

SVENSK STANDARD

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Förpackningar – Plastsäckar för insamling av hushållsavfall – Typer, krav och provningsmetoder

**Plastics sacks for household waste collection – Types,
requirements and test methods**



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Denna standard ersätter SS-EN 13592+A1:2007, utgåva 1.

The European Standard EN 13592:2017 has the status of a Swedish Standard. This document contains the official version of EN 13592:2017.

This standard supersedes the Swedish Standard SS-EN 13592+A1:2007, edition 1.

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Denna standard är framtagen av kommittén för Förpackningsmaterial, SIS/TK 164/AG 22.

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EUROPEAN STANDARD

EN 13592

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2017

ICS 55.080

Supersedes EN 13592:2003+A1:2007

English Version

Plastics sacks for household waste collection - Types, requirements and test methods

Sacs en plastique pour la collecte des déchets
ménagers - Types, exigences et méthodes d'essai

Kunststoffsäcke für die Abfallsammlung aus
Haushalten - Typen, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 21 November 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 13592:2017) has been prepared by Technical Committee CEN/TC 261 “Packaging”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2017, and conflicting national standards shall be withdrawn at the latest by August 2017.

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

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1 Scope

This European Standard specifies the general characteristics, test methods and requirements for sacks, bags and bin liners, made from plastic films, used for household waste collection, or household selective waste collection including the collection of biodegradable waste for organic recycling (biodegradation and composting).

For the purpose of this European Standard biodegradable and compostable sacks, including ties if any, are those which comply with EN 13432.

This European Standard applies only to sacks, bags and bin liners for which the first use is for household waste collection or household selective waste collection.

This European Standard does not apply to sacks used to protect bins and that are not lifted at the emptying operation and thus do not require the same mechanical characteristics.

NOTE For editorial reasons, in this document the terms “sack” and “bag” are synonymous.

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.

EN 13432, *Packaging — Requirements for packaging recoverable through composting and biodegradation — Test scheme and evaluation criteria for the final acceptance of packaging*

EN 22248, *Packaging — Complete, filled transport packages — Vertical impact test by dropping (ISO 2248)*

EN ISO 291, *Plastics — Standard atmospheres for conditioning and testing (ISO 291)*

EN ISO 527-1, *Plastics — Determination of tensile properties — Part 1: General principles (ISO 527-1)*

EN ISO 527-3, *Plastics — Determination of tensile properties — Part 3: Test conditions for films and sheets (ISO 527-3)*

EN ISO 1043-1, *Plastics — Symbols and abbreviated terms — Part 1: Basic polymers and their special characteristics (ISO 1043-1)*

EN ISO 7965-2, *Sacks — Drop test — Part 2: Sacks made from thermoplastic flexible film (ISO 7965-2)*

ISO 4591:1992, *Plastics — Film and sheeting — Determination of average thickness of a sample, and average thickness and yield of a roll, by gravimetric techniques (gravimetric thickness)*

ISO 4593, *Plastics — Film and sheeting — Determination of thickness by mechanical scanning*

3 Terms and definitions

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

3.1

household waste

non dangerous waste from household or from industrial activities or service activities, collected in the same conditions

Note 1 to entry: To prevent damage to the sacks, unwrapped broken glass and unwrapped items with sharp edges are not normally placed in them.

3.2

selective waste collection

SWC

collection of some flows of waste, separated beforehand by producers with the view of valorisation or specific treatment

3.3

standard sack

open mouthed sack

3.4

drawtight sack

sack with a tie inserted in its top, allowing it to be closed and, in some cases, be carried

3.5

four flaps sack

sack with four flaps used for closure by knotting

3.6

strapsack

sack with two or four unsealed straps that can be used as tie for closure and as handles to carry it

3.7

T-shirt sack

sack with sealed handles

3.8

star sealed sack

sack folded before sealing in addition to gusset folds

3.9

gusset

fold or series of folds inserted in the longitudinal edge or in the bottom of a sack

3.10

tie

any item incorporated by design or added, used to close a sack

Note 1 to entry: For example: tapes, clips and wire ties.

