

Guideline on Plastic Coding System for Resin Identification

1 The Purpose of the Plastic Coding System

- 1.1 The success and value of a recycled plastic product depends largely on the purity of the materials used. The properties of the recycled plastic will be more predictable if the plastic materials being recycled are more uniform.
- 1.2 The use of coding to facilitate sorting is one of the prerequisites for successful plastic recovery and recycling. It is a key measure in ensuring that plastic containers and materials of various resin types can be identified so that they can be properly collected, sorted and recycled. The public is not expected to separate plastic containers according to their codes but the coding enables plastic waste reprocessors/recyclers to perform sorting before recycling, ensuring that the recycled plastic is as homogeneous as possible to meet the needs of the market.
- 1.3 Another potential benefit of coding is that it may facilitate the recovery of plastics not currently collected for recycling. If there is a readily identifiable supply of a given material in the waste stream, it may drive the recycling industry to explore means of recovering that material in a cost-effective manner.

2 The Plastic Coding System

- 2.1 We propose to adopt the coding system used by the Society of The Plastics Industry (SPI), Inc., USA, with minor modifications to include more commonly known acronyms. The coding system offers a means of identifying the resin content of bottles and containers commonly and frequently consumed by the public.
- 2.2 The majority of plastic packaging is made of six common types of resins: polyethylene terephthalate (PET or PETE); high-density polyethylene (HDPE); polyvinyl chloride (PVC or V); low-density polyethylene (LDPE); polypropylene (PP); and polystyrene (PS). Each of the resin types is represented by a number under the coding system. Each number is featured inside an equilateral triangle, with the resin abbreviation printed underneath.
- 2.3 The coding system also includes a seventh code, identified as "OTHER". The use of this code indicates that the product in question is made of a resin other than the six listed above, or is made of more than one resin used in combination.
- 2.4 Adding codes to plastic products would not incur significant costs to manufacturers and

importers. Manufacturers and importers could simply adapt their mould bases or printing runs to incorporate the code at minimal cost. They will also need to confirm and certify the type of resin in their products.

3 Usage of the Coding

3.1 The code is not intended to be a guarantee to consumers that a given item bearing the code will be readily accepted for recycling. Users of the code are encouraged to adhere to the following guidelines:

- The code should be used on bottles and rigid containers solely to identify resin content.
- The code should preferably appear on the bottom of the container, as close to the centre as feasible. Placing it in a similar location on all containers allows the code to be quickly located and the material be easily identified.
- Do not modify the design of the code (i.e., do not replace the resin acronym in the code and do not use other types of triangles).
- Do not make recyclability or other environmental claims in close proximity to the code, even if such claims are properly qualified. Specifically, do not use the term "recyclable" in proximity to the code.

4 Benefits of Adopting the Coding System

4.1 The main purpose of the coding system is to facilitate recycling and recovery of post-use plastics, which is a key element towards waste reduction. Companies adopting the system will have the following benefits without incurring significant additional cost to their products:

- Public Image Enhancement: Waste reduction and recycling could be an effective way for companies to demonstrate its commitment on protecting the environment which could help increase customer loyalty and result in gains from goodwill.
- Companies' Social Responsibility: Waste reduction and recycling is a common responsibility to all members of the community. Producers should play an active role to minimise waste of their products.
- Help Create Recycling Market: A stable market for recovered plastics and plastic products could be established in the long run, which may become a competitive source to virgin plastic materials and help stabilise its price.

The Plastic Coding System

Code 編碼	Material 物料	Applications 應用例子
 OR  PETE PET 聚對苯二甲酸乙二醇酯	Polyethylene Terephthalate 聚對苯二甲酸乙二醇酯	Clear soft drink and beverage bottles, films 透明汽水及飲品樽、菲林
 OR  HDPE PE-HD 高密度聚乙烯 (硬性軟膠)	High Density Polyethylene 高密度聚乙烯 (硬性軟膠)	Detergent bottles, industrial wrapping and film, sheets, shopping bags 洗潔精樽、工業包裝及薄膜、膠板、背心膠袋
 OR  V PVC 聚氯乙烯	Polyvinyl Chloride 聚氯乙烯	Water pipes, bath curtains, credit cards, packaging film, water containers 水管、浴簾、信用卡、包裝薄膜、盛水容器
 OR  LDPE PE-LD 低密度聚乙烯	Low Density Polyethylene 低密度聚乙烯	Cling film, bread bags, plastic bags, shrink wrap, T-shirt bags 保鮮紙、麵包袋、收縮膠膜、背心膠袋
 OR  PP PP 聚丙烯 (百折膠)	Polypropylene 聚丙烯 (百折膠)	microwave containers, sweet and snack wrappers, straws, artificial lawns 微波爐膠盒、糖果及小吃、飲管、人造草皮
 OR  PS PS 聚苯乙烯 (硬膠)	Polystyrene 聚苯乙烯 (硬膠)	Disposable cups and plates, fast-food boxes, CD cases, VHS tapes 即棄膠碟、飯盒、雷射唱片膠盒、錄影帶
 OR  OTHER 0 All other resin and multi-materials not otherwise defined 其他所有未列出之樹脂及混合料	All other resin and multi-materials not otherwise defined 其他所有未列出之樹脂及混合料	CD, complex composites 雷射唱片、合成樹脂製品

Note:

This Table should be read in conjunction with the Guideline on Plastic Coding System

附註：

此編碼表應與塑膠材料編碼表指引一併閱讀

