

Compilation of national and international specifications related to “almost free from contamination and other types of wastes” and “almost exclusively” for shipments of plastic waste destined for recycling

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This compilation has been approved by the working group of the Plastic Waste Partnership of the Basel Convention. It is intended to assist Parties to the Basel Convention, authorities, stakeholders, and the public in the environmentally sound management of plastic wastes. It does not necessarily represent the viewpoints of the working group members on all the details of its content. This compilation should not be understood as derogating from the text of the Basel Convention or any decision(s) adopted by the Conference of the Parties and is without prejudice to the views of individual Parties. The information presented therein is current at the time of writing. The working group reserves the right to revise this content at any given time.

INTRODUCTION

- (1) At its fourteenth meeting, the Conference of the Parties to the Basel Convention adopted decision BC-14/12, on amendments to annexes II, VIII and IX, in relation to plastic waste (so-called “plastic waste amendments”). This decision added three entries to the annexes of the Convention as follows:
 - (a) Annex II (waste that requires special consideration: subject to the PIC procedure): addition of new entry Y48 covering all plastic waste, including mixtures of plastic waste, except for the plastic waste covered by entries A3210 (in Annex VIII) and B3011 (in Annex IX);
 - (b) Annex VIII (waste presumed to be hazardous: subject to the PIC procedure): addition of new entry A3210 covering hazardous plastic waste;
 - (c) Annex IX (waste presumed to not be hazardous: not subject to the PIC procedure): addition of new entry B3011 covering plastic waste consisting exclusively of one non-halogenated polymer or resin, selected fluorinated polymers or mixtures of polyethylene, polypropylene and/or polyethylene terephthalate, provided the waste is destined for recycling in an environmentally sound manner and almost free from contamination and other types of wastes.
- (2) In relation to the terms “consisting exclusively of one non-halogenated polymer” and “almost free from contamination and other types of wastes”, decision BC-14/12 (footnotes 6 and 7, respectively) indicates that international and national specifications may offer a point of reference.
- (3) This document provides a compilation of national and international specifications related to “almost free from contamination and other types of wastes” and “almost exclusively” for shipments of plastic waste destined for recycling. The information presented was provided by Parties and stakeholders in response to a questionnaire on this topic issued by the Secretariat of the Basel Convention as part of activities undertaken within the framework of the Plastic Waste Partnership.¹ The compilation is not exhaustive.
- (4) Information on some approaches, other than specifications, used to support implementation of the requirements related to “almost free from contamination and other types of waste” and “almost exclusively” for shipments of plastic waste destined for recycling is available on the website of the Basel Convention.²

¹ <http://www.basel.int/Implementation/Plasticwastes/PlasticWastePartnership/tabid/8096/Default.aspx>

² <http://www.basel.int/Implementation/Plasticwaste/PlasticWastePartnership/tabid/8749/Default.aspx>

I. INTERNATIONAL SPECIFICATIONS

A. DEVELOPED BY PRIVATE SECTOR ENTITIES

Title	Source	Description	Access ³	Reference
Baled Recycled Plastic Scrap Commercial Guidelines	Institute of Scrap Recycling Industries (ISRI)	<p>Commercial Guidelines for Baled Recycled Plastic Scrap were developed to provide industry-wide quality standards. These standards will facilitate commodity trading of these materials. They will also focus suppliers of such material on the quality requirements of their customers.</p> <p>These guidelines are designed with the potential for dealing with all recycled plastic in bale form. Initial specifications refer only to bottles.</p>	Publicly available	http://www.scrap2.org/specs/35/#zoom=z
Model Bale Specifications	The Association of Plastics Recyclers (APR)	<p>To facilitate communications between bale producers (e.g. MRFs) and purchasers (e.g. plastic reclaimers) APR has developed these model bale specifications.</p> <p>APR's model bale specifications have seven standard components:</p> <ul style="list-style-type: none"> - Bale Content Overview, - Acceptable Levels of Contaminants, - Contaminants not Acceptable at any Level, - Warnings, - Bale Size/Minimum Shipping Weight, - Bale Wire, - Storage. 	Publicly available	https://plasticsrecycling.org/model-bale-specifications

³ Unless otherwise indicated the documents are available in English. Other languages may also be available on the respective websites.

