

Product Responsibility Best Practices

SUBJECT

Plush Toy Product Responsibility

LAST UPDATE

May 13, 2016

APPLIES TO

- Suppliers
- Distributors

FOCUS ON

The various Federal and state regulations for plush toys available for sale or distribution in the United States.

QUICK LINKS

- PPAI Corporate Responsibility: <http://www.ppai.org/inside-ppai/corporate-responsibility>
- Consumer Product Safety Commission (CPSC): www.cpsc.gov
- UL: www.ul.com

Available For Purchase: PPAI Sourcing And Compliance Manual: www.ppai.org/shop/product-safety

Italic grey text indicates a hyperlink listed in the Online Resources section of this document.

Background

Properly categorizing a consumer product is not always easy, and it is a challenge in the promotional products industry where the end use and end user is not always known at the time of manufacture. Often times, promotional products, which are intended for use by adults and are given out at tradeshow and in workplaces, end up in the hands of children. This does not mean that anything could be a children's product, but it does mean that a determination as to its appeal and foreseeable use by children needs to be considered when manufacturing or distributing a promotional product. While it is the responsibility of the manufacturer, importer, or supplier to ensure compliance of a product, the distributor also needs to ensure that the product complies with appropriate requirements and regulations.

Plush toys are commonly recognized as appropriate for children of all ages. So it's important to keep this in mind. Even if you are distributing the plush "toy" to adults at a trade show, plush is a "toy"—something a child will interact with while at play. It does not matter whether the purchaser intends the product to be given and used only by adults. It is classified by the *Consumer Product Safety Commission (CPSC)* as a "toy" and must meet *appropriate requirements related to toys*. The *Age Determination Guidelines* issued by the CPSC provide instruction and advice on considering appropriate age determinations for products.

Consumer Product Safety Improvement Act (CPSIA)

The *CPSIA* has specific requirements for children's products and all children's products must comply with these. They include lead in paint, lead content in accessible substrate materials,

mandatory third party testing, and a tracking label requirement. If the item is a toy, compliance to *ASTM F963* is required, and there is a ban on phthalates.

A children's toy is defined in the CPSIA as a consumer product designed or intended by the manufacturer for a child 12 years of age or younger for use by the child when the child plays.

The CPSIA includes four factors to consider in determining if an item is a children's product:

1. *A statement by a manufacturer about the intended use of such product, including a label on such product if such statement is reasonable. This often comes in the form of an age grade or age label on the product or packaging.*
2. *Whether the product is represented in its packaging, display, promotion or advertising as appropriate for use by children 12 years of age or younger.*
3. *Whether the product is commonly recognized by consumers as being intended for use by a child 12 years of age or younger.*
4. *The Age Determination Guidelines issued by the Commission staff.*

Third party testing and certification is required for children's toys, children's products and child care articles. A full description of the covered products is included in the CPSC's FAQs. The standard *ASTM F963-11* applies to toys intended for use by children under 14 years of age, however the testing requirements involving third-party labs only pertains to toys intended primarily for children 12 years of age or younger.



Factors to Consider When Dealing With Plush

In the US, while a formal risk assessment of a product design is not mandated, it is no longer sufficient to simply test a final product for compliance and be done with it. The CPSC's reasonable testing program, part of the CPSIA, requires not just a certification test of the final product, but also requires periodic testing and recommends a production testing plan to help ensure continued compliance and sufficient manufacturing quality controls. The manufacturer or importer must also know when and where the product is manufactured and should have detailed product specifications on the item.

Manufacturing Considerations

consumer product For plush items and stuffed toys, it is critical that the manufacturing facility have appropriate controls in place, especially to ensure that sewing needles or broken parts of needles do not end up inside the toy, which present a risk of injury to child. The manufacturing facility should have an appropriate needle control policy in place which requires that needles are assigned and returned each workday. Factory should also have a robust metal detection procedure in place to help detect any metal contamination.

Hazardous Conditions

Hazard prevention begins with identification. Efforts to protect consumers from preventable injuries begins with eliminating hazards through product design, especially for products that children will use. In the compliance world, a voluntary standard should be treated as a mandatory standard. In addition to the various regulations, regulators will also look at industry best practices and voluntary standards when making decisions and handing down judgments. According to the CPSC they expect companies to know, understand, and apply all standards that apply to their products whether mandatory or voluntary. Previously voluntary standards were made mandatory with the passage of CPSIA, including ASTM F963.

Accessible potentially hazardous sharp points

- Products intended for use by children less than 8 years of age are subject to this requirement before and after use and abuse testing.

Accessible potentially hazardous sharp edges

- Products intended for use by children less than 8 years of age are subject to this requirement before and after use and abuse testing.

Common industry practice is to evaluate all consumer products for sharp points and sharp edges to determine if there could be a potential hazard to the consumer, regardless of age.

