

# Government Decree

## on end-of-waste criteria for mechanically recycled secondary plastic raw materials

By decision of Government, pursuant to section 5b, subsection 2, as amended by Act 714/2021, and section 10, as partly amended by Act 714/2021 of the Waste Act (646/2011), and section 9, as amended by Act 1166/2018, of the Environmental Protection Act (527/2014), the following is enacted:

### Section 1

#### *Objective and scope*

This Decree lays down criteria for determining when a mechanically recycled secondary plastic raw material ceases to be waste and the purposes for which a secondary plastic raw material meeting the criteria may be used.

This Decree applies to producers of secondary plastic raw materials who hold an environmental permit referred to in section 27 of the Environmental Protection Act (527/2014) for the processing of plastic waste and who adopt the criteria referred to in this Decree.

In addition, the manufacture of secondary plastic raw materials intended to come into contact with food is governed by Commission Regulation (EU) 2022/1616 on recycled plastic materials and articles intended to come into contact with food and repealing Regulation (EC) No 282/2008, Commission Regulation (EC) 2023/2006 on good manufacturing practice for materials and articles intended to come into contact with food, Commission Regulation (EU) 10/2011 on plastic materials and articles intended to come into contact with food, and Regulation (EC) No 1935/2004 of the European Parliament and of the Council on materials and articles intended to come into contact with food and repealing Directives 80/509/EEC and 89/109/EEC.

### Section 2

#### *Definitions*

For the purposes of this Decree, the following definitions shall apply:

- 1) *input* means plastic waste, as referred to in Annex 1, used as raw material for the production of the secondary plastic raw material referred to in point 2;
- 2) *secondary plastic raw material* means plastic material in the form of pellets, crushed plastic or flakes produced from plastic waste and which is available as raw material for the manufacture of new plastic products without requiring further processing;
- 3) *recovery operation* means technical and other measures for the reception, pre-processing and recovery of inputs to transform plastic waste into secondary plastic raw material;
- 4) *manufacturer* means the holder of the waste who adopts the end-of-waste criteria for the secondary plastic raw material;

5) *independent party* means an entity, institution or other body providing compliance assessment services;

6) *melt flow index* means a measure of the ease of flow of the melt of a thermoplastic polymer at a given temperature and under a specified pressure.

### Section 3

#### *End-of-waste criteria for secondary plastic raw material*

The classification of secondary plastic raw material as waste ceases when the following requirements are met at the time the secondary plastic raw material is placed on the market:

- 1) plastic waste referred to in Annex 1 has been used as an input for the recovery operation;
- 2) the input has undergone a recovery operation that meets the requirements laid down in section 5 and sections 7 to 9;
- 3) the secondary plastic raw material meets the requirements laid down in section 10;
- 4) the intended use of the secondary plastic raw material has been determined in accordance with section 12;
- 5) the secondary plastic raw material has been stored in accordance with the requirements of section 13 and has a declaration of compliance in accordance with section 14 that meets the content requirements laid down in section 15.

### Section 4

#### *Manufacturer's quality assurance system*

The manufacturer shall have a quality assurance system to verify, on a continuous basis, compliance with the quality assurance requirements of the recovery operation and the recycled plastic raw material that has undergone the recovery operation.

The manufacturer shall designate the persons responsible for the quality assurance system and ensure that the responsible persons and those involved in the implementation of the quality assurance are trained in the quality assurance system. The responsible persons are designated in the quality assurance system.

The manufacturer shall establish an assessment and audit plan for the quality assurance system.

The compliance of the quality assurance system is verified by an independent party. The independent party shall have a qualification granted by the Finnish Safety and Chemicals Agency's Accreditation Service to perform this task.

### Section 5

#### *Reception of plastic waste*

The manufacturer shall check each consignment of plastic waste at the time of receipt of the waste before pre-processing. The manufacturer shall draw up instructions for the receiving inspection and document them in their quality assurance system.

- The manufacturer may only accept plastic waste referred to in Annex 1, which must also
- 1) be such that it is ensured that it is possible, taking into account the technical solutions of the recovery operation, to produce secondary plastic raw material meeting the criteria;
  - 2) be stored and transported in such a way that waste of the different waste codes in Annex 1 is not mixed with each other or with other waste.

