



DPC: 24/30494134 DC

BSI Group Headquarters

389 Chiswick High Road London W4 4AL

Tel: +44 (0)20 8996 9000

Fax: +44 (0)20 8996 7400

www.bsigroup.com

Date: 19 September 2024

Origin: European

Latest date for receipt of comments: 12 November 2024

Project No. 2024/01602

Responsible committee: PKW/0 Packaging

Interested committees:

Title: Draft BS EN 18120-6 BS Packaging - Design for recycling for plastic packaging. Part 6: Guideline for PE and PP rigid packaging.

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

- i) has any issues related to 3rd party IPR, patent or copyright
- ii) affects other national standard(s)
- iii) requires additional national guidance or information

WARNING: THIS IS A DRAFT AND MUST NOT BE REGARDED OR USED AS A BRITISH STANDARD. THIS DRAFT IS NOT CURRENT BEYOND 12 November 2024

This draft is issued to allow comments from interested parties; all comments will be given consideration prior to publication. No acknowledgement will normally be sent. **See overleaf for information on the submission of comments.**

No copying is allowed, in any form, without prior written permission from BSI except as permitted under the Copyright, Designs and Patent Act 1988 or for circulation within a nominating organization for briefing purposes. Electronic circulation is limited to dissemination by e-mail within such an organization by committee members.

Further copies of this draft may be purchased from BSI Shop <http://shop.bsigroup.com> or from BSI Customer Services, Tel: +44(0) 20 8996 9001 or email cservices@bsigroup.com. British, International and foreign standards are also available from BSI Customer Services.

Information on the co-operating organizations represented on the committees referenced above may be obtained from <https://standardsdevelopment.bsigroup.com/>.

Responsible Committee Secretary: Ms Katherine Imbert (BSI)
Direct tel: 0208 996 6450
E-mail: katherine.imbert@bsigroup.com

Full document details: 24/30494134 DC

Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
------------------	------------------------

1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

English Version

Packaging - Design for recycling for plastic packaging - Part 6: Guideline for PE and PP rigid packaging

Emballages - Conception des emballages plastiques en
vue de leur recyclage - Partie 6 : Lignes directrices
pour les emballages rigides en PE et PP

Verpackung - Recyclingorientierte Gestaltung von
Kunststoffverpackungsprodukten - Teil 6: Leitfaden
und Protokolle für starre Verpackungen aus PE und PP

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 261.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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.

CEN members are the national standards bodies of 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 United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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

Contents		Page
European foreword		3
Introduction		4
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Compatibility of PE and PP-based rigid packaging designs with recycling	6
4.1	General	6
4.2	Sortability and residual content after emptying	7
4.3	Copolymers of PE and PP	7
4.4	Packaging format specific design guidance	7
4.4.1	General	7
4.4.2	White packaging	8
4.5	Design guidelines summary table	8
Annex A (informative) PE and PP rigid packaging functionalities		21
Bibliography		22

European foreword

This document (prEN 18120-6:2024) has been prepared by Technical Committee CEN/TC 261 “Packaging”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

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.

Introduction

EN 18120 consisting of 15 parts 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.

- Part 1: Definitions and principles for design-for-recycling of plastic packaging
- Part 2: Process and governance to evaluate the recyclability of plastic packaging
- Part 3: Sortability evaluation process for plastic packaging
- Part 4: Guideline for PET bottles
- Part 5: Guideline for PET rigid packaging (except bottle)
- Part 6: Guideline for PE and PP rigid packaging
- Part 7: Guideline and protocols for PE and PP flexible packaging
- Part 8: Guideline for PS and XPS 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 other rigid packaging
- 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 packaging
- Part 15: Recyclability evaluation process for plastic packaging — Protocols for EPS packaging

Design for recycling guidelines are a common way of describing compatibility with plastic packaging collection, sorting and recycling into high quality recycled plastic into state-of-the-art facilities. They provide guidance on the level compatibility, defined as:

- green: Packaging constituents with full compatibility with recycling;
- yellow: Packaging constituents with limited compatibility with recycling;
- red: Packaging constituents which are not compatible with recycling.

Recyclability guidelines will require regular review and improvement to reflect innovations in design, collection, sorting and recycling.

The design for recycling guidelines provided in this series of standards are representative of the state of the art in Europe and cover all steps from design for recycling, packaging waste collection, sorting, recycling into recycled plastic and to use in a new application.

Packaging recyclability is the combination of five parameters: packaging designed for recycling, packaging waste collection, sorting when necessary, recycling and use of recycled plastic in a new application. This series of standards covers one parameter: the design for recycling.

1 Scope

This document covers the design of PE and PP rigid packaging with respect to compatibility of the design with the collecting, sorting, and recycling processes.

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

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

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in prEN 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 and PP-based rigid packaging designs with recycling

4.1 General

To determine the recyclability of the design of a PE or PP rigid packaging, the following guidance tables shall be consulted in conjunction with the definitions provided in prEN 18120-1, *Packaging — Design for recycling of plastic packaging products — Part 1: Definitions and principles for design-for-recycling of plastic packaging*. The tables provide combined design guidance for all considered recycling processes.

The design guidance provided in this document covers a) main packaging components which constitute PE or PP-based flexible packaging, with all their integrated components and all constituents, including those which are removed during the recycling process and b) separate components of other types of packaging which constitute PE or PP flexible materials, with all their constituents, including those which are removed during the recycling process.

It does not apply to other types of separate components (which are already separated before the sorting process) as per the definition of part 1 of this series of standards and as determined according to part 3 of this series of standards. Separate components are to be evaluated separately, as described in part 1 of this series of standards. As such, a separate component 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 can be not compatible with recycling even when an integrated component would be compatible.