Small part requirements address the hazards from choking, ingestion, or inhalation to children under 36 months of age that could be created by small parts or objects. No product for children of this age can be small enough without being compressed to fit entirely within a small parts cylinder. This includes removable, liberated components, or fragments of a product. The requirement is applicable, before and after use and abuse testing, to determine the accessibility of small objects or pieces that break off or are removed from the product. For plush items, any hard components such as eyes or nose are critical components that must be securely attached and must not detach during the mechanical safety testing described below.

In addition to the ban on small parts in products for children younger than 3 years, there is a requirement to include a small parts warning statement for products intended for children between the ages of 3 and 6 years should they include any small parts. There are similar requirements for small balls and marbles. Third-party testing is required to determine compliance with all children's product requirements

Mechanical Safety

Mechanical safety testing is conducted on children's products to simulate mechanical damage through dropping, throwing, and other actions likely to be performed by a child, which are characterized as reasonable foreseeable abuse. The severity of the abuse tests are determined according to the age group for which the toy is intended. Some of the most common mechanical tests for plush toys are listed here.

- *Bite test*
- *Impact (drop) test*
- *Torque test*
- *Tension test for seams in plush toys*
- *Tension test*
- *Compression test*
- *Material quality*
- *Cords and elastics*
- *Washable toys*

Chemical Requirements

1. Mandatory Toy Safety Standard

a. **Surface Coatings:** Plush toys fall within the scope of the *ASTM F963-11*, Mandatory Toy Safety Standard, and mandated by Section 106 of the Consumer Product Safety Improvement Act. One of the requirements included in this standard is soluble migrated elements, also known as heavy metals. Surface coatings on toys cannot exceed the allowable limits of antimony, arsenic, barium, cadmium, chromium, lead, mercury and selenium.

i. *If there is less than 10 milligrams of surface coating present on the toy, the surface coating is exempt from soluble heavy metals testing. The CPSIA total lead on the surface coating test would still be required but not the soluble testing.*

b. **Substrates:** In addition to surface coatings on toys, substrates are also within the scope of the soluble migrated elements requirement found in the *ASTM F963-11*. Soluble migrated elements for substrates is applicable to toys intended for children under six years which includes most, if not all, plush toys.

i. *Although some material exemptions exist for total lead content testing under CPSIA for textile materials, the same exemptions do not apply for textile materials from soluble migrated elements for substrates*

Flammability

There are various Flammability tests that could apply to plush toys.

1. **Flammability of solids test for plush stuffed toys:** A flammable solid means a solid substance that when tested, ignites and burns with a self-sustained flame at a rate greater than 0.1 inches per second along its major axis.

- Plush are toys and are tested to **16 CFR 1500.44** which is an open flame/candle test. The acceptable burn rate is less than or equal to 0.1 in/s.
- Fabrics not intended to be removed (such as the T-shirt sewn onto this stuffed bear) are subjected to the test as well, to the extent that it becomes part of the product itself.

2. **Flammability of textile fabrics:** Textile fabrics that are intended to be removed are tested separately and must meet the requirements for flammability of fabrics. A total of five samples should be tested whenever practical and samples are tested in the manner in which they appear on the toy.

- For plain surface fabrics, specimens are acceptable if they did not ignite, ignited but self-extinguished or any combination of the two. Plain surface fabrics refer to any textile fabric which does not have an intentionally raised fiber or yarn surface.
- For raised surface fabrics, specimens are acceptable if they did not ignite, ignited but self-extinguished or any combination of the two. Raised surface refers to any textile fabric which has an intentionally raised fiber or yarn surface such as pile, nap or tufting.

Table 1 to 1610.4 - Summary of Test Criteria for Specimen Classification

Class	Plain surface textile fabric	Raised surface textile fabric
1	Burn time is 3.5 seconds or more ACCEPTABLE (3.5 sec is a pass)	(1) Burn time is greater than 7.0 seconds; or (2) Burn time is 0-7 seconds with no base burns (SFBB). Exhibits rapid surface flash only. ACCEPTABLE.
2	Class 2 is not applicable to plain surface textile fabrics	Burn time is 4-7 seconds (inclusive) with base burn (SFBB). ACCEPTABLE.
3	Burn time is less than 3.5 seconds. NOT ACCEPTABLE	Burn time is less than 4.0 seconds with base burn (SFBB). NOT ACCEPTABLE.

These are the mandatory flammability requirements per 16 CFR 1610. Note that this flammability test also applies to wearing apparel in general. If the item is children's wearing apparel, the testing must be conducted by a 3rd party accredited CPSC listed lab. If it is adult apparel, it can be conducted by any lab or even an in-house lab. In both cases, the importer of record must issue also issue a certification (CPC or GCC).

