INTERNATIONAL STANDARD

ISO 23560

Second edition 2015-03-15

Woven polypropylene sacks for bulk packaging of foodstuffs

Sacs tissés en polypropylène pour l'emballage en vrac de denrées alimentaires



Reference number ISO 23560:2015(E)



roduced or utilized e te internet or an ' or ISO's memb All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org

Published in Switzerland

Foreword Introduction 1	
1 Scope 2 Normative references 3 Terms and definitions 4 Manufacture 4.1 Raw materials 4.2 Fabric 5 Sack 6 Liner 7 Requirements 7.1 Conditioning and test conditions 7.2 Construction parameters 7.3 UV resistance 7.4 Mass of the bale 7.5 Drop testing 8 Food compatibility	iv
Normative references Terms and definitions Manufacture 4.1 Raw materials 4.2 Fabric Sack Liner Requirements 7.1 Conditioning and test conditions 7.2 Construction parameters 7.3 UV resistance 7.4 Mass of the bale 7.5 Drop testing Food compatibility	v
3 Terms and definitions 4 Manufacture 4.1 Raw materials 4.2 Fabric 5 Sack 6 Liner 7 Requirements 7.1 Conditioning and test conditions 7.2 Construction parameters 7.3 UV resistance 7.4 Mass of the bale 7.5 Drop testing 8 Food compatibility	1
4 Manufacture 4.1 Raw materials 4.2 Fabric 5 Sack 6 Liner 7 Requirements 7.1 Conditioning and test conditions 7.2 Construction parameters 7.3 UV resistance 7.4 Mass of the bale 7.5 Drop testing	1
4.1 Raw materials 4.2 Fabric 5 Sack 6 Liner 7 Requirements 7.1 Conditioning and test conditions 7.2 Construction parameters 7.3 UV resistance 7.4 Mass of the bale 7.5 Drop testing	
4.1 Raw materials 4.2 Fabric 5 Sack 6 Liner 7 Requirements 7.1 Conditioning and test conditions 7.2 Construction parameters 7.3 UV resistance 7.4 Mass of the bale 7.5 Drop testing	1
5 Sack 6 Liner 7 Requirements 7.1 Conditioning and test conditions 7.2 Construction parameters 7.3 UV resistance 7.4 Mass of the bale 7.5 Drop testing.	1
6 Liner	
7 Requirements 7.1 Conditioning and test conditions 7.2 Construction parameters 7.3 UV resistance 7.4 Mass of the bale 7.5 Drop testing 8 Food compatibility	
7.1 Conditioning and test conditions 7.2 Construction parameters 7.3 UV resistance 7.4 Mass of the bale 7.5 Drop testing	3
7.2 Construction parameters 7.3 UV resistance 7.4 Mass of the bale 7.5 Drop testing 8 Food compatibility	
7.3 UV resistance 7.4 Mass of the bale 7.5 Drop testing 8 Food compatibility	
7.4 Mass of the bale 7.5 Drop testing 8 Food compatibility	
8 Food compatibility	3
	3
9 Marking and packaging	3
9.1 Marking on sacks	
9.2 Packaging9.3 Marking on bales	4
10 Sampling and criteria for conformity 10.1 Sampling	
10.2 Criteria for conformity	4
Annex A (normative) Method of calculation of the mass of a sack	6
Annex B (normative) Breaking strength of fabric and bottom seam	
Annex C (normative) Drop testing	
Bibliography	

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

This second edition cancels and replaces the first edition (ISO 23560:2008), which has been technically revised.

Introduction

With the removal of trade barriers between nations, there is a need for an International Standard for the packaging, transportation, and storage of foodstuffs such as cereals. Polypropylene (PP) sacks made from woven fabric are an ideal choice for the packaging of foodstuffs. Such sacks are produced from al Standar.

aring the lon_E food-grade polypropylene and ensure the mechanical strength needed for storage and transportation.

This International Standard describes the construction of the sacks, their dimensions, and test methods suitable for ensuring the long-term storage and transportation of foodstuffs in the sacks.

This document is a previous general ded by tills

Woven polypropylene sacks for bulk packaging of foodstuffs

1 Scope

This International Standard specifies the general characteristics, requirements, and methods of test for woven polypropylene (PP) sacks. It is applicable to woven PP sacks, having a capacity of 50 kg or 25 kg, intended for the transport and storage of foodstuffs, such as cereals, sugar, and pulses.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 291, Plastics — Standard atmospheres for conditioning and testing

ISO 3451-1:2008, Plastics — Determination of ash — Part 1: General methods

ISO 4892-3:2013, Plastics — Methods of exposure to laboratory light sources — Part 3: Fluorescent UV lamps

ISO 4915, Textiles — Stitch types — Classification and terminology

ISO 6591-2, Packaging — Sacks — Description and method of measurement — Part 2: Empty sacks made from thermoplastic flexible film

ISO 13934-1, Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method

ISO 13935-1, Textiles — Seam tensile properties of fabrics and made-up textile articles — Part 1: Determination of maximum force to seam rupture using the strip method

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

woven PP sack

container made of woven polypropylene (PP) fabric, closed at one end, in certain cases combined with other flexible materials used, for instance, for the liner to provide the properties required for filling, storage, and distribution of the packaged commodity

4 Manufacture

4.1 Raw materials

A suitable grade of PP conforming to food contact requirements shall be utilized in the manufacture of the PP tape/fabric used in the sacks.