

List of Proposed Plastics Specification sheets

Purpose: To evidence use of existing standards and common commercial practices (e.g. on purity levels accepted in EU recycling plants) in relation to Basel Convention Decision ref: BC14/12 – Amendments to Annexes II, VIII and IX to the Basel Convention 2019 as well as Commission delegated act [number to be inserted once the act has been adopted] amending Annexes III, IIIA, IV, V and VIII to Regulation (EC) No 1013/2006 of the European Parliament and of the Council on shipments of waste. For clarification, the specification sheets issued will aim not only to be applied to Basel (B3011) but also to plastic waste shipments within the EU (EU3011).

This "all streams" flakes specification covers for monopolymer waste exports from minor and dispersed variable sources, for example post-industrial waste streams. Put together, these streams are significant and must be addressed.

The “*All streams – Flakes specification*” is intended to apply exclusively to the flakes classified as waste. Currently, the waste / non-waste status of plastics flakes is not homogeneous and varies widely from one state to another, including within the EU. Similar plastic flakes can be classified either as waste or non-waste (product, by-product, product through “end-of-waste” procedure). **EuRIC supports the classification as non-waste of flakes that are fit for integration within a manufacturing process.** The technical criteria for waste / non-waste classification of plastics material (including, but not limited to, plastics flakes) should be set and harmonized, at least within the EU.”

The minimal purity requirement is set at minimum 90%.

Table 1 - All streams - Flakes - specification sheets list

Polymer Type	Source	Format	Purity Mass %
ABS			
PC			
PS			
PE	All	flakes	90
PP			
PET			
Other non-halogenated polymer (POM, PMMA, etc.)			

Table 2 - Proposed coding numbers - Specification Sheets

Polymer	Type	Format	Order	Version
ABS	1 Household packaging	1 Rigid items	1,2,3.	V0
PC	2 Other packaging	2 Film / Flexible item		
PS	3 All packaging	3 Flakes		
PE	4 Technical post-consumer	4 Other		
PP	5 Technical pre-consumer			
PET	6 All technical plastics			
Other Non-halogenated	7 All types - Packaging and technical			

B3011 - Basel Listing

Plastic waste listed below, provided it is destined for recycling¹³ in an environmentally sound manner and almost free from contamination and other types of wastes (note the related entries on list A A3210 and Y48 in Annex II):¹⁴

- Plastic waste almost exclusively consisting of one non-halogenated polymer, including but not limited to the following polymers:

- o Polyethylene (PE)
- o Polypropylene (PP)
- o Polystyrene (PS)
- o Acrylonitrile butadiene styrene (ABS)
- o Polyethylene terephthalate (PET)
- o Polycarbonates (PC)

- Plastic waste almost exclusively¹⁵ consisting of one cured resin or condensation product including the following:

- o Urea formaldehyde resins
- o Phenol formaldehyde resins
- o Melamine formaldehyde resins
- o Epoxy resins
- o Alkyd resins

- Plastic waste almost exclusively consisting of one of the following fluorinated polymer wastes:¹⁶

- o Perfluoroethylene/propylene (FEP)
- o Perfluoro alkoxy alkane
- o Tetrafluoroethylene/per fluoro vinyl ether (PFA)
- o Tetrafluoroethylene/per fluoro methylvinyl ether (MFA)
- o Polyvinylfluoride (PVF)
- o Polyvinylidene fluoride (PVDF)

- Mixtures of Plastic wastes, consisting of polyethylene (PE), polypropylene (PP) or polyethylene terephthalate (PET), provided they are destined for separate recycling¹⁷ of each material and in an environmentally sound manner, and almost free from contamination and other types of wastes.¹⁸

*Extract from Basel Decision 14/12-2019. Please note, there are several footnotes in the official text, which can be seen here [\(BC14/12\)](#).

EU 3011 – EU listing

EU3011 Solid plastic waste:

The following plastic materials, provided they are almost free from contamination and other types of waste:

– Plastic waste consisting of one non-halogenated polymer, including but not limited to the following polymers:

- Polyethylene (PE)
- Polypropylene (PP)
- Polystyrene (PS)
- Acrylonitrile butadiene styrene (ABS)
- Polyethylene terephthalate (PET)
- Polycarbonates (PC)
- Polyethers

– Plastic waste consisting of one cured resin or condensation product, including but not limited to the following resins:

- Urea formaldehyde resins
- Phenol formaldehyde resins
- Melamine formaldehyde resins
- Epoxy resins
- Alkyd resins