The manufacturer shall not receive, in the form of plastic waste, packaging used for the storage or packaging of a hazardous substance or mixture meeting the hazard class or category listed in Annex 2. This requirement does not apply to plastic waste collected separately from households.

Plastic waste which, based on the inspection, is suspected or found to contain impurities that significantly impair the quality of the recycled plastic raw material, may not be used as an input for the recovery operation.

## Section 6

### *Records of receipt of plastic waste*

The manufacturer shall keep records of the plastic waste received and rejected as input. The receipt records must record the date and time of receipt of each consignment of plastic waste received, the producer and supplier of the waste, the type, title and quantity of the waste and the indication of acceptance. For consignments of waste not accepted, the date of rejection, the producer and the supplier of the waste, the type, code and quantity of the waste and the grounds for rejection are recorded.

The manufacturer shall draw up instructions on keeping records of receipt and document them in the quality assurance system.

## Section 7

### *Storage of plastic waste*

The manufacturer shall store plastic waste intended for the manufacture of secondary plastic raw material intended to come into contact with food separately from other plastic waste and waste.

The manufacturer shall keep plastic waste from construction separate from plastic waste from demolition and other waste.

## Section 8

### *Pre-processing of plastic waste*

The manufacturer shall pre-process the plastic waste prior to its use as an input for the recovery operation in order to remove non-plastic waste or plastic waste containing significant quantities of impurities.

The manufacturer shall continuously monitor the quality of the pre-processed plastic waste and remove any detected impurities that may materially impair the quality of the secondary plastic raw material being manufactured. Manufacturers must keep a record of the amount of impurities removed and the method of treatment.

## Section 9

### *Recovery of plastic waste*

In the recovery of plastic waste, the manufacturer shall ensure that:

1) the plastic waste sorted by type of plastic at source has been appropriately sorted before being used as input in further processing;

2) waste not sorted by type of plastic at source is sorted by type of plastic and by taking into account other characteristics related to the quality and classification of the recycled plastic raw material;

3) pre-processed and sorted plastic waste is reduced by crushing or by shredding it into flakes, and pieces containing non-plastic-material are removed;

4) contaminated plastic waste or plastic waste containing stickers or other impurities is treated to remove the impurities;

5) any remaining impurities are removed from plastic melt intended for pelletizing by extrusion or otherwise before pelletizing;

6) the processing line used for the production of secondary plastic raw material intended to come into contact with food only processes plastic waste originating from plastic products that have come into contact with food and that is collected separately or sorted at source.

The manufacturer shall define appropriate and adequate risk management measures to identify and remove contaminated batches from the recovery operation.

The manufacturer shall draw up instructions in the quality assurance system on the use and maintenance of the equipment used in the manufacture of the secondary plastic raw material and on the functions related to the manufacturing process.

## Section 10

### *Specifications for secondary plastic raw material*

The manufacturer shall provide the following specifications for the secondary plastic raw material:

- 1) the mass fractions of the main polymer and other polymers;
- 2) its suitability for different manufacturing methods of plastic products;
- 3) the melt flow index, either as a continuous measurement or determined from a sample representative of a batch of up to 1 500 kg of secondary plastic raw material.

## Section 11

### *Documentation of sampling, analysis of samples and results*

The manufacturer shall draw up instructions for sampling and testing for the specifications provided for in section 10 and shall record the instructions in the quality assurance system. The instructions must include information on:

- 1) the person collecting samples and their qualifications, the sampling site, the method of sampling and the date and time of sampling;
- 2) the methods used to determine the melt index and other characteristics;
- 3) deviations observed during sampling;
- 4) the use, calibration and maintenance of the sampling, measurement or testing equipment used by the manufacturer.

The methods and tools used for the analysis of samples and the results of the analysis must be documented as part of the quality assurance system. The documents must contain information on:

- 1) the parameters and research methods used for analysis of the samples;
- 2) the results of the analyses carried out on the samples;
- 3) the quality deviations observed;
- 4) measures taken in response to deviations;
- 5) calibration and maintenance of the sampling, measurement or testing equipment used by the manufacturer.

The documents referred to in subsection 2 concerning quality assurance are kept for a period of 10 years from the date on which the documents were drawn up.

