



**SLOVENSKI STANDARD**  
**SIST EN 13430:2004**

**01-september-2004**

**Nadomešča:**  
**SIST EN 13430:2001**

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**Embalaža - Zahteve za embalažo, primerno za predelavo s snovnim recikliranjem**

Packaging - Requirements for packaging recoverable by material recycling

Verpackung - Anforderungen an Verpackungen für die stoffliche Verwertung

Emballage - Exigences relatives aux emballages valorisables par recyclage matière  
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**Ta slovenski standard je istoveten z: EN 13430:2004**

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**ICS:**

13.030.50	Recikliranje	Recycling
55.020	Pakiranje in distribucija blaga na splošno	Packaging and distribution of goods in general

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**en,fr,de**

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EUROPEAN STANDARD

EN 13430

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July 2004

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English version

## Packaging - Requirements for packaging recoverable by material recycling

Emballage - Exigences relatives aux emballages valorisables par recyclage matière

Verpackung - Anforderungen an Verpackungen für die stoffliche Verwertung

This European Standard was approved by CEN on 5 May 2004.

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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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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<b>Contents</b>	<b>Page</b>
Foreword.....	3
Introduction .....	4
<b>1</b> <b>Scope</b> .....	<b>5</b>
<b>2</b> <b>Normative References</b> .....	<b>5</b>
<b>3</b> <b>Terms and definitions</b> .....	<b>5</b>
<b>4</b> <b>Requirements</b> .....	<b>6</b>
4.1 <b>Application</b> .....	6
4.2 <b>Packaging assessment</b> .....	6
4.3 <b>Declaration of percentage recyclable</b> .....	6
4.4 <b>Conformity of the packaging with this document (material recycling)</b> .....	7
4.5 <b>Support Documentation</b> .....	7
<b>Annex A (normative) Procedures to elaborate the requirements for packaging recoverable by material recycling</b> .....	<b>8</b>
A.1 <b>Objective</b> .....	8
A.2 <b>Control of packaging construction/composition and processing</b> .....	8
A.3 <b>Suitability for available recycling technology</b> .....	8
A.4 <b>Releases to the environment caused by recycling of the packaging after use</b> .....	8
<b>Annex B (normative) Procedure for assessing recyclability criteria</b> .....	<b>10</b>
B.1 <b>Objective</b> .....	10
B.2 <b>Design Criteria</b> .....	10
B.3 <b>Production criteria</b> .....	11
B.3.1 <b>Raw material and material composition in production, conversion and filling</b> .....	11
B.3.2 <b>Control of changes during processing</b> .....	11
B.4 <b>Utilisation criteria</b> .....	11
B.4.1 <b>Non-prejudice to essential requirements</b> .....	11
B.4.2 <b>Criteria for emptying by the end user</b> .....	11
B.4.3 <b>Criteria for sorting by the end-user</b> .....	11
B.5 <b>Criteria for collection/sorting</b> .....	11
B.6 <b>Note to annex B Material Identification</b> .....	12
<b>Annex C (informative) Examples of compliance summary statement for packaging to be recovered by material recycling after use</b> .....	<b>13</b>
<b>Annex D (informative) Examples of declaration of the percentage of weight of material available for recycling</b> .....	<b>16</b>
<b>Annex ZA (Informative) Relationship between this European Standard and the Essential Requirements of EU Directive 94/62/EC</b> .....	<b>21</b>
<b>Bibliography</b> .....	<b>22</b>

## Foreword

This document (EN 13430:2004) 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 January 2005, and conflicting national standards shall be withdrawn at the latest by January 2005.

This document supersedes EN 13430:2000.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This document forms one of a series of standards and reports prepared under Mandate M 200 rev3 and the second Standardisation Mandate M 317 given to CEN by the European Commission and the European Free Trade Association to support the European Council and Parliament Directive on Packaging and Packaging Waste [94/62/EC]. The procedure for applying this document in conjunction with the other mandated standards and reports, is specified in EN 13427.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard : Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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## Introduction

The Directive on Packaging and Packaging Waste (94/62/EC) defines essential requirements for packaging to be considered recoverable. This document amplifies these requirements with respect to material recycling. The European Standard EN 13427 provides a framework within which this and four other standards may be used together to support a claim that a packaging is in compliance with the essential requirements for packaging to be placed on the market as required by the Directive.

NOTE The Directive 94/62/EC is amended by European Parliament and Council Directive 2004/12/EC of 11 February 2004.

The purpose of packaging is the containment, protection, distribution and presentation of products. Material recycling of used packaging is one of several recovery options in the post use strategy. In order to save resources and minimise waste, the whole system in which the packaging takes part should be optimised. This includes prevention as well as reuse and recovery of packaging waste.

This document presents a framework for self-assessment to determine whether the requirements of this document have been met. Its approach is similar to that of systems standards such as the EN ISO 9000 series or an environmental management system such as EN ISO 14001.

This document also provides practical guidance in assessing recyclability.

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## 1 Scope

This document specifies the requirements for packaging to be classified as recoverable in the form of material recycling whilst accommodating the continuing development of both packaging and recovery technologies and sets out procedures for assessment of conformity with those requirements.

This document cannot by itself provide presumption of conformity. The procedure for applying this document is contained in EN 13427.

## 2 Normative References

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

EN 13193, *Packaging – Packaging and the Environment – Terminology*.

EN 13427:2004, *Packaging and the Environment – Requirements for the use of European Standards in the field of packaging and packaging waste*.

EN 13437:2003, *Packaging and material recycling – Criteria for recycling methods – Description of recycling processes and flow chart*.