– Plastic waste consisting of one of the following fluorinated polymers*:

- Perfluoroethylene/propylene (FEP)
 - Perfluoroalkoxy alkanes:
 - Tetrafluoroethylene/perfluoroalkyl vinyl ether (PFA)
 - Tetrafluoroethylene/perfluoromethyl vinyl ether (MFA)
 - Polyvinylfluoride (PVF)
 - Polyvinylidene fluoride (PVDF)
 - Fluorinated ethylene (PTFE)
 - Polymers of vinyl chloride.
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* Post consumer wastes are excluded

Sheet Reference Code

ABS 7.3.1

ABS flakes from all origins, including ABS copolymers (ABS PC, ABS PMMA, ABS TPU etc.)

ITEM	DESCRIPTION	NOTE/REF.
Specification Number	ABS 7.3.1	see Table 2
Specification Name	ABS flakes from all origins, including ABS copolymers (ABS PC, ABS PMMA, ABS TPU etc.)	
Basel Convention B3011 reference - 'Decision BC14/12 – Amendments to Annexes II, VIII and IX to the Basel Convention 2019'	Plastic waste almost exclusively consisting of one non-halogenated polymer, of the type:-	
	o Acrylonitrile butadiene styrene (ABS) ...that is destined for recycling in an environmentally sound manner and almost free from contamination and other types of wastes.	
Corresponding CEN Quality grades for plastic packaging for recycling	<i>(To be documented when finalised by CEN)</i> Ex : 01.01.01 PET Bottles clear blue 01.02.01 PET Bottle colors 01.03.01 PET trays	
Polymer Type	ABS or ABS copolymer (ABS PC, ABS PMMA, ABS TPU, etc.)	Cas. No: 99999-99-9
Waste type	All origins, post-industrial and post-consumer	
Waste format	Flakes - No standard size	
Possible colour	All colors. Flakes color can be homogeneous or mixed.	
Transport Format	Big bags	
Source of waste	Mixed or separate collection from manufacturers (post-industrial), household or companies (post-consumer)	
Prior Treatment	Sorting and flaking	
Nominal unit weight	About 1.0 tonne/ bag (inc. moisture).	

PURITY	MATERIAL TYPE	DRY MASS %*
Target Material	ABS or ABS copolymer	Min. 90%
Allowed Impurities		
<u>Product related Impurities</u>		Max. 10%
-	Product related rigid plastics	
-	Other inorganic materials originating from waste source	
	Ferrous metal particles	
	Non-ferrous metal particle	
Prohibited Contaminants		Max 0.5%
	wood / carton board / paper	
	Glass; stones; minerals;	
IMPORTANT NOTE	Combined Mass of ALL allowed impurities + prohibited items MUST be less than Z%	10 %
Moisture Content	Water in the bag / bale from rain / shipping - is <u>above</u> the 100% for DRY WEIGHT BASIS material	NIL% - dry weights only

Sheet Reference Code

PC 7.3.1

PC flakes from all origins, including PC copolymers

ITEM	DESCRIPTION	NOTE/REF.
Specification Number	PC 7.3.1	see Table 2
Specification Name	PC flakes from all origins, including PC copolymers	
Basel Convention B3011 reference - 'Decision BC14/12 – Amendments to Annexes II, VIII and IX to the Basel Convention 2019'	Plastic waste almost exclusively consisting of one non-halogenated polymer, of the type:-	
	o Polycarbonates (PC) ...that is destined for recycling in an environmentally sound manner and almost free from contamination and other types of wastes.	
Corresponding CEN Quality grades for plastic packaging for recycling	<i>(To be documented when finalised by CEN)</i> Ex : 01.01.01 PET Bottles clear blue 01.02.01 PET Bottle colors 01.03.01 PET trays	
Polymer Type	PC or PC copolymer	Cas. No: 99999-99-9
Waste type	All origins, post-industrial and post-consumer	
Waste format	Flakes - No standard size	
Possible colour	All colors. Flakes color can be homogeneous or mixed.	
Transport Format	Big bags	
Source of waste	Mixed or separate collection from manufacturers (post-industrial), household or companies (post-consumer)	
Prior Treatment	Sorting and flaking	
Nominal unit weight	About 1.0 tonne/ bag (inc. moisture).	