Title	Source	Description	Access ³	Reference
Recyclates characterisation guiding requirements	Plastics Recyclers Europe	<p>Recyclates characterisation guidance serves a basis for the assessment of recycled material quality, in accordance with best practices, as well as the well-established European and international standards. The documents' overarching aim is to advance the quality and enhance the demand for recyclates.</p> <p>They do not replace contractually agreed specifications.</p>	Publicly available	https://www.plasticsrecyclers.eu/recyclates-characterisation
Recycling input characterisation guiding requirements	Plastics Recyclers Europe	<p>Recycling input characterisation guiding requirements specify the main properties that define the type, origins and characteristics of the sorted waste, levels of impurities, means of transportation and supplier information. The documents can be used both by the sorting centres and the recycling facilities to verify the reliability of suppliers and, along with the contractually agreed specifications, to characterise the content of the bales. Furthermore, they can serve as an information benchmark in the process of checking the quality of the bales.</p>	Publicly available	https://www.plasticsrecyclers.eu/waste-characterisation

B. DEVELOPED BY STANDARDIZATION BODIES

Title	Source	Description	Access	Reference
EN 15342:2007⁴ Plastics – Recycled Plastics – Characterization of Polystyrene (PS) recyclates	European Committee for Standardization (CEN)	This European Standard defines a method of specifying delivery condition characteristics for polystyrene (PS) recyclates. It gives the most important characteristics and associated test methods for assessing a single batch of PS recyclates intended for use in the production of semi-finished/finished products.	For purchase	https://standards.cen.eu/dyn/www/f?p=204:110:0:::F-SP_PROJECT,FSP_ORG_ID:22651,6230&cs=-1F407852AC78B-2568284C9372E770558C
EN 15343:2007 – Plastics – Recycled Plastics – Plastics recycling traceability and assessment of conformity and recycled content	European Committee for Standardization (CEN)	This European Standard specifies the procedures needed for the traceability of recycled plastics. This gives the basis for the calculation procedure for the recycled content of a product.	For purchase	https://standards.cen.eu/dyn/www/f?p=204:110:0:::F-SP_PROJECT,FSP_ORG_ID:22653,6230&cs=1BFF-1149B3A2683C148F9F-BC3CD0FD5D7
EN 15344:2007 – Plastics – Recycled Plastics – Characterization of Polyethylene (PE) recyclates	European Committee for Standardization (CEN)	This European Standard defines a method of specifying delivery conditions for polyethylene (PE) recyclates. It gives the most important characteristics and associated test methods for assessing PE recyclates intended for use in the production of semi-finished/finished products.	For purchase	https://standards.cen.eu/dyn/www/f?p=204:110:0:::F-SP_PROJECT,FSP_ORG_ID:22659,6230&cs=13D-6B8F100B22BC3C60CB-4235DDCA0D3E

⁴ European standards developed by CEN may be adopted and published under a different designation by national standards body.

<p>EN 15345:2007 – Plastics – Recycled Plastics – Characterization of Polypropylene (PP) recyclates</p>	<p>European Committee for Standardization (CEN)</p>	<p>This European Standard defines a method of specifying delivery conditions for Polypropylene (PP) recyclates. It gives the most important characteristics and associated test methods for assessing a single batch of PP recyclates intended for use in the production of semi-finished/finished products.</p>	<p>For purchase</p>	<p>https://standards.cen.eu/dyn/www/f?p=204:110:0:::F-SP_PROJECT,FSP_ORG_ID:22660,6230&cs=161A-C8A36622975B-8563C552227BEBF65</p>
<p>EN 15346:2007 – Plastics – Recycled Plastics – Characterization of poly(vinyl chloride) (PVC) recyclates</p>	<p>European Committee for Standardization (CEN)</p>	<p>This European Standard defines a method of specifying delivery conditions for poly(vinyl chloride) (PVC) recyclates. It gives the most important characteristics and associated test methods for assessing of PVC recyclates intended for use in the production of semi-finished/finished products.</p>	<p>For purchase</p>	<p>https://standards.cen.eu/dyn/www/f?p=204:110:0:::F-SP_PROJECT,FSP_ORG_ID:39406,6230&cs=112B-CFD111AE9A-40FA3898A6285E6D8D5</p>
<p>EN 15347:2007 – Plastics – Recycled Plastics – Characterization of plastics waste</p>	<p>European Committee for Standardization (CEN)</p>	<p>This European Standard provides a scheme for the characterisation of plastics wastes, laying out those properties for which the supplier of the waste shall make information available to the purchaser, and identifying test methods where applicable.</p>	<p>For purchase</p>	<p>https://standards.cen.eu/dyn/www/f?p=204:110:0:::F-SP_PROJECT,FSP_ORG_ID:22665,6230&cs=1C869F-355C35971A71BEAC-2CACD3F13B3</p>

