

Factsheet on Harmonized System codes relevant to plastic waste and their relation to the amendments to the Basel Convention on plastic waste







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# Factsheet on Harmonized System codes relevant to plastic waste and their relation to the amendments to the Basel Convention on plastic waste

- 1. This factsheet has been developed under the Plastic Waste Partnership (PWP) to support implementation of the plastic waste amendments, adopted in decision BC-14/12 by the Conference of the Parties (COP) to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. The PWP was established by the COP to improve and promote the environmentally sound management of plastic waste at the global, regional and national levels and prevent and minimize their generation so as to, among other things, reduce significantly and in the long-term eliminate the discharge of plastic waste and microplastics into the environment, in particular the marine environment.
- 2. The factsheet is intended to provide an overview of the Harmonized System codes relevant for monitoring the transboundary movements of plastic waste. It should not be used as the sole source of information but as a starting point in understanding the issues involved and as a guide to additional and more comprehensive information, if needed. More detailed information in the form of guidance documents related to the transboundary movements of hazardous wastes and other wastes, including plastic waste, is available on the website of the Basel Convention. More detailed information on the Harmonized System is available on the website of the World Customs Organization (WCO).
- 3. The Basel Convention establishes the international framework for transboundary movements of hazardous wastes and other wastes. It is based on the concept of prior informed consent (PIC), which requires that, before a transboundary movement can take place, the authorities of the State of export notify the authorities of the prospective States of import and transit. The movement may only proceed if and when all States concerned have given their consent.<sup>3</sup>
- 4. In 2019, the COP adopted, in decision BC-14/12,<sup>4</sup> amendments to Annexes II, VIII and IX on plastic waste. These amendments became effective on 1 January 2021. In 2023, the COP adopted the Basel Convention Technical guidelines on the environmentally sound management of plastic waste.<sup>5</sup>.

## I. The importance of Harmonized System codes for monitoring the transboundary movements of plastic waste

- 5. At the national level, Parties need to implement legal and administrative measures to facilitate and support the implementation and the enforcement of the Basel Convention, including the plastic waste amendments.
- 6. A competent authority, when considering whether to consent to or permit a transboundary movement, must verify that the request is consistent with relevant provisions and restrictions at national level. Because the Basel Convention regulates movements across international borders, its effective implementation *inter alia* by national customs authorities is essential to ensure compliance.
- 7. As customs authorities are responsible for overseeing movement of goods notably at points of entry and exit, they have the opportunity to verify and take action regarding the movement of wastes

http://www.basel.int/BrochuresLeaflets/tabid/2365/Default.aspx

<sup>&</sup>lt;sup>1</sup> http://www.basel.int/GuidanceManuals/tabid/2364/Default.aspx

<sup>&</sup>lt;sup>2</sup> http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools.aspx

<sup>&</sup>lt;sup>3</sup> See leaflet on "Controlling transboundary movements of hazardous wastes" available at

http://www.basel.int/Amendments/Overview/tabid/8426/Default.aspx

<sup>&</sup>lt;sup>5</sup> https://www.basel.int/TechnicalGuidelines/tabid/8025/Default.aspx

controlled by the Basel Convention. Customs authorities can control the movement document and the consent, including whether the type of waste that is being traded is in conformity with the movement document. In case they observe indications for illegal traffic, they should inform the relevant competent authority. In addition to the provisions of the Convention, provisions of customs legislation apply. Customs authorities use the Harmonized System nomenclature to monitor and collect information on imports and exports of wastes, in accordance with customs legislation.