PURITY	MATERIAL TYPE	DRY MASS %*
Target Material	PC or PC copolymer	Min. 90%
Allowed Impurities		
<u>Product related Impurities</u>		Max. 10%
-	Product related rigid plastics	
-	Other inorganic materials originating from waste source	
	Ferrous metal particles	
	Non-ferrous metal particle	
Prohibited Contaminants		Max 0.5%
	wood / carton board / paper	
	Glass; stones; minerals;	
IMPORTANT NOTE	Combined Mass of ALL allowed impurities + prohibited items MUST be less than Z%	10 %
Moisture Content	Water in the bag / bale from rain / shipping - is <u>above</u> the 100% for DRY WEIGHT BASIS material	NIL% - dry weights only

PS flakes from all origins, including PS copolymers (PS ABS etc.)

ITEM	DESCRIPTION	NOTE/REF.
Specification Number	PS 7.3.1	see Table 2
Specification Name	PS flakes from all origins, including PS copolymers (PS ABS etc.)	
Basel Convention B3011 reference - 'Decision BC14/12 – Amendments to Annexes II, VIII and IX to the Basel Convention 2019'	Plastic waste almost exclusively consisting of one non-halogenated polymer, of the type:-	
	o Polystyrene (PS) ...that is destined for recycling in an environmentally sound manner and almost free from contamination and other types of wastes.	
Corresponding CEN Quality grades for plastic packaging for recycling	<i>(To be documented when finalised by CEN)</i> Ex : 01.01.01 PET Bottles clear blue 01.02.01 PET Bottle colors 01.03.01 PET trays	
Polymer Type	PS or PS copolymer	Cas. No: 99999-99-9
Waste type	All origins, post-industrial and post-consumer	
Waste format	Flakes - No standard size	
Possible colour	All colors. Flakes color can be homogeneous or mixed.	
Transport Format	Big bags	
Source of waste	Mixed or separate collection from manufacturers (post-industrial), household or companies (post-consumer)	
Prior Treatment	Sorting and flaking	
Nominal unit weight	About 1.0 tonne/ bag (inc. moisture).	

PURITY	MATERIAL TYPE	DRY MASS %*
Target Material	PS or PS copolymer	Min. 90%
Allowed Impurities		
Product related Impurities		Max. 10%
-	Product related rigid plastics	
-	Other inorganic materials originating from waste source	
	Ferrous metal particles	
	Non-ferrous metal particle	
Prohibited Contaminants		Max 0.5%
	wood / carton board / paper	
	Glass; stones; minerals;	
IMPORTANT NOTE	Combined Mass of ALL allowed impurities + prohibited items MUST be less than Z%	10 %
Moisture Content	Water in the bag / bale from rain / shipping - is <u>above</u> the 100% for DRY WEIGHT BASIS material	NIL% - dry weights only

Sheet Reference Code

PE 7.3.1

PE flakes from all origins, including PE copolymers

ITEM	DESCRIPTION	NOTE/REF.
Specification Number	PE 7.3.1	see Table 2
Specification Name	PE flakes from all origins, including PE copolymers	
Basel Convention B3011 reference - 'Decision BC14/12 – Amendments to Annexes II, VIII and IX to the Basel Convention 2019'	Plastic waste almost exclusively consisting of one non-halogenated polymer, of the type:-	
	o Polyethylene (PE) ...that is destined for recycling in an environmentally sound manner and almost free from contamination and other types of wastes.	
Corresponding CEN Quality grades for plastic packaging for recycling	<i>(To be documented when finalised by CEN)</i> Ex : 01.01.01 PET Bottles clear blue 01.02.01 PET Bottle colors 01.03.01 PET trays	
Polymer Type	PE or PE copolymer	Cas. No: 99999-99-9
Waste type	All origins, post-industrial and post-consumer	
Waste format	Flakes - No standard size	
Possible colour	All colors. Flakes color can be homogeneous or mixed.	
Transport Format	Big bags	
Source of waste	Mixed or separate collection from manufacturers (post-industrial), household or companies (post-consumer)	
Prior Treatment	Sorting and flaking	
Nominal unit weight	About 1.0 tonne/ bag (inc. moisture).	