Performance

Testing is an objective process of verifying that a product performs as labeled according to design, performance, and function - and complies with safety requirements.

1. Per the *ASTM F963-11*, the stuffing material must be evaluated for material cleanliness. Loose fillers (such as the stuffing inside a plush toy) must be free of objectionable matter originating from insect, bird, rodent or other animal infestation and of contaminants such as splinters and metal chips.
 2. Colorfastness is a common test done on plush toys.
 - a. A colorfastness to crocking test is used to determine the amount of color that may be transferred from a sample fabric to another fabric by rubbing. The *colorfastness to crocking test (AATCC 8-2001)* is a performance test method of the *American Association of Textile Chemists and Colorists*, not required by law, yet recommended for most fabrics. Any fabric that may come in contact with another should be tested. It is particularly important to test dark colors and pigment prints in order to prevent problems such as the red t-shirt on a plush bear rubbing off on a consumer's white sweater or staining the plush bear.
 - b. Colorfastness to water is another performance test found on most standard testing protocols for plush toys. The test is used to determine if a dyed fabric, when exposed to water, will leave a water stain or lose color. The test will identify items that are vulnerable to water.
 - c. Colorfastness to saliva is appropriate for plush toys as they are often given to young children who mouth everything. This test is used to determine the fastness of colored textiles to the effects of simulated saliva.
- **Producer Marking Requirement:** A requirement for toys under *ASTM F963* pertains to toys, including plush. It states that toys and their packaging must be legibly and conspicuously marked with the name and address of the producer or distributor.
 - **Age Grading:** Stuffed plush toys are commonly recognized as appropriate for young children and therefore must be tested for the *safety of all ages*, regardless of the age grading found on the packaging or the method of distribution.
 - **California Prop 65:** Applies to all consumer products, including toys and children's products. Prop 65 requires businesses to notify Californians via warning labels about significant amounts of chemicals – specified in a list of more than 900, such as lead and cadmium—contained in a company's products. It is important to note that many of the compounds identified on the Prop 65 list are permissible under federal regulations.
 - According to the State of California, you must provide a warning that appears on a product's label or other labeling should any of the listed chemicals be present. The term "label" means a display of written, printed or graphic matter upon a product or its immediate container. The term "labeling" means any label or other written, printed or graphic matter affixed to or accompanying a product or its container or wrapper. You should consult legal counsel for specific guidance.
 - Since it is not practical to test every product for every chemical, we recommend that importers confirm with their manufacturers or suppliers to ensure that none of the chemicals have been intentionally added to their product if labeling is not desired. Refer to *PPAI's Prop 65 Best Practice* for more information.
 - **Illinois Lead Poisoning Prevention Act:** This is essentially a *labeling law* that requires a warning statement should the specified limits not be met. The law applies a limit of 40 ppm lead in the **surface coatings used on toys, children's jewelry, and child care articles**. It also applies the 40 ppm limit to the **substrate materials of children's jewelry and childcare articles**. In addition, if the surface coating or substrate material of adult items exceeds 600 ppm the warning label is required.

Labeling

There are numerous specific labeling requirements for plush toys Consumer Packaging and Labeling Act Requirements:

- **Country of Origin:** This marking applies to most consumer products, including plush toys. Articles of foreign origin (or their container) imported into the United States must be marked with the name of the country of origin. For example, Made in China, would satisfy the country of origin marking requirement for a plush toy manufactured in China.
- **The CPSIA Tracking Label Requirement:** This mandatory requirement requires manufacturers to have a tracking label or other distinguishing permanent mark on all children's products whether produced domestically or imported.
 - For a plush toy, including the tracking label information as a code on the sewn-in label is one way to meet this requirement. For more information regarding tracking labels please refer to our tracking labels best practice.

- “WARNING: CONTAINS LEAD. MAY BE HARMFUL IF EATEN OR CHEWED. COMPLIES WITH FEDERAL STANDARDS.”

- With regard to plush toys specifically, if the toy contains more than 40 ppm lead but less than 100 ppm lead (which is the Federal limit), you must use the warning label. Regarding toys and other children’s products, test labs have seen a trend in products either containing very high levels of lead or very low levels of lead during testing. Rarely is lead found in the middle range; therefore, it would be unlikely that you would see this warning on a toy or children’s product.

State Stuffed Toy Registration Labeling Laws

Pennsylvania, Massachusetts and Ohio have specific laws related to stuffed toys. Stuffed toys and dolls sold in these states must conform to licensing and labeling laws. Manufacturers have to register in each state, and each state has its own registration fee. Manufacturers must submit detailed information about the filler content of their toys, and specimens of each toy need to be provided to the state for evaluation. It is possible for manufacturers to utilize a uniform stuffed-toy label which is good in all three states that require the licensing of stuffed toy manufacturers and the labeling of stuffed toys. There is no color, size, or type requirement for the uniform label, but the print must be legible and affixed to the toy itself.