#### II. Introduction to the Harmonized System

- 8. Almost all trade in the world is classified under the Harmonized Commodity Description and Coding System, also known as the Harmonized System (HS), when it crosses an international border. Developed by WCO and implemented under the International Convention on the Harmonized Commodity Description and Coding System, the HS is the basis for identifying goods with the purposes, among others, of establishing Customs tariffs, for collecting international trade statistics and for performing risk analysis.
- 9. Within the HS, traded goods are classified to their relevant six-digit code. Every tradeable physical commodity is classifiable within the HS, either as a specifically named commodity or as part of a group of commodities.
- 10. The HS Nomenclature is divided in 21 Sections and 97 Chapters. Section VII, Chapter 39 covers plastics and more specifically those plastic trade-flows that are not covered elsewhere in the HS. Every Chapter is divided into headings, numbered with 4 digits. The first two digits are the Chapter number, with the following two digits reflecting the order of the headings in the Chapter. Headings can be further subdivided into 5-digit subheadings, which can themselves be further subdivided into 6-digit subheadings. Changes to headings and subheadings are made on the basis of five-year review cycles and are subject to the approval of the Contracting Parties to the Convention. The Explanatory Notes, as approved by the WCO Council, constitute the official interpretation of the Harmonized System at the international level and are an indispensable complement to the System.
- 11. Countries can add additional digits to the existing six digits of the HS in forming their national nomenclatures. This allows countries to specifically identify certain goods according to their national needs.
- 12. The HS is continually evolving with the change in trade patterns. For example, certain goods cease to be traded or the trade decrease significantly. Also, due to technological progress, other goods may be created and start being traded. As such, the HS is amended normally every 5 years to update the Nomenclature. The 7th edition of the HS (HS 2022) entered into force in January 2022.
- 13. Given the potential environmental impact of trade in certain goods and in recognition of the importance of international instruments that aim to control such trade, the HS has also evolved to identify goods and wastes controlled under such instruments. The Basel Convention has a long-standing cooperation with the WCO to facilitate the assignment of HS codes to the types of wastes controlled under its umbrella.
- 14. More work on plastic waste is anticipated for the 8th edition of the HS (HS 2028).

#### III. Overview of the Harmonized System, Section VII, Chapter 39

15. Chapter 39 covers plastics and articles thereof. The expression "plastics" is defined in Note 1 to this Chapter as meaning those materials of headings 39.01 to 39.14 which are or have been capable, either at the moment of polymerisation or at some subsequent stage, of being formed under external influence (usually heat and pressure, if necessary with a solvent or plasticiser) by moulding, casting, extruding, rolling or other process into shapes which are retained on the removal of the external influence. The

expression "plastics" also includes vulcanised fibre. It is important to take into account that in the HS, the expression "plastics" does not apply to textile materials of Section XI. Therefore, in the Nomenclature, waste of textile materials, made of plastics fibres is not considered plastic waste of Chapter 39. Such exclusions under the HS do not affect the classification of waste under the Basel Convention.

- 16. Chapter 39 covers substances called polymers, semi-manufactures and articles thereof not excluded by Note 2 to the Chapter. This Chapter does not cover other articles specifically mentioned in Note 2, such as textile or textile articles (goods of Section XI of the HS), synthetic rubber as defined for the purposes of Chapter 40 of the HS, or articles thereof, footwear, electrical appliances, parts of vehicles, furniture, toys, etc.
- 17. Polymers consist of molecules which are characterised by the repetition of one or more type of monomer units. To be considered a polymer, the molecule should have more than 5 monomer units. The term "copolymers" is defined in Note 4 to the Chapter as polymers in which no single monomer unit contributes 95% or more by weight to the total polymer content. Unless the context otherwise requires, copolymers are to be classified in the heading covering polymers of that comonomer unit which predominates by weight over every other.
- 18. Chemically modified polymers, that is, those in which only appendages to the main polymer chain have been changed by chemical reaction, are to be classified in the heading appropriate to the unmodified polymer (see Note 5 to this Chapter). This provision does not apply to graft copolymers. Thus, for example, chlorinated polyethylene and chlorosulphonated polyethylene are classified in heading 39.01 as polymers of ethylene (see Explanatory Note to heading 3901, first paragraph).
- 19. If material of this Chapter can be softened repeatedly by heat treatment and shaped into articles, e.g., by moulding, and then hardened by cooling, it is termed "thermoplastic". If it can be or has already been transformed into an infusible product by chemical or physical means (e.g., by heat), it is termed "thermoset plastic or thermosetting plastic".
- 20. Chapter 39 is divided into two sub-Chapters. Sub-Chapter I covers polymers in primary forms and sub-Chapter II covers waste, parings and scrap, semi-manufactures and articles.
- 21. In sub-Chapter I, relating to primary forms, the products of headings 39.01 to 39.11 are obtained by chemical synthesis, such as polyethylene, polypropylene, polystyrene, PVC, polycarbonates, etc. Headings 39.12 and 39.13 are either natural polymers or are obtained therefrom by chemical treatment. Heading 39.12 covers cellulose and chemical derivatives of cellulose, such as cellulose acetates and nitrates. Heading 39.13 covers natural polymers such as alginic acid or hardened proteins. Heading 39.14 covers ion-exchangers based on polymers of headings 39.01 to 39.13, in primary form.
- 22. Headings 39.01 to 39.14 cover products in primary forms only. The expression "primary forms" is defined in Note 6 to Chapter 39. It applies only to the following forms:

