SLOVENSKI STANDARD
SIST EN 18120-13:2026

01-junij-2026

Embalaža - Načrtovanje za recikliranje plastične embalaže - 13. del: Postopek za ocenjevanje zmožnosti recikliranja plastične embalaže - Protokoli za fleksibilno embalažo iz polietilena (PE) in polipropilena (PP)

Packaging - Design for recycling of plastic packaging - Part 13: Recyclability evaluation process for plastic packaging - Protocols for PE and PP flexible packaging

Verpackung - Recyclingorientierte Gestaltung von Kunststoffverpackungsprodukten - Teil 13 - Verfahren zur Bewertung der Recyclingfähigkeit von Kunststoffverpackungen - Protokolle für flexible Verpackungen aus PE und PP

Emballages - Conception des emballages plastiques en vue de leur recyclage - Partie 13 : Processus d'évaluation de la recyclabilité des emballages plastiques - Protocoles pour les emballages souples en PE et PP

Ta slovenski standard je istoveten z: **EN 18120-13:2026**

ICS:

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

SIST EN 18120-13:2026 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 18120-13

April 2026

ICS 55.020; 83.080.20

English Version

Packaging - Design for recycling of plastic packaging - Part 13: Recyclability evaluation process for plastic packaging - Protocols for PE and PP flexible packaging

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This European Standard was approved by CEN on 9 February 2026.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 18120-13:2026) 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of an identical text or by endorsement, at the latest by October 2026, and conflicting national standards shall be withdrawn at the latest by October 2026.

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.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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

Introduction

The EN 18120 series, under the general title *Packaging — Design for recycling of plastic packaging,* which aims via a series of guidelines and protocols to establish consistency and improvement for the design for recycling of household, industrial and commercial plastic packaging, consists of the following parts:

— *Part 1: Definitions and principles for design-for-recycling of plastic packaging*

— *Part 3: Evaluation processes for the sortability of plastic packaging*

— *Part 4: Guideline for PET bottles*

— *Part 5: Guideline for PET rigid packaging (except bottles)*

— *Part 6: Guideline for PE and PP rigid packaging*

— *Part 7: Guideline for PE and PP flexible packaging*

— *Part 8: Guideline for PS and XPS rigid packaging*

— *Part 9: Guideline for EPS packaging*

— *Part 10: Recyclability evaluation process for plastic packaging — Protocols for PET bottles*

— *Part 11: Recyclability evaluation process for plastic packaging — Protocols for PET rigid packaging (except bottles)*

— *Part 12: Recyclability evaluation process for plastic packaging — Protocols for PE and PP rigid packaging*

— *Part 13: Recyclability evaluation process for plastic packaging — Protocols for PE and PP flexible packaging*

— *Part 14: Recyclability evaluation process for plastic packaging — Protocols for PS and XPS rigid packaging*

— *Part 15: Recyclability evaluation process for plastic packaging — Protocols for EPS packaging*

Design for recycling guidelines are a common way of evaluating the compatibility with plastic-packaging collection, sorting and recycling which enables the use of secondary raw materials that are of sufficient quality when compared to the original material, in state-of-the-art facilities.

They provide guidance on the level of compatibility, defined as:

— green: packaging constituents and components with full compatibility with state-of-the-art collection, sorting and recycling;

— yellow: packaging constituents and components with limited compatibility with state-of-the-art collection, sorting and recycling;

— red: packaging constituents and components which are not compatible with state-of-the-art collection, sorting and recycling.

The design for recycling guidelines provided in the EN 18120 series cover the design for recycling based on the knowledge available at the time of the development of this document and are representative of the

state-of-the-art. They consider packaging waste collection, sorting and recycling, so that the recycled plastic can substitute primary raw materials in packaging application or other applications. Compliance with the design guidelines in the EN 18120 series does not guarantee that the recycled plastic quality will be fit for purpose for a specific targeted end application or compliant with applicable regulations.

Packaging recyclability is the combination of design of recycling, proven collection, sorting and recycling in practice.

