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# Standard Guide for Packaging and Labeling of Consumer Resin Cannabis Products for Sale to Adult Consumers, Legally Authorized Medical Users, and Caregivers in a Business-to-Consumer Retail Environment (Retailers)<sup>1</sup>

This standard is issued under the fixed designation D8233; 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 reappraisal. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reappraisal.

## 1. Scope

1.1 This guide is for the packaging and labeling of cannabis flowers, resins, and preparations derived therefrom for sale to adult consumers, legally authorized medical users, and caregivers in a business-to-consumer/patient/caregiver retail environment and other legal distribution channels. This includes labeling of products, regardless of packaging format, that will be purchased by adults in retail dispensaries, pharmacies, or other distribution methods (for example, postal shipment).

1.2 This guide does not address packaging or labeling specific to non-consumer-facing transactions (for example, products packaged for transfer between business entities, including growers, processors, manufacturers, wholesalers, and retailers).

1.3 This guide incorporates relevant materials previously published in other industry resources such as ASTM Committees D10 and F02, Foundation of Cannabis Unified Standards (FOCUS), American Herbal Products Association (AHPA), Occupational Safety and Health Administration (OSHA), and various sanctioned working group findings and publications (for example, Council on Responsible Cannabis Regulation (CRCR), National Cannabis Industry Association (NCIA), and so forth).

1.4 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

<sup>1</sup> This guide is under the jurisdiction of ASTM Committee D37 on Cannabis and is the direct responsibility of Subcommittee D37.04 on Processing and Handling. Current edition approved Feb. 1, 2019. Published February 2019. DOI: 10.1520/D8233-19.

## 2. Referenced Documents

- 2.1 *ASTM Standards*:<sup>2</sup>  
D3475 Classification of Child-Resistant Packages  
F2097 Guide for Design and Evaluation of Primary Flexible Packaging for Medical Products

## 3. Terminology

### 3.1 Definitions:

3.1.1 *child-resistant/senior-friendly packaging, n*—special packaging that is significantly difficult for children under five years of age to open, yet not difficult for seniors (65 years of age and older) to use properly. See Classification D3475.

3.1.2 *container/immediate container, n*—sealed, hard, or soft-bodied receptacle in which a cannabis item is placed.

3.1.3 *exit package, n*—opaque bag or other similar opaque covering provided at the point of sale.

3.1.4 *local jurisdiction/authorities having jurisdiction, n*—the area for which the regulation(s) apply, such as federal, state/province, county, or local municipality.

3.1.5 *opaque, n*—packaging does not allow the product to be seen without opening the packaging material.

3.1.5.1 *semi-opaque, n*—packaging that may allow light but not detailed images to pass through; syn. semi-transparent; translucent.

3.1.6 *resealable, n*—immediate container maintains its child-resistant effectiveness for multiple openings.

3.1.7 *resin cannabis products, n*—any product containing or comprised of cannabis flowers and/or resins and includes, but is not limited to, the cannabis flowers and resins themselves, extracts/concentrates/derivatives thereof, and preparations therefrom.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

3.1.8 *secondary packaging, n*—packaging in addition to the immediate container, if applicable, that is the outermost layer visible to the consumer at the point of sale.

3.1.9 *shipping container, n*—sealed, hard or soft-bodied container used to transport multiple consumer packages.

3.1.9.1 *security shipping container, n*—lockable, hard-sided container with a lid or other enclosure that can be secured in place for purposes of transporting cannabis products to and from licensed cannabis businesses, including but not limited to wholesaler, cultivator, processor, manufacturer, retailer, and research/testing facilities.

3.1.10 *tamper evident, n*—a seal or closure of a package designed to reveal any prior interference with the contents.

3.1.11 *universal symbol, n*—a graphic representation, as defined by the local jurisdiction, indicating a warning of potentially harmful substances and/or effects of improper use.

3.1.12 *variable weight consumer resin cannabis products, n*—product which is apportioned at the point of sale by the retail operator and priced based on the weight measure (typically using the kilogram (kg) as the proper SI unit).