The real-time measurement data of the melt flow index produced as a continuous measurement is kept for at least two months.

#### Section 12

##### *Permitted uses of secondary plastic raw material that has undergone the recovery operation*

Secondary plastic raw material can be used for the manufacture of plastic products or products containing plastic.

#### Section 13

##### *Storage of secondary plastic raw material that has undergone the recovery operation*

The manufacturer shall store secondary plastic raw materials intended for different uses separately. The secondary plastic raw material must be stored in such a way that its quality does not deteriorate.

If the manufacturer has reason to suspect that the quality of the secondary plastic raw material has deteriorated during storage so that it no longer meets the criteria, the manufacturer shall examine the quality of the secondary plastic raw material and assess its suitability for the intended use. Secondary plastic raw material that does not meet the criteria is returned by the manufacturer for processing as waste.

#### Section 14

##### *Manufacturer's declaration of compliance*

Manufacturers shall draw up a declaration of compliance for the secondary plastic raw material that they manufacture and place on the market. The declaration of compliance is provided to the recipient of the secondary plastic raw material with each batch of secondary plastic raw material. The declaration of compliance may also be in electronic form. The manufacturer shall keep the declaration of compliance for 10 years after its issuance.

Upon request, the manufacturer shall submit a declaration of compliance for the secondary plastic raw material to the Finnish Safety and Chemicals Agency.

#### Section 15

##### *Content of the declaration of compliance*

The declaration of compliance must contain the following information concerning the secondary plastic raw material:

- 1) the name and contact details of the manufacturer and their declaration of compliance with the criteria and signature;
- 2) the date of adoption of the criteria and the supervisory authority responsible for supervising the activities in accordance with the Environmental Protection Act;
- 3) basic information about the secondary plastic raw material, including its colour and origin by waste code;
- 4) the type of plastic and its identifier in accordance with the industry specification;

5) the melt flow index and the standard used for its determination or precise description of the method used for determination, and the mass fractions of the main polymer and other polymers in the secondary plastic raw material;

6) the intended use and suitability for the manufacturing methods of plastic products in accordance with section 12

## Section 16

### *Notification and reporting obligation*

The manufacturer shall notify the supervisory authority referred to in section 23, subsection 1 of the Environmental Protection Act of the adoption of the criteria in writing. The notification must include an explanation of the manufacturer's quality assurance system. The notification must be issued no later than 30 days before the criteria are introduced.

Each year at the time specified in the environmental permit, but no later than the end of February of the following calendar year, the manufacturer shall submit to the supervisory authority:

1) information on the waste used in the recovery operation and its quantities itemised by plastic waste and waste code as listed in Annex 1;

2) an explanation of any changes in the manufacturer's quality assurance system;

3) information on the quantities of manufactured secondary plastic raw material that meets the criteria.

In addition, the manufacturer shall provide the supervisory authority annually with information on the received quantities of waste listed in Annex 1 by type of waste as well as information on the quantities of material removed from the input in the pre-processing referred to in section 8 and in the recovery operation referred to in section 9 and on further processing.

The manufacturer shall notify the supervisory authority in writing of the end of the use of the criteria.

## Section 17

### *Entry into force*

This Decree enters into force on 1 August 2024.

This Decree does not apply to secondary plastic raw materials manufactured before the entry into force of this Decree. Any ad hoc decisions on end-of-waste status issued prior to the entry into force of this Decree are repealed at the time of adoption of the criteria laid down in section 3 insofar as it concerns plastic waste covered by this Decree.

If an ad hoc application for granting end-of-waste status to a secondary plastic raw material is pending at the time this Decree enters into force, processing of the application will stop or lapse. Cases pending before a court at the time this Decree enters into force are heard and decided in accordance with the provisions in force at the time this Decree enters into force. If the Court of Appeal annuls a decision which has been subject to the provisions in force at the time this Decree enters into force and refers the case in full for a review, the case is heard and decided in accordance with this Decree.