  Liquids and pastes, including dispersions (emulsions and suspensions) and solutions;

  Blocks of irregular shape, lumps, powders (including moulding powders), granules, flakes and similar bulk forms. Examples are shown in figure 1.
- 23. In sub-Chapter II, heading 39.15 relates to waste, parings and scrap of plastics. Headings 39.16 to 39.21 cover semi-manufactures or specified articles of plastics, such as monofilaments, tubes, pipes, floor coverings, sheets, films. Headings 39.22 to 39.25 cover different articles of plastics, such as sanitary ware, kitchenware, articles for the conveyance or packing of goods and builders' ware. Heading 39.26 is a residual heading which covers articles, not elsewhere specified or included, of plastics or of other materials of headings 39.01 to 39.14, such as office or school supplies, fittings for furniture, etc.

#### IV. Classification of plastic wastes according to the HS

24. According to the Explanatory Notes to heading 39.15, under the HS plastic wastes are broken or worn articles of plastics that are clearly not usable for their original purposes, or manufacturing waste (shavings, dust, trimmings, etc.).

Relevant codes for the classification of plastic wastes according to the HS

25. In the HS, waste of plastics is covered in Section VII, Chapter 39, heading 39.15 "Waste, parings and scrap, of plastics." as shown below:

39.15		Waste, parings and scrap, of plastics.
	3915.10	- Of polymers of ethylene
	3915.20	- Of polymers of styrene
	3915.30	- Of polymers of vinyl chloride
	3915.90	- Of other plastics

- 26. Heading 39.15 covers waste, parings and scrap consisting of:
- any single thermosetting material in any form;
- any single thermoplastic material *provided* it has not been broken down into a primary form (Note 7 to Chapter 39); or
- two or more thermoplastic materials mixed together in any form.
- 27. According to Note 7 of Chapter 39, heading 39.15 does not apply to waste, parings and scrap of a single thermoplastic material, transformed into primary forms (headings 39.01 to 39.14), as defined in Note 6 to Chapter 39. If wastes are made of a single thermoplastic material, for instance empty used bottles of PET, and imported as such, these bottles are considered plastic waste and classified in subheading 3915.90. If the waste bottles are processed into primary forms as defined in Note 6 to Chapter 39, such as during the recycling process, the resulting material is then classified in heading 39.07; an example is shown in figure 1(c).
- 28. If instead, the waste PET bottles together with their polypropylene lids are further processed into primary forms, then this is a mixture of PET and polypropylene and therefore Note 7 to Chapter 39 does not apply as this is not a single thermoplastic material. In this case the mixture is considered a waste and classified in heading 39.15; an example is shown in figure 2
- 29. In the HS 2022, only waste of polymers of ethylene (3915.10), styrene (3915.20) or vinyl chloride (3915.30) are specifically identified. Waste of all other plastic polymers, including mixtures of plastic polymers, are classified in subheading 3915.90 "- Of other plastics".
- 30. To identify specifically other types of plastic wastes not specifically mentioned at 6-digit level, such as plastic waste consisting of halogenated plastics, other than polymers of vinyl chloride, the region or country could open a specific national (or regional if applicable) subheading for such plastic wastes, using as many digits as the ones used in national or regional subheadings. For example, the European Union use at regional level 8-digit codes. The EU has identified waste of polymers of propylene by expanding international subheading 3915.90 "– Of other plastics" to regional 8-digit subheading 3915.90.11 "- Of polymers of propylene". As another example, Canada expanded the international subheading 3915.90 "- Of other plastics" to their national 10-digit statistical code 3915.90.00.10 "- Of polymers of propylene or of other olefins.

