

**SINGAPORE STANDARD**

# **Specification for plastic refuse sacks**

Confirmed 2011



Published by

**Enterprise**  
**Singapore**

**SS 331 : 1997 (2011)**  
(ICS 55.080)

---

SINGAPORE STANDARD

**Specification for plastic refuse sacks**

---

All rights reserved. Unless otherwise specified, no part of this Singapore Standard may be reproduced or utilised in any form or by any means, electronic or mechanical, including photocopying and microfilming, without permission in writing from Enterprise Singapore. Request for permission can be sent to: [standards@enterprisesg.gov.sg](mailto:standards@enterprisesg.gov.sg).

ISBN 9971-67-611-7

## SS 331 : 1997

This Singapore Standard having been approved by the Packaging Standards Committee was endorsed by the Standards Council on 1 September 1997.

First published, 1988.

First revision, 1997.

The Packaging Standards Committee appointed by the Standards Council consists of the following members :

	Name	Organisation
<b>Chairman</b> :	Mr Eddie P Chng	Standards Council
<b>Secretary</b> :	Ms Christina Choong	Singapore Productivity and Standards Board
<b>Members</b> :	Dr Philip Adams	The Plastics and Rubber Institute
	Mr Chia Hong Kuan	Ministry of the Environment
	Mr Thomas Chua	Singapore Chinese Chamber of Commerce and Industry
	Dr Chuah Yow Nan	Port of Singapore Authority
	Mr Andrew Lee	Singapore Productivity and Standards Board
	Mrs Ser-Low Wai Ming	Singapore Institute of Food Science and Technology
	Dr Tri Lu Dac	Singapore International Chamber of Commerce

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

	Name	Organisation
<b>Chairman</b> :	Dr Philip Adams	Packaging Standards Committee
<b>Secretary</b> :	Ms Barbara Bok	Singapore Productivity and Standards Board
<b>Members</b> :	Dr Chan Hung Kong	Singapore Plastic Industry Association
	Mr Kwa Eng Seen	The Plastics and Rubber Institute
	Mr Lim Swee Ling	Singapore Institute of Food Science and Technology
	Mr Ng Kok Yau	Singapore Productivity and Standards Board
	Mr Patrick Ong	Singapore Confederation Industries
	Mr Ooi Lin Kah	Ministry of the Environment
	Mr Pok Chin Siong	Singapore Polytechnic
	Mr Benny Tan C M	Temasek Polytechnic
	Dr Suraj Singh Verma	Singapore Productivity and Standards Board
<b>Co-opted Member</b> :	Mr Edward Kwong	Individual Capacity

## CONTENTS

## Page

Foreword	-	-	-	-	-	-	-	-	-	4
----------	---	---	---	---	---	---	---	---	---	---

## SPECIFICATION

1.	Scope	-	-	-	-	-	-	-	-	5
2.	Definitions	-	-	-	-	-	-	-	-	5
3.	Conditioning for testing	-	-	-	-	-	-	-	-	5
4.	Requirements	-	-	-	-	-	-	-	-	5
5.	Marking	-	-	-	-	-	-	-	-	7

## APPENDICES

A.	Determination of tensile strength and elongation of plastics films	-	-	-	-	-	-	-	-	8
B.	Resistance to dropping impact	-	-	-	-	-	-	-	-	13

## TABLE

1.	Dimensions of test piece	-	-	-	-	-	-	-	-	10
----	--------------------------	---	---	---	---	---	---	---	---	----

## FIGURES

1.	One type of grip suitable	-	-	-	-	-	-	-	-	12
2.	Equipment for the dropping impact test	-	-	-	-	-	-	-	-	13

SINGAPORE STANDARD  
SPECIFICATION FOR PLASTICS REFUSE SACKS

FOREWORD

This Singapore Standard was prepared by the Technical Committee on Plastic Packaging Materials under the direction of the Packaging Standards Committee. This standard is a revision of SS 331 : 1988.

This revision was made to bring the standard up-to-date to afford guidance to industry and users in relation to plastic sacks used for the collection of refuse. The revised standard introduces the inclusion of a new performance requirement i.e. drop test. It also recommends the use of the Elmendorf method, in replacement of the trouser tear method, for tear resistance.

In preparing this standard, reference was made to the following publications.

BS 2782 : -	Methods of testing plastics Part 3 : Methods 326A to 326C : 1977 : Determination of tensile strength and elongation of plastics films
BS 6642 : 1985	Specification for disposable plastics refuse sacks made from polyethylene
ISO 7965 : -	Sacks - Drop test Part 2 : 1993 Sacks made from thermoplastic flexible film
SS 323 : -	Methods of test for flexible plastic packaging materials Part A1 : 1987 Determination of thickness Part C2 : 1987 Determination of impact resistance (by falling weight method) Part C3 : 1996 Determination of initial tear resistance

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. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

**NOTE**

1. Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.
2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR.
3. Compliance with a SS or TR does not exempt users from any legal obligations.

**1. SCOPE**

This standard specifies requirements for plastic refuse sacks which are intended for normal usage and does not cover refuse sacks intended for hot refuse and unwrapped sharp objects.