The uniform label must contain the Pennsylvania license number of the manufacturer or vendor. Massachusetts and Ohio will accept the use of a Pennsylvania registration number, as long as the number is registered within these states and their fees are paid. The name and principal place of business (including city and state) of the manufacturer or vendor is required and a statement that “all new materials” with the type of material or “all new (type) material” was used in the manufacture of the stuffed toy. If the toy contains wire, plastic, wood, cardboard or any other type of stiffeners, they must also be listed on the label.

1. **Pennsylvania** requires an initial registration fee of \$25 and an additional \$25 annually. Note that this fee may be changed at any time. Manufacturers must submit detailed information as to the filler content of their stuffed toys and specimens of the toys selected at random to Pennsylvania’s licensing authorities. Labs can perform testing to verify if stuffing meets the regulation prior to submitting samples to Pennsylvania for approval.

Pennsylvania has an additional flammability requirement for the fabric that covers the outside of the plush toy which is required to obtain the Pennsylvania registration and is usually done in pre-production stage.

The regulation also provides that stuffed toys are “unfit for sale” if they contain any of the materials or chemicals or violate specific requirements as listed here.

- Material of sufficient size to visibly reveal a pattern, weave, or other mechanical unification of threads to indicate prior use of a previous manufacturing process
- Dirt and/or other foreign matter in excess of 1% by weight
- More than 1% oil or grease
- More than 0.002% lead
- More than 0.0002% arsenic
- More than 5% ammonia
- More than 1% urea
- Plastic or metal ornaments (such as eyes or noses) not of a safe design or not attached to the stuffed toys in such manner to prevent removal
- Stones or other hard materials having jagged or sharp edges
- Material bearing electrostatic charge with adherence characteristics which when exposed could lodge in the windpipe, ears or nostrils
- Filling material which surface burns at a rate of less than three seconds for 12 square inches

2. **Massachusetts** will accept the use of the Pennsylvania registration number with a required initial registration fee of \$300 and \$300 annual renewal fee. Note that this fee may change at any time. Labeling is the same as Pennsylvania and so the uniform label is acceptable.

3. **Ohio** will also accept Pennsylvania’s registration number. However, their fee schedule is a bit more complicated. The regulations of the Division of Bedding and Upholstered Furniture of the Ohio Department of Industrial Relations require that manufacturers of stuffed toys pay an annual fee of \$50 and file quarterly reports accompanied by a tax of four cents per item sold in the State of Ohio in the preceding quarter.

4. **Battery Operated Plush: ASTM F963-11** toy safety standard has additional safety, labeling and instructional requirements for battery operated toys.

- Battery compartments must be permanently labeled to show the correct battery orientation, polarity and size of battery.
- Batteries must comply with the mercury content requirement per various state legislation and United States public law.
- Novelty products or products designed for children must have less than 5 milligrams per cell.

Additional concerns such as proper battery insulation and replacement should be considered. If the unit generates more than 1.705 MHz and is not exempt, it may be subject to the requirements of Federal Communications Commission (FCC) regulations. Finally, sound producing plush toys shall not exceed specified sound pressure level limits for individual categories of such toys prescribed by the *ASTM F963-11*.

Online Resources:

PPAI Best Practice - Determining Children's Products: <http://www.ppai.org/inside-ppai/corporate-responsibility/product-responsibility/Documents/PR-BP-Determining-Childrens-Products.pdf>

Illinois Lead Poisoning Prevention Act: <http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1523&ChapterID=35>

CPSC Age Determination Guidelines: <http://www.cpsc.gov/PageFiles/113962/adg.pdf>

CPSC Third-Party Accepted Labs: <http://www.cpsc.gov/cgi-bin/labsearch/>

CPSIA GAQs: <http://www.cpsc.gov/cgi-bin/labsearch/>

ASTM F963: <http://www.astm.org/toys.html>

ASTM F963-11: <http://www.cpsc.gov/en/Business--Manufacturing/Business-Education/Toy-Safety/ASTM-F-963-11-Chart/>

Stuffed Toy Registration Laws:

- <http://www.portal.state.pa.us/portal/server.pt?open=514&objID=552994&mode=2>
- https://www.comapps.ohio.gov/dic/dico_apps/bedd/LicenseLookup/
- <http://www.mass.gov/eohhs/docs/dph/environmental/foodsafety/toy-app.pdf>

Colorfastness to Crocking Test AATCC 8-2001: <http://www.aatcc.org/test/methods/>

Association of Textile, Apparel & Materials Professionals: <http://www.aatcc.org/>

16 CFR 1500.44: <https://www.gpo.gov/fdsys/pkg/CFR-2003-title16-vol2/pdf/CFR-2003-title16-vol2-sec1500-44.pdf>

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