Helsinki 23 May 2024

Kai Mykkänen, Minister of Climate and the Environment

Johanna Routio, Senior Officer for Legal Affairs

Annex 1

Plastic waste types allowed to be used as an input for the recovery operation and their waste codes

Plastic waste	Waste code
<b>1. Plastic waste resulting from the manufacture of plastics and plastic products</b>	
(a) Plastic waste resulting from the manufacture and use of plastics	07 02 13
(b) Waste from unmarketable plastic products resulting from the manufacture of plastic products	16 03 04
(c) Plastic waste resulting from the moulding of plastics	12 01 05
(d) Pre-processed plastic waste resulting from the mechanical processing of plastic waste referred to in points (a) to (c)	19 12 04
<b>2. Plastic construction waste</b>	
(a) Plastic waste resulting from construction	17 02 03
(b) Plastic insulation material waste resulting from construction	17 06 04
(c) Pre-processed plastic waste resulting from the mechanical processing of plastic waste referred to in points (a) to (b)	19 12 04
<b>3. Other separately collected plastic waste</b>	
(a) Separately collected plastic waste from agriculture, horticulture and forestry	02 01 04
(b) Separately collected plastic packaging waste and other plastic waste from households <sup>1</sup>	15 01 02 20 01 39
(c) Plastic bottles collected separately via the deposit system	15 01 02
(d) Plastic packaging waste and other plastic waste separately collected or sorted at source from industry, trade and services <sup>2</sup>	15 01 02
(e) Pre-processed plastic waste from the mechanical processing of plastic waste referred to in points (a) to (d)	19 12 04
<b>4. Plastic waste separated from mixed waste</b>	
(a) Plastic film waste separated from mixed construction and demolition waste (17 09 04)	19 12 04

<sup>1</sup> Contains separately or collectively collected plastic packaging waste and other plastic waste

<sup>2</sup> Contains separately or collectively collected plastic packaging waste and other plastic waste



(B) Plastic packaging waste separated from energy waste separately collected from industry, trade and services (20 01 99)	19 12 04
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HAZARD CLASSES AND CATEGORIES OF DANGEROUS SUBSTANCES

- (a) hazard class 2.1 explosives;
- (b) hazard class 2.2 flammable gases;
- (c) hazard class 2.3 flammable aerosols;
- (d) hazard class 2.4 oxidising gases;
- (e) hazard class 2.5 gases under pressure;
- (f) hazard class 2.6 flammable liquids, Category 1;
- (g) hazard class 2.7 flammable solids;
- (h) hazard class 2.8 self-reactive substances and mixtures, types A to D;
- (i) hazard class 2.12 substances and mixtures which, in contact with water, emit flammable gases, Categories 1 and 2;
- (j) hazard class 2.13 oxidising liquids, Categories 1 and 2;
- (k) hazard class 2.14 oxidising solids, Categories 1 and 2;
- (l) hazard class 2.15 organic peroxides, Types A to D;
- (m) hazard class 3.1 acute toxicity, Categories 1, 2 and 3;
- (n) hazard class 3.5 germ cell mutagenicity;
- (o) hazard class 3.6 carcinogenic effects;
- (p) hazard class 3.7 reproductive toxicity;
- (q) hazard class 3.8 specific target organ toxicity – single exposure, Categories 1 and 2;
- (r) hazard class 3.11 endocrine disrupting substances and mixtures affecting human health, Categories 1 and 2;
- (s) hazard class 4.2 endocrine disrupting substances and mixtures affecting the environment, Categories 1 and 2;
- (t) hazard class 4.3 persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) substances and mixtures;
- (u) hazard class 4.4 persistent, transportable and toxic (PMT) or very persistent and very mobile (vPvM) substances and mixtures.

#### DETERMINATION OF THE MELT FLOW INDEX

Where the melt flow index is determined on a representative sample of not more than 1 500 kg, the determination is carried out in accordance with standard SFS-EN ISO 1133-1 or by any other method of sufficient analytical sensitivity, accuracy and reproducibility. If an input from the same starting material is used to produce secondary plastic raw materials of uniform material quality, the quantity of which exceeds 1 500 kg, one sample taken per batch of secondary raw material is sufficient to determine the melt flow index.

If the melt flow index is determined for each batch of secondary plastic raw material as a continuous measurement, the melt flow index is determined for each batch on the basis of real-time measurement data.

For quantitatively small batches with a well-known and perfectly homogeneous starting material, the melt flow index determination can be replaced by a precise description of the input.