#### 4. Significance and Use

4.1 This guide provides manufacturers, wholesalers, and retailers with guidance on how to package and label consumer resin cannabis products, based on their intended use, in a manner that prevents contamination and promotes prevention of accidental or improper consumption. The guide recommends packaging types, terminology, nomenclature, graphics, and symbols that enable consumers to determine product type, strain, potency, concentration, dosage, and expiration date, such that informed decisions can be made.

#### 5. Packaging

5.1 *General Provisions for All Forms of Consumer Resin Cannabis Products (for example, flowers, resins and products derived from them), for Retail or Other Legal Distribution Channel:*

5.1.1 All consumer resin cannabis products should be placed in an immediate container that is opaque, tamper-evident, and child-resistant prior to the time of transfer to a retail operation or distribution/fulfillment center, except as specifically identified in this guide. Containers should be tested and certified by a properly accredited and recognized authority, using commonly accepted protocols such as those defined with authorities having jurisdiction. The immediate and secondary containers should not expose the cannabis products to any toxic or harmful contaminants. See Classification **D3475**. A film wrapper used to seal product for freshness/shelf life or to prevent odor leaching may be used in addition to but not in lieu of the immediate container.

5.1.2 Non-edible cannabis flower product may be placed in an immediate container that is transparent.

5.1.3 All resin cannabis products should be placed in an opaque or semi-opaque exit bag at the point of sale, prior to transfer to a consumer/patient/licensed caregiver, such that it does not exceed the legal maximum sales limit established by the local jurisdiction.

5.1.4 If the consumer resin cannabis product's immediate container is child-resistant, then neither the secondary container nor the exit bag need be child-resistant.

5.1.5 If the consumer resin cannabis product's immediate container is not required to be child-resistant as specified in **5.2**, or if there is not yet an approved child-resistant container available in the marketplace for the approved product form, then the container should be placed in an opaque, child-resistant exit bag at the point of sale, prior to transfer to a consumer/patient/licensed caregiver, if applicable.

5.1.6 Variable weight consumer resin cannabis products should be placed in an opaque child-resistant container or exit package at the point of sale, prior to transfer to a consumer/patient/designated caregiver.

5.1.7 Consumer resin cannabis product containers housing multiple servings of active THC product must maintain its child-resistant effectiveness for multiple openings consistent with, at minimum, the number of servings in the container.

5.1.8 Authorities having jurisdiction may, with required documentation provided by a licensed caregiver, make exceptions to child-resistant packaging requirements for elderly and/or handicapped persons.

5.1.9 Consumer resin cannabis packaging manufacturers should certify and maintain proper documentation (for example, a General Certificate of Conformity) for each form of packaging containing resin cannabis products. Consumer resin cannabis retail operations and distribution/fulfillment centers placing product in child-resistant containers and/or exit bags should maintain proper child-resistant certification documentation for all such containers and exit bags.

5.1.10 Standard classifications of child-resistant packaging may be referenced, including Classification **D3475** and Guide **F2097**.

#### 5.2 Additional Packaging Guidelines by Product Form:

5.2.1 *Single-Serve Ingestible Consumer Resin Cannabis*—A single-serve ingestible solid or liquid consumable resin cannabis product containing no more than the maximum legally permissible amount of active THC (as defined by local jurisdiction) should be placed in a child-resistant and opaque container. Plastic packaging used as containers for solid or liquid ingestible consumer resin cannabis products should be at least 0.004 in. (4 mils) in thickness and be heat-sealed with no easy-open tab, dimple, corner, or flap as to make it difficult for a child to open and as a tamper-proof measure. Other packaging substrates such as glass, metal, and other non-leaching food-grade materials, including paperboard, may be used.

5.2.2 *Multi-Serve Solid Ingestible Consumer Resin Cannabis* products should either:

5.2.2.1 Be separated into child-resistant opaque internal containers of no more than the maximum legally permissible single-serve amount of active THC (as defined by local jurisdiction), with the larger external packaging not required to be child-resistant, or

5.2.2.2 Be placed in a child-resistant opaque container that maintains its child-resistant effectiveness for multiple openings and be demarcated into separate or easily separable single

servings, with each serving containing no more than the maximum legal amount of active THC (as defined by local jurisdiction).

