
Embalaža - Načrtovanje za recikliranje plastične embalaže - 7. del: Smernica za fleksibilno embalažo iz polietilena (PE) in polipropilena (PP)

Packaging - Design for recycling of plastic packaging - Part 7: Guideline for PE and PP flexible packaging

Verpackung - Recyclingorientierte Gestaltung von Kunststoffverpackungsprodukten - Teil 7: Leitfaden und Protokolle für flexible Verpackungen aus PE und PP

Emballages - Conception des emballages plastiques en vue de leur recyclage - Partie 7 : Lignes directrices pour les emballages souples en PE et PP

Ta slovenski standard je istoveten z: EN 18120-7:2026

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 |

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EUROPEAN STANDARD

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English Version

Packaging - Design for recycling of plastic packaging - Part 7: Guideline for PE and PP flexible packaging

Emballages - Conception des emballages plastiques en
vue de leur recyclage - Partie 7 : Lignes directrices
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und Protokolle für flexible Verpackungen aus PE und
PP

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

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European foreword

This document (EN 18120-7:2026) 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of an identical text or by endorsement, at the latest by October 2026, and conflicting national standards shall be withdrawn at the latest by October 2026.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.

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EN 18120-7:2026 (E)**Introduction**

The EN 18120 series, under the general title *Packaging — Design for recycling for 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.

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EN 18120-7:2026 (E)

1 Scope

This document covers the design of any flexible packaging with the main body of the packaging unit predominantly made of PE or PP and the design of separate components predominantly made of flexible PE or flexible PP, with respect to compatibility of the design with state-of-the-art collection, sorting and recycling processes and useability of the recyclates.

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 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 18120-1:2026, *Packaging — Design for recycling of plastic packaging — Part 1: Definitions and principles for design-for-recycling of plastic packaging*

EN 18120-3, *Packaging — Design for recycling of plastic packaging — Part 3: Sortability evaluation process for plastic packaging*

EuPIA Exclusion Policy for Printing Inks and Related Products. <https://www.eupia.org/our-commitment/eupia-exclusion-policy-for-printing-inks-and-related-products/>

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 18120-1 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/>

4 Compatibility of PE-based and PP-based flexible packaging designs with material recycling

4.1 General characteristics

To determine the technical recyclability of the design of a PE or PP flexible packaging, the guidance tables in Clause 5 shall be consulted in conjunction with the definitions provided in EN 18120-1:2026. The tables provide combined design guidance for all considered material recycling processes. This document considers mechanical and chemical¹ recycling of PE and PP flexible packaging as state-of-the-art recycling technologies. It considers the outlets described in Table 1 as state-of-the-art.

¹ At the time of creation of this document, the exact requirements for chemical recycling processes were not known in detail. A future revision may introduce specific requirements.

Table 1 — Outlets for recyclates considered state-of-the-art in this document

| Packaging type | Recycling technology | State-of-the-art outlet for mechanical recycling |
|--|---|--|
| Natural colour PE flexible packaging | Mechanical recycling and chemical recycling | Film |
| White industrial and commercial PE flexible packaging | Mechanical recycling and chemical recycling | Film |
| Coloured PE flexible packaging and white household PE flexible packaging | Mechanical recycling and chemical recycling | Film, injection moulding |
| Natural colour industrial and commercial PP flexible packaging | Mechanical recycling and chemical recycling | Film |
| White industrial and commercial PP flexible packaging | Mechanical recycling and chemical recycling | Film ² |
| Household PP flexible packaging and coloured industrial and commercial PP flexible packaging | Mechanical recycling and chemical recycling | Film, injection moulding |

The design guidance provided in this document covers a) main bodies of the packaging unit which constitute PE-based or PP-based flexible packaging, with all their integrated components and constituents, including those which are removed *during* the recycling process (see EN 18120-1:2026, 5.4) and b) separate components which constitute PE or PP flexible materials, with all their integrated components and constituents, including those which are removed *during* the recycling process.

It does *not* cover separate components *of* flexible packaging (which are already separated *before* and *during* the sorting process) as per the definition of EN 18120-1 and as determined according to EN 18120-3, unless these again constitute flexible packaging.

Separate components are to be evaluated separately, as described in EN 18120-1. As such, a separate component of flexible packaging can be fully compatible with recycling even when an integrated component or a constituent of the same specification would only have limited or no compatibility with recycling according to the guidance in this document. Equally, separate components of flexible packaging can be incompatible with recycling while an integrated component of the same specification may be compatible.

² In the development of this document, it was acknowledged that recycling of and into woven PP material, e.g., as used for flexible IBCs, should be discussed and potentially added in a future revision of this document.