CR 13688:2000, *Packaging – Material recycling – Report on requirements for substances and materials to prevent a sustained impediment to recycling*.

CR 14311; *Packaging – Marking and material identification system*

[SIST EN 13430:2004](https://standards.iteh.ai/catalog/standards/sist/9d1aa4f2-fefa-46fd-9e44-250d11a64846/sist-en-13430-2004)

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## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13193, EN 13427, EN 13437 and the following apply:

### 3.1

#### empty packaging

packaging is empty if - under normal and foreseeable circumstances - all product residues that can be removed by the emptier have been removed using practices commonly employed for that type of packaging

A non-exhaustive list of common practices includes:

- removing an inner liner;
- pouring;
- pumping;
- aspirating;
- shaking;
- scraping;

**EN 13430:2004 (E)**

- squeezing;
- rinsing;
- wiping-out.

**3.2****primary raw material**

material which has never been processed into any form of end use product

**3.3****recycling**

reprocessing in a production process of the waste materials for the original purpose or for other purposes including organic recycling but excluding energy recovery [94/62/EC]

**3.4****recycling process**

physical and/or chemical process which converts collected and sorted used packaging and scrap, together in some instances with other material, into secondary raw material or products

NOTE A description of relevant recycling processes is given in EN 13437.

**3.5****secondary raw material**

material recovered for use as a raw material from used products and from scrap with the exception of the scrap arising within a primary production process [EN 13437]

NOTE The precise nature of the primary production process may vary between material sectors. Reference to the relevant flow diagram in EN 13437 will clearly identify this process.

**3.6****supplier**

entity responsible for placing packaging or packed product on the market [EN 13427]

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**4 Requirements****4.1 Application**

The application of this document to any particular packaging shall be as specified in EN 13427.

**4.2 Packaging assessment**

The supplier shall be able to demonstrate that the procedures defined in normative Annexes A and B have been followed in arriving at the final design of the finished packaging such that a certain percentage of the packaging materials can be claimed to be recyclable.

**4.3 Declaration of percentage recyclable**

Packaging may use more than one material whose relative proportions may vary from small components and constituents, typically represented by labels and closures, to larger proportions in multi-material packaging.

The supplier shall declare the percentage by weight of the functional unit of packaging available for recycling, identifying the intended material recycling stream(s), reference EN 13437. A format for this declaration is given in Annex C.

NOTE 1 The functional unit is explained in EN 13427:2004, Clause 4.3.



NOTE 2 CR 13688 provides guidance on materials and substances that may cause sustained impediment to the material recycling of the functional unit of packaging. Contamination of the packaging by contact with extraneous materials in the collection and sorting processes, or by residues of the packaging content, even after cleaning, are not considered as impediments to the material recycling.

#### **4.4 Conformity of the packaging with this document (material recycling)**

The supplier shall prepare a written statement of compliance with the requirements stated in 4.2 and 4.3.

#### **4.5 Support Documentation**

The assessment shall be documented and examples of the structure of such documentation are given in Annex C.

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## Annex A (normative)

### Procedures to elaborate the requirements for packaging recoverable by material recycling

#### A.1 Objective

To identify the criteria that need to be taken into consideration when assessing the recyclability of packaging. These criteria for recycling should be considered in a perspective which includes all relevant aspects from the design of packaging, its manufacture and through its use and post-use collection and sorting until its recovery by recycling.

This perspective is conveniently illustrated and checked through the matrix approach presented in Table A.1, which represents a guideline to elaborate practical requirements for packaging recoverable in the form of material recycling.

The relevant boxes in the Table A.1 highlight the interactions between life cycle steps and criteria for recyclable packaging.

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#### A.2 Control of packaging construction/composition and processing

**A.2.1** Ensure that the design of packaging includes consideration of aspects significant for the recycling of the materials from which it is produced.

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**A.2.2** Control selection of raw materials used in production / packing / filling operations and where practicable collection/ sorting operations to ensure that the recycling processes are not negatively affected.

#### A.3 Suitability for available recycling technology

**A.3.1** Ensure that the design of packaging makes use of materials or combinations of materials which are compatible with the known, relevant and industrially available recycling technologies whilst also recognising the interrelationship of standards as detailed in 4.1.

**NOTE** The development and marketing of new packaging materials and systems, typically giving functional and environmental benefits may precede the introduction of appropriate recycling processes. It is recognised that the development and expansion of such recycling processes may take a period of time. Provided that the supplier can demonstrate that there is development leading to the availability of industrial recycling capacity within a reasonable period of time it may be appropriate during this period to classify such packaging as recyclable.

**A.3.2** Establish a system designed to ensure that new developments in the relevant technology for the recycling of the material used in packaging are monitored, recorded and that such records are available to the design function.

#### A.4 Releases to the environment caused by recycling of the packaging after use

Take account of the potential change in releases to the environment arising from the used packaging and/or product residues in the recycling process.

**Table A.1 — Elaboration of requirements by a decision matrix with interactions between life cycle steps and criteria for recyclable packaging**

Life cycle steps	Criteria for recyclable packaging		
	Control of packaging construction/ composition and processing <b>A2</b>	Suitability for available recycling technologies <b>A3</b>	Releases to environment caused by recycling of packaging <b>A4</b>
Design		Relevant	Relevant
Production	Relevant		Relevant
Utilisation	Relevant		Relevant
Sorting by the End User	Relevant		
Collection/Sorting	Relevant	Relevant	Relevant

NOTE The numbering in the Table refers to the Clauses of Annex A.

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