<p>EN 15348:2007 – Plastics – Recycled Plastics – Characterization of poly(ethylene terephthalate) (PET) recyclates</p>	<p>European Committee for Standardization (CEN)</p>	<p>This European Standard defines a method of specifying delivery conditions for poly(ethylene terephthalate) (PET) recyclates. It gives the most important characteristics and associated test methods for assessing PET recyclates intended to be used for the production of semi-finished/finished products.</p>	<p>For purchase</p>	<p>https://standards.cen.eu/dyn/www/f?p=204:110:0:::F-SP_PROJECT,FSP_ORG_ID:39411,6230&cs=11E1CF-C58F1E5ADDC2157F-51254B3F99B</p>
<p>EN 13437:2003 – Packaging and material recycling – Criteria for recycling methods – Description of recycling processes and flow chart</p>	<p>European Committee for Standardization (CEN)</p>	<p>This standard defines the principal existing processes for material recycling and their inter-relationship. Both packaging and recovery technologies are subject to continuing and rapid development. This standard describes the present stage of knowledge but may be subject to modifications in the light of new developments. The essential relationship between this and the four other (mandated) European Packaging Standards and one (mandated) CEN Report is specified in the standard prEN 261265.</p>	<p>For purchase</p>	<p>https://standards.cencenelec.eu/dyn/www/f?p=CEN:110:0:::F-SP_PROJECT,FSP_ORG_ID:13125,6242&cs=160FA1CD-7D39D64C1B89D-4B5A7BC800FF</p>

II. NATIONAL SPECIFICATIONS

A. DEVELOPED BY PRIVATE SECTOR ENTITIES

Title	Source	Description	Access	Reference
Technical Specifications for materials recovered from light packaging sorting plants (Revision 12)	Ecoembes (Spain)	This document lists the various conditions required for different kind of plastic material recovered from light packaging sorting plants: - requested material, - impurities, - delivery conditions.	Publicly available (in Spanish)	https://www.ecoembes.com/sites/default/files/etmr_def_v12_0.pdf
Technical Specifications for materials recovered from bulk waste processing plants (Revision 2)	Ecoembes (Spain)	This document lists the various conditions required for different kind of plastic materials recovered from bulk waste processing plants: - requested material, - impurities, - delivery conditions.	Publicly available (in Spanish)	https://www.ecoembes.com/sites/default/files/etmr_revision_rsu_v2_0.pdf

B. DEVELOPED BY STANDARDIZATION BODIES

Title	Source	Description	Access	Reference
Norm 13710 (2018) Recyclable plastics. Classification and requirements	Instituto Argentino de Normalización y Certificación (IRAM)	This standard establishes the requirements for bales of recyclable plastic materials of polyethylene terephthalate (PET), low density polyethylene (LDPE) and high density polyethylene (HDPE), which are produced in sorting or separation centers from household, commercial, agricultural and industrial waste, assimilated to household waste, and which are subsequently used as secondary raw material in the recycling industry. The aim is to promote the recycling of post-consumer plastic materials.	Publicly available (in Spanish)	https://caip.org.ar/2015/wp-content/uploads/2018/12/13710-P1.pdf