1 Scope

This document provides requirements for the evaluation process of any flexible packaging with the main body of the packaging unit predominantly made of PE or PP and for the evaluation process of separate components predominantly made of flexible PE or flexible PP, with respect to compatibility of the design with state-of-the-art collecting, sorting and recycling processes, and the characterization of the output(s) compared to a reference material.

Packaging constituents and packaging components made of other materials than PE and PP are also covered by this document as they need to be evaluated on compatibility with PE or PP polymer recycling.

2 Normative references

The following documents are referred to in the text in such a way that their content constitutes requirements 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 14477, *Packaging — Flexible packaging material — Determination of puncture resistance — Test methods*

EN 18120-1, *Packaging — Design for recycling of plastic packaging — Part 1: Definitions and principles for design-for-recycling of plastic packaging*

EN 18120-7, *Packaging — Design for recycling of plastic packaging — Part 7: Guideline for PE and PP flexible packaging*

EN ISO 294-3, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 3: Small plates (ISO 294-3)*

EN ISO 527-1:2019, *Plastics — Determination of tensile properties — Part 1: General principles (ISO 527-1:2019)*

EN ISO 527-2, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2)*

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

EN ISO 178, *Plastics — Determination of flexural properties (ISO 178)*

EN ISO 179-2, *Plastics — Determination of Charpy impact properties — Part 2: Instrumented impact test (ISO 179-2)*

EN ISO 1133-1, *Plastics — Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics — Part 1: Standard method (ISO 1133-1)*

EN ISO 1183-1, *Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid pycnometer method and titration method (ISO 1183-1)*

EN ISO 3451-1, *Plastics — Determination of ash — Part 1: General methods (ISO 3451-1)*

EN ISO 6383-2, *Plastics — Film and sheeting — Determination of tear resistance — Part 2: Elmendorf method (ISO 6383-2)*

EN ISO 7765-1, *Plastics film and sheeting — Determination of impact resistance by the free-falling dart method — Part 1: Staircase methods (ISO 7765-1)*

EN ISO 8295, *Plastics — Film and sheeting — Determination of the coefficients of friction (ISO 8295)*

EN ISO 11357-1, *Plastics — Differential scanning calorimetry (DSC) — Part 1: General principles (ISO 11357-1)*

EN ISO 11357-3, *Plastics — Differential scanning calorimetry (DSC) — Part 3: Determination of temperature and enthalpy of melting and crystallization (ISO 11357-3)*

EN ISO 11358-1, *Plastics — Thermogravimetry (TG) of polymers — Part 1: General principles (ISO 11358-1)*

EN ISO 13468-1, *Plastics — Determination of the total luminous transmittance of transparent materials — Part 1: Single-beam instrument (ISO 13468-1)*

EN ISO 13468-2, *Plastics — Determination of the total luminous transmittance of transparent materials — Part 2: Double-beam instrument (ISO 13468-2)*

EN ISO 15512, *Plastics — Determination of water content (ISO 15512)*

EN ISO 18314-1, *Analytical colourimetry — Part 1: Practical colour measurement (ISO 18314-1)*

EN ISO/CIE 11664-4, *Colorimetry — Part 4: CIE 1976 L*a*b* colour space (ISO/CIE 11664-4)*

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

ISO 14782, *Plastics — Determination of haze for transparent materials*

ASTM E1164, *Standard Practice for Obtaining Spectrometric Data for Object-Color Evaluation*

ASTM D2457, *Standard Test Method for Specular Gloss of Plastic Films and Solid Plastics*

ASTM D882, *Standard Test Method for Tensile Properties of Thin Plastic Sheeting*

CIE 015:2018, *Colorimetry, 4th Edition*

DIN 55529, *Packaging — Determining the sealed-seam strength of sealings made of flexible packaging material*

NF T54-115, *Plastics — Sheets — Determination of dimensional variations after heating — Immersion method*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 18120-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp/

— IEC Electropedia: available at https://www.electropedia.org/