapore
1 Fusionopolis Walk,
#01-02 South Tower, Solaris
Singapore 138628
Email : standards@spring.gov.sg

ISBN 978-981-4353-82-3

This Singapore Standard was approved by the General Engineering and Safety Standards Committee on behalf of the Singapore Standards Council on 12 March 2013.

First published, 1987
First revision, 2013

The General Engineering and Safety Standards Committee, appointed by the Standards Council, consists of the following members:

		Name	Capacity
Chairman	:	Mr Chan Yew Kwong	*Member, Standards Council*
Deputy Chairman	:	Mr Seet Choh San	*Singapore Institution of Safety Officers*
Secretary	:	Ms Kong Wai Yee	*Singapore Manufacturing Federation – Standards Development Organisation*
Members	:	Ms Barbara Bok	*SPRING Singapore*
		Dr Kenneth Choy	*Ministry of Manpower*
		Assoc Prof Foo Swee Cheng	*National University of Singapore*
		Er. Goh Keng Cheong	*Housing & Development Board*
		Assoc Prof Hoon Kay Hiang	*Nanyang Technological University*
		Mr Albert Lim	*Packaging Council of Singapore*
		Mr Liu Png Hock	*Land Transport Authority*
		Mr Ng Yek Meng	*Singapore Contractors Association Limited*
		Mr P K Raveendran	*Association of Singapore Marine Industries*
		Mr Tan Chong Lin	*Building and Construction Authority*
		Mr Tan Kai Hong	*Institution of Engineers Singapore*
		Mr Tay Cheng Pheng	*Society of Loss Prevention in the Process Industries*
		Mr Wong Choon Kin	*Singapore Manufacturing Federation*
		Mr Victor Yeow	*Association of Small and Medium Enterprises*
		Assoc Prof Zhou Wei	*Singapore Welding Society*

The Technical Committee on Packaging, appointed by the General Engineering and Safety Standards Committee and responsible for the preparation of this standard, consists of representatives from the following organisations:

		Name	Capacity
Chairman	:	Mr Albert Lim Siang Meng	*Member, General Engineering and Safety Standards Committee*
Secretary	:	Ms Julia Yeo	*Singapore Manufacturing Federation – Standards Development Organisation*
Members	:	Assoc Prof Lee Kim Seng	*National University of Singapore*
		Dr Lee Mun Wai	*Singapore Polytechnic*
		Mr Ong Beng Yang	*TÜV SÜD PSB Pte Ltd*
		Dr Tai Kang	*Nanyang Technological University*

The Working Group appointed by the Technical Committee to assist in the preparation of this standard comprises the following experts who contribute in their *individual capacity*:

		Name
Convenor	:	Assoc Prof Lee Kim Seng
Co-convenor	:	Dr Tai Kang
Members	:	Ms Goh May San
		Ms Angeline Hu Aun Chyi
		Ms Christina Loh Siew Cheam
		Mr Ong Kian Soo

The organisations in which the experts of the Working Group are involved are:

Nanyang Technological University
National University of Singapore
Singapore Food Manufacturers' Federation
Superior Multi-Packaging Limited
The Plastics and Rubber Institute of Singapore
TÜV SÜD PSB Pte Ltd

(blank page)

Contents

National Foreword

This Singapore Standard was prepared by the Working Group on Methods of test for flexible plastic packaging materials appointed by the Technical Committee on Packaging which is under the purview of the General Engineering and Safety Standards Committee.

It is a revision of SS 323 : Part F1 : 1987 (1996). This Singapore Standard is a modified adoption of ASTM F88/F88M – 09, "Standard test method for seal strength of flexible barrier materials", Copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken PA 19428, USA. Reprinted by permission of ASTM International.

The modification is given as follows:

Subclause	Modification
6.1	*Amend* the heading to 'Tensile testing machine or Universal testing machine'. Explanation: Universal testing machine is also applicable for tensile testing.

Attention is drawn to the following:

1. The reference to ASTM Standard shall be replaced by the following Singapore Standard:

ASTM Standard	Corresponding Singapore Standard
ASTM D882 : 2012	SS 323 : Part C1 : 2013

Acknowledgement is made for the use of information from the above publications.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. SPRING Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

1. *Singapore Standards are subject to periodic review to keep abreast of technological changes and new technical developments. The changes in Singapore Standards are documented through the issue of either amendments or revisions.*

2. *Compliance with a Singapore Standard does not exempt users from legal obligations.*

Methods of test for flexible plastic packaging materials – Part F1 : Standard test method for seal strength of flexible barrier materials[1]

1 Scope

1.1 This test method covers the measurement of the strength of seals in flexible barrier materials.

1.2 The test may be conducted on seals between a flexible material and a rigid material.

1.3 Seals tested in accordance with this test method may be from any source, laboratory or commercial.

1.4 This test method measures the force required to separate a test strip of material containing the seal. It also identifies the mode of specimen failure.

1.5 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.6 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.