PURITY	MATERIAL TYPE	DRY MASS %*
Target Material	PE or PE copolymer	Min. 90%
Allowed Impurities		
Product related Impurities		Max. 10%
-	Product related rigid plastics	
-	Other inorganic materials originating from waste source	
	Ferrous metal particles	
	Non-ferrous metal particle	
Prohibited Contaminants		
	wood / carton board / paper	Max 0.5%
	Glass; stones; minerals;	
IMPORTANT NOTE	Combined Mass of ALL allowed impurities + prohibited items MUST be less than Z%	10 %
Moisture Content	Water in the bag / bale from rain / shipping - is <u>above</u> the 100% for DRY WEIGHT BASIS material	NIL% - dry weights only

Sheet Reference Code

PP 7.3.1

PP flakes from all origins, including PE copolymers

ITEM	DESCRIPTION	NOTE/REF.
Specification Number	PP 7.3.1	see Table 2
Specification Name	PP flakes from all origins, including PE copolymers	
Basel Convention B3011 reference - 'Decision BC14/12 – Amendments to Annexes II, VIII and IX to the Basel Convention 2019'	Plastic waste almost exclusively consisting of one non-halogenated polymer, of the type:-	
	o Polyethylene (PE) ...that is destined for recycling in an environmentally sound manner and almost free from contamination and other types of wastes.	
Corresponding CEN Quality grades for plastic packaging for recycling	<i>(To be documented when finalised by CEN)</i> Ex : 01.01.01 PET Bottles clear blue 01.02.01 PET Bottle colors 01.03.01 PET trays	
Polymer Type	PP or PP copolymer	Cas. No: 99999-99-9
Waste type	All origins, post-industrial and post-consumer	
Waste format	Flakes - No standard size	
Possible colour	All colors. Flakes color can be homogeneous or mixed.	
Transport Format	Big bags	
Source of waste	Mixed or separate collection from manufacturers (post-industrial), household or companies (post-consumer)	
Prior Treatment	Sorting and flaking	
Nominal unit weight	About 1.0 tonne/ bag (inc. moisture).	

PURITY	MATERIAL TYPE	DRY MASS %*
Target Material	PP or PP copolymer	Min. 90%
Allowed Impurities		
Product related Impurities		Max. 10%
-	Product related rigid plastics	
-	Other inorganic materials originating from waste source	
	Ferrous metal particles	
	Non-ferrous metal particle	
Prohibited Contaminants		
	wood / carton board / paper	Max 0.5%
	Glass; stones; minerals;	
IMPORTANT NOTE	Combined Mass of ALL allowed impurities + prohibited items MUST be less than Z%	10 %
Moisture Content	Water in the bag / bale from rain / shipping - is <u>above</u> the 100% for DRY WEIGHT BASIS material	NIL% - dry weights only

Sheet Reference Code

Other non-halogenated polymer 7.3.1

Other non-halogenated polymer

ITEM	DESCRIPTION	NOTE/REF.
Specification Number	Other non-halogenated polymer 7.3.1	see Table 2
Specification Name	Other non-halogenated polymer from all origins, including other non-halogenated polymer copolymers	
Basel Convention B3011 reference - 'Decision BC14/12 – Amendments to Annexes II, VIII and IX to the Basel Convention 2019'	Plastic waste almost exclusively consisting of one non-halogenated polymer, of the type:-	
	Other non listed non-halogenated polymer ...that is destined for recycling in an environmentally sound manner and almost free from contamination and other types of wastes.	
Corresponding CEN Quality grades for plastic packaging for recycling	<i>(To be documented when finalised by CEN)</i> Ex : 01.01.01 PET Bottles clear blue 01.02.01 PET Bottle colors 01.03.01 PET trays	
Polymer Type	Single non-mixed non-halogenated polymer	Cas. No: 99999-99-9
Waste type	All origins, post-industrial and post-consumer	
Waste format	Flakes - No standard size	
Possible colour	All colors. Flakes color can be homogeneous or mixed.	
Transport Format	Big bags	
Source of waste	Mixed or separate collection from manufacturers (post-industrial), household or companies (post-consumer)	
Prior Treatment	Sorting and flaking	
Nominal unit weight	About 1.0 tonne/ bag (inc. moisture).	

PURITY	MATERIAL TYPE	DRY MASS %*
Target Material	Non-halogenated polymer	Min. 90%
Allowed Impurities		
Product related Impurities		Max. 10%
-	Product related rigid plastics	
-	Other inorganic materials originating from waste source	
	Ferrous metal particles	
	Non-ferrous metal particle	
Prohibited Contaminants		Max 0.5%
	wood / carton board / paper	
	Glass; stones; minerals;	
IMPORTANT NOTE	Combined Mass of ALL allowed impurities + prohibited items MUST be less than Z%	10 %
Moisture Content	Water in the bag / bale from rain / shipping - is <u>above</u> the 100% for DRY WEIGHT BASIS material	NIL% - dry weights only