Chilean Norm NCh3401:2016, Containers and packaging Recycling rate	National Institute of Normalization of Chile	Definition and calculation method	For purchase (in Spanish)	https://ecommerce.inn.cl/search?q=NCh3401&cid=0&mid=0&fi=&ft=&icsfl=0&icsgp=0&icss-bgp=0&adv=false&sid=false
Chilean Norm NCh3402:2016, Recycled plastics	National Institute of Normalization of Chile	Characterization of recycled polystyrene	For purchase (in Spanish)	https://ecommerce.inn.cl/search?q=NCh3402&cid=0&mid=0&fi=&ft=&icsfl=0&icsgp=0&icss-bgp=0&adv=false&sid=false
Chilean Norm NCh3403:2016, Recycled plastics	National Institute of Normalization of Chile	Traceability and conformity assessment of plastics recycling and recycled content	For purchase (in Spanish)	https://ecommerce.inn.cl/search?q=NCh3403&cid=0&mid=0&fi=&ft=&icsfl=0&icsgp=0&icss-bgp=0&adv=false&sid=false
Chilean Norm NCh3404:2016, Recycled plastics	National Institute of Normalization of Chile	Characterization of recycled polyethylene	For purchase (in Spanish)	https://ecommerce.inn.cl/search?q=NCh3404&cid=0&mid=0&fi=&ft=&icsfl=0&icsgp=0&icss-bgp=0&adv=false&sid=false
Chilean Norm NCh3405:2016, Recycled plastics	National Institute of Normalization of Chile	Characterization of recycled polypropylene	For purchase (in Spanish)	https://ecommerce.inn.cl/search?q=NCh3405&cid=0&mid=0&fi=&ft=&icsfl=0&icsgp=0&icss-bgp=0&adv=false&sid=false
Chilean Norm NCh3406:2016, Recycled plastics	National Institute of Normalization of Chile	Characterization of recycled polyvinyl chloride	For purchase (in Spanish)	https://ecommerce.inn.cl/search?q=NCh3406&cid=0&mid=0&fi=&ft=&icsfl=0&icsgp=0&icss-bgp=0&adv=false&sid=false
Chilean Norm NCh3407:2016, Recycled plastics	National Institute of Normalization of Chile	Characterization of recycled Polyethylene terephthalate	For purchase (in Spanish)	https://ecommerce.inn.cl/search?q=NCh3407&cid=0&mid=0&fi=&ft=&icsfl=0&icsgp=0&icss-bgp=0&adv=false&sid=false
Chilean Norm NCh3416:2016, Containers and packaging	National Institute of Normalization of Chile	Bags of flexible material for the transport of various retail products - General characteristics and test methods for the determination of volume and transport capacity.	For purchase (in Spanish)	https://ecommerce.inn.cl/search?q=NCh3416&cid=0&mid=0&fi=&ft=&icsfl=0&icsgp=0&icss-bgp=0&adv=false&sid=false

<p>Chilean Norm NCh3399:2015, Containers and packaging</p>	<p>National Institute of Normalization of Chile</p>	<p>Requirements for containers and packaging that can be recovered through composting and biodegradation. Test program and evaluation criteria for final acceptance.</p>	<p>For purchase (in Spanish)</p>	<p>https://ecommerce.inn.cl/search?q=NCh3399</p>
<p>Chilean Norm NCh3398:2016 Labeling of plastics</p>	<p>National Institute of Normalization of Chile</p>	<p>Labeling of plastics designed to be composted aerobically in municipal or industrial facilities.</p>	<p>For purchase (in Spanish)</p>	<p>https://ecommerce.inn.cl/search?q=NCh3398&cid=0&mid=0&fi=&ft=&icsfl=0&icsgp=0&icss-bgp=0&adv=false&sid=false</p>

III. INDICATIVE ELEMENTS FOR SPECIFICATIONS DEVELOPED BY PRIVATE SECTOR ENTITIES

Title	Source	Description	Access	Reference
Indicative specification sheets for main grades of sorted plastics	European Recycling Industries' confederation (EuRIC)	<p>These indicative specification sheets aim to propose an objective, measurable definition of the new entry B3011 of the Basel Convention. They intend to clarify and provide a more harmonized criterion to assess what "<i>almost free from contamination and other types of wastes</i>" means and help devising a sound classification of sorted plastic waste.</p> <p>There are three sets of specification sheets:</p> <ul style="list-style-type: none"> - general plastics from packaging, - stream-specific technical plastics from WEEE & ELVs, - «all streams» flakes specification. 	Publicly available	https://www.euric-aisbl.eu/position-papers/item/459-euric-indicative-specification-sheets-for-main-grades-of-sorted-plastics

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