

Designation: D7611/D7611M - 10

### StandardPractice for Coding Plastic Manufactured Articles for Resin Identification<sup>1</sup>

This standard is issued under the fixed designation D7611/D7611M; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\varepsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This practice stipulates the types, names and sizes of Codes for those material types specified in Table 1.

1.2 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system are likely not to be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems is likely to result in nonconformance with the standard.

1.3 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

Note 1-There is no known ISO equivalent to this standard.

### 2. Terminology

2.1 Definitions:

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2.1.1 *Resin Identification Code (RIC; Code)*—a molded, imprinted or raised symbol or wording that consists of an equilateral triangle comprised of clockwise chasing arrows, a Resin Identification Number, and an Abbreviated Term for polymeric material in compliance with Fig. 1 and Table 1.

### 3. Significance and Use

3.1 Resin Identification Codes are used solely to identify the plastic resin used in a manufactured article.

3.2 Resin Identification Codes are not "recycle codes." The use of a Resin Identification Code on a manufactured plastic article does not imply that the article is recycled or that there are systems in place to effectively process the article for reclamation or re-use. The term "recyclable" or other environmental claims shall not be placed in proximity to the Code.

3.3 This practice is based upon the system developed in 1988 by the Society of the Plastics Industry, Inc (SPI).

### 4. Requirements

4.1 The Code is to be molded, formed or imprinted on the manufactured article.

4.2 The Code shall be clear and legible.

4.3 The size of the Code shall normally equal or exceed 12 mm ( $\frac{1}{2}$  in.) in height and width.

Note 2—For small parts or components, it is not always possible to conform to these size requirements. In these cases, it is important to maximize the size and legibility of the Code.

4.4 The Code shall be placed in an inconspicuous location on the manufactured article, such as the bottom or the back, where it will not be obvious to the consumer at the point of purchase so it does not influence the consumer's buying decision.

**24.5** The Code shall be as shown in Table 1. Option A is commonly found in North America. Option B is often found internationally. Either option is acceptable.

4.6 The numbering system within the triangular clockwise chasing arrows shall correspond to the generic class of resins shown in Table 1.

4.7 The Code with the Resin Identification Number "1" and the Abbreviated Term "PETE" is reserved for manufactured articles produced from Polyethylene Terephthalate.

4.7.1 The Code with the Resin Identification Number "1" and the Abbreviated Term "PETE+" is reserved for manufactured articles produced from Polyethylene Terephthalate that also contain at least one additional layer of a different material. This Code does not require the modification of existing tooling. This Code shall apply to all new tooling.

4.8 The Code with the Resin Identification Number "2" and the Abbreviated Term "HDPE" is reserved for manufactured articles produced from High Density Polyethylene.

4.8.1 The Code with the Resin Identification Number "2" and the Abbreviated Term "HDPE+" is reserved for manufactured articles produced from High Density Polyethylene that also contain at least one additional layer of a different material. This Code does not require the modification of existing tooling. This Code shall apply to all new tooling.

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<sup>&</sup>lt;sup>1</sup> This practice is under the jurisdiction of ASTM Committee D20 on Plastics and is the direct responsibility of Subcommittee D20.95 on Recycled Plastics.

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| TABLE 1 | Resin | Identification | Codes |
|---------|-------|----------------|-------|
|---------|-------|----------------|-------|

| Resin Identification<br>Number   | Resin   | Resin Identification<br>Code—Option A   | Resin Identification<br>Code—Option B |
|----------------------------------|---|---|---------------------------------------|
| 1                                | Polyethylene<br>Terephthalate                   | PETE  | D1<br>PET                             |
| 2                                | High Density<br>Polyethylene                    | HDPE  | D2<br>PE-HD                           |
| 3                                | PolyVinyl Chloride                              | رچی<br>tandaY:ds  | PVC                                   |
| 4                                | Low Density<br>Polyethylene                     | ndar Aiteh.<br>nt 14 ew<br>LDPE   | i)<br>PE-LD                           |
| 5<br>os://standards.iteh.ai/cata | Polypropylene 1 D7<br>bg/standards/sist/1c8fac7 | 611/D7611M-10<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474d-47255<br>5-474055<br>5-4740555<br>5-4740555<br>5-4740555<br>5-47405555<br>5-47405555<br>5-474055555<br>5-47405555555555555555555555555555555555 | 3df18/astrong 611-d7611               |
| 6                                | Polystyrene                                     | PS  | D6<br>PS                              |
| 7                                | Other Resins                                    | OTHER   | 07<br>0                               |