#### Relevant HS codes for mixed wastes containing plastic and other materials

- 31. Mixed wastes, including municipal waste and waste from chemical or allied industries, containing both plastic and other non-plastic waste, are generally classified under heading 38.25. Municipal waste containing both plastic and other non-plastic waste is defined in Note 4 to Chapter 38.
- 32. In the HS, "Municipal waste" means waste of a kind collected from households, hotels, restaurants, hospitals, shops, offices, etc., road and pavement sweepings, as well as construction and demolition waste. Municipal waste generally contains a large variety of materials such as plastics, rubber, wood, paper, textiles, glass, metals, food materials, broken furniture and other damaged or discarded articles. The term "municipal waste", however, does not cover:
  - (a) Individual materials or articles segregated from the waste, such as wastes of plastics, rubber, wood, paper, textiles, glass or metals and spent batteries which fall in their appropriate headings of the Nomenclature;
  - (b) Industrial waste;
  - (c) Waste pharmaceuticals, as defined in Note 4 (k) to Chapter 30; or
  - (d) Clinical waste, as defined in Note 6 (a) to Chapter 38:
    - "Clinical waste, that is, contaminated waste arising from medical research, diagnosis, treatment or other medical, surgical, dental or veterinary procedures, which often contain pathogens and pharmaceutical substances and require special disposal procedures (for example, soiled dressings, used gloves and used syringes)".
- 33. Plastic wastes containing precious metal or precious metal compounds, of a kind used principally for the recovery of precious metal are classified under heading 71.12 under HS 2022.
- 34. Electrical and electronic waste and scrap is classified under heading 85.49 and remains in this classification whether or not it also contains plastic wastes.

### V. Relationship of the relevant HS codes to the amendments to the Basel Convention on plastic waste

- 35. Plastic waste covered by entry B3011 in Annex IX to the Basel Convention includes plastic waste almost exclusively consisting of one non-halogenated polymer, of one cured resin, or condensation product, or of one of selected fluorinated polymers, excluding post-consumer waste, 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, as well as mixtures of plastic waste consisting of polyethylene, polypropylene and/or polyethylene terephthalate, provided they are destined for separate recycling<sup>6</sup> in an environmentally sound manner<sup>7</sup> and almost free from contamination and other types of wastes. Plastic waste consisting of polymers of ethylene, or consisting of polymers of styrene, meeting the definition of entry B3011, could be classified under subheadings 3915.10 and 3915.20, respectively. Plastic waste consisting of polymers of vinyl chloride are not covered by entry B3011. Plastic waste consisting of polymers other than of ethylene, styrene or vinyl chloride, meeting the definition of entry B3011, could be classified under subheading 3915.90 "- Of other plastics".
- 36. Plastic waste covered by entry A3210 in Annex VIII to the Basel Convention includes hazardous plastic waste. Plastic waste covered by entry Y48 in Annex II to the Basel Convention includes plastic waste that is not covered by entries A3210 and B3011. Plastic waste consisting of polymers of ethylene and styrene, covered by either entry A3210 or entry Y48, could be classified under subheadings 3915.10 and 3915.20, respectively. Plastic waste consisting of polymers of vinyl chloride, covered by either entry A3210 or entry Y48, could be classified under heading 3915.30.

<sup>&</sup>lt;sup>6</sup> https://www.basel.int/TextoftheConvention/tabid/1275/Default.aspx

<sup>&</sup>lt;sup>7</sup> https://www.basel.int/TechnicalGuidelines/tabid/8025/Default.aspx

- 37. All other consignments of plastic waste, including mixtures of such waste, could be classified under heading 3915.90, regardless of hazardousness.
- 38. It is important to note that there is no international agreement under the Basel Convention on the interpretation of the terms "almost free from contamination and other types of wastes" and "almost exclusively consisting of" for consignments of wastes covered by entries Y48 and B3011. As such, the interpretation of these terms may vary by Party, and therefore consignments of plastic waste classified under 3915.10 and 3915.20 may be covered by entry Y48 or B3011, depending on the interpretations of Parties involved in a transboundary movement. According to footnotes 6 and 7 of decision BC-14/12, international and national specifications may offer a point of reference.
- 39. In this context, it is noted that, for the purpose of the Basel Convention in accordance with its Article 2, paragraph 1, "Wastes" are substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law.<sup>8</sup>

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<sup>&</sup>lt;sup>8</sup> See text of the Basel Convention available at <a href="https://www.basel.int/TextoftheConvention/tabid/1275/Default.aspx">https://www.basel.int/TextoftheConvention/tabid/1275/Default.aspx</a> and "Glossary of terms" available at <a href="http://www.basel.int/GuidanceManuals/tabid/2364/Default.aspx">https://www.basel.int/GuidanceManuals/tabid/2364/Default.aspx</a>

(a)



(b)



(c)



Figure 1. Examples of primary forms of plastics under headings 39.01 to 39.14. (a) Powder (b) granules (c) Waste PET bottles shredded into irregular shape.

(a)
(b)





Figure 2. Examples of plastic waste that could be classified under heading 39.15. (a) Broken article made of plastic (b) Waste PET bottles (c) Waste of mixtures of plastic, shredded into irregular shape.