SS-EN 13592:2017 (E)**3.11
useful length**

L
distance from the bottom to the mouth of a sack, measured inside the sack lying flat

Note 1 to entry: It is expressed in millimetres (mm).

**3.12
useful width**

P
internal width of a sack, measured with gussets unfolded, if any

Note 1 to entry: It is expressed in millimetres (mm).

**3.13
nominal thickness**

N_t
thickness of the film constituting a sack, as declared by the manufacturer or agreed upon in a contract

Note 1 to entry: It is expressed in micrometres (μm).

Note 2 to entry: nominal thickness is not the only parameter impacting the performance of the sacks

**3.14
longitudinal direction**

MD
direction parallel to the extrusion machine direction of the film

**3.15
transverse direction**

TD
direction perpendicular to the extrusion machine direction of the film

4 Designation

Sacks are designated using the following information:

- a) use, i.e. household waste collection sacks, household waste selective collection sacks, specific test loads (if any) and, any other information if there is an agreement between the supplier and customer;
- b) the dimensions, in millimetres (mm) (see Clause 5);
- c) the type:
 - 1) standard sacks;
 - 2) drawtight sacks;
 - 3) T-shirt sacks;
 - 4) strap sacks;
 - 5) four flap sacks;
 - 6) star sealed sacks.

NOTE The above list of types of sacks is neither restrictive nor exhaustive.

- d) the abbreviated term of the plastic material from which the sack is made of, in accordance with EN ISO 1043-1, and the colour of the sack;

Colour is a basic information for the designation of a sack, e.g. black, blue, green, white. When no pigment, filler or coloured master batch is incorporated in the resin, it is designated as “neutral”. When a more accurate definition of colour is needed, it should be specified in the contract with a reference to the relevant specification or standard.

- e) the nominal thickness of the film, N_t , in micrometres (μm);
- f) a reference to this European Standard, i.e. EN 13592;
- g) a reference to EN 13432, for sacks for the separate collection of biodegradable waste for organic recycling (biodegradation and composting).

EXAMPLES OF DESIGNATION

EXAMPLE 1 Household waste collection sack, 700 mm x 1 100 mm, standard, in polyethylene, white, 40 μm thick:

“Household waste collection sack – EN 13592 — 700/1100 - Standard - PE - White – 40 μm ”

EXAMPLE 2 Household selective waste collection drawtight sack, 600 mm x 800 mm, in polyethylene, neutral, 30 μm thick for specific load of 4 kg both for drop test and closing device test:

“Household selective waste collection sack for 4 kg – EN 13592 — 600/800 - Drawtight - PE - Neutral – 30 μm ”

EXAMPLE 3 Organic waste collection with biodegradable and compostable sacks, 500 x 600 mm, standard, neutral 20 μm :

“Biodegradable and compostable sack EN 13592 — EN 13432 — 500/600 - Standard - Neutral – 20 μm ”

5 Dimensions

The dimensions of the sacks shall be agreed between the supplier and the customer, unless otherwise specified in this standard.

The dimensions of sacks are given by two separate numbers, the first number giving the useful width, P , in millimetres, (see 3.12) and the second number the useful length, L , in millimetres (see 3.11).

EXAMPLE Reference 500x700 (500/700) for a sack with $P = 500$ mm and $L = 700$ mm.

6 General

Clause 7 gives the requirements for sacks for the collection of household waste except for the separate collection of biodegradable waste for organic recycling (biodegradation and composting) and the corresponding test methods.

In order to take into account the specificities of biodegradable waste and organic recycling, Clause 8 gives the requirements for sacks for the separate collection of biodegradable waste for organic recycling (biodegradation and composting). The corresponding test methods are given either in 7.2 when they are identical to those for sacks covered in Clause 7 or in 8.2 for the specific test methods or any deviation from the test methods given in 7.2.

Sampling shall be performed according to Annex B.