**5.2.3 Multi-Serve Liquid Ingestible Consumer Resin Products**—Items containing more than a single serving of the maximum legally permissible amount of active THC (as defined by local jurisdiction) should be placed in a child-resistant container that includes a measuring component that cannot be separated from the cap or container, or a volumetrically accurate pumping device enabling a user to pour increments not to exceed the equivalent of a single serving of active THC.

**5.2.4 Concentrates and Refillable or Disposable Cartridges and Vaporizer Pens**—A sealed refillable or disposable vaporizer cartridge or disposable vaporizer pen need not itself be child-resistant but must be placed in a child-resistant container prior to transfer to a consumer/patient/designated caregiver.

**5.2.5 Immature Plants**—Immature plants should be placed into a receptacle. The receptacle is not required to be child-resistant.

**5.2.6 Viable Resin Cannabis Seeds, Loose Flower, and Trim**—The container may, but is not required to, be child-resistant and should keep the product dry. Any immediate container that is not child-resistant should be placed into an opaque child-resistant secondary container or exit package at the point of transfer to a consumer/patient/designated caregiver.

## 6. Labeling

**6.1 General Provisions**—The following requirements apply to labels affixed to the immediate container and/or any secondary containers of all retail consumer resin cannabis products. The immediate and any secondary container should have a label with all information required by the local jurisdiction. Any intermediary packaging between the immediate and secondary container may but is not required to be labeled.

**6.1.1 Font Size and Language**—Labeling text on the immediate and any secondary container should be no smaller than a 6-point font (or 1/16 in.) and should be printed in the officially recognized language(s) of the country or province.

**6.1.2 Unobstructed and Conspicuous**—Labeling text on the immediate and any secondary container should be unobstructed and conspicuous. A cannabis operation may affix multiple labels to a container provided none of the information suggested by this guide or by the local authority is obstructed. For example, and not by means of limitation, labels may be accordion, expandable, extendable, or layered to permit labeling of small containers.

**6.1.3 Health Claims/Benefits**—The label(s) on the immediate and any secondary container should not make any claims regarding health or physical benefits to the consumer except if and as approved by governing food and drug agencies within the local jurisdiction, nor shall it make any false or misleading claims/statements.

**6.1.4 Appeal to Children**—Labels and any graphics on the immediate and any secondary container should not be designed to appeal to children or individuals under the legal age as defined by the local jurisdiction. Use of cartoon characters or similar images are prohibited, as is the use of the word “candy” or “candies.”

**6.1.5 Use of Trademarks**—No immediate or secondary container should be trademarked, or labeled in a manner that violates any applicable trademark law or regulation.

**6.1.6 Exit Bags**—The exit package may not be required to be labeled but may include the retail cannabis store’s identity statement and/or standardized graphic symbol.

**6.2 Labeling Guidelines by Product Form**—See [Table 1](#).

## 7. Keywords

7.1 cannabis; labeling; packaging

**TABLE 1 Labeling Guidelines by Product Form**

Labeling Requirements Prior to Transfer to Consumers, Patients, and Caregivers	All	Flower and Trim	Viable Seed and Immature Plants	Extracts/Concentrates	Edibles other than Pills, Capsules, and Tinctures	Edible Pills, Capsules, and Tinctures	Pre-Roll, Blunt	Topical	Suppository	Transdermal
All required labels are affixed to products prior to transfer to retail store				X	X	X	X	X	X	X
All required labels are affixed to products prior to transfer to consumer (affixed at retail store)		X	X							
Item Identification Use of common or usual name is recommended (e.g., “cannabis”); Identity statements should clearly identify the resin cannabis product. Examples: cannabis flowers, cannabis resins, resin cannabis gummy.										
Required License Numbers and Information License number, physical address, and web address of: (1) cannabis cultivation facility where grown (affixed to immediate and any secondary container); (2) cannabis product manufacturing facility where produced (affixed to immediate and any secondary container); (3) retail store where sold (affixed to immediate and any secondary container)										

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