

UL Standard Product Requirement

Protocol ID: 8887 Approved by: Lardner-Stone, Anne Approved Date: May 31, 2013 Modified Date: Jun 04, 2014

small parts cylinder, before and after use and abuse testing,

Category:	All Ages
Item:	Toy: All Ages
Country:	UNITED STATES
Sample Requirements:	12

Base Test Package

Hazardous Condition

	Year: 2011 Citation: CPSIA Public Law 110-314		Toys and games intended for use by children who are at least three (3) years of age but less than six (6) years of age that contain as-received small parts shall bear a prescribed safety alert symbol on the principal display panel of the package followed by this cautionary statement: "WARNING: CHOKING HAZARDSmall parts. Not for children under 3 yrs." Toys and games intended for use by children who are at least three (3) years of age but less than six (6) years of age that produce or liberate small parts as a result of use and abuse testing are not required to bear the safety alert symbol or cautionary statement but the presence of the small parts shall be noted and reported. There is no prohibition of small parts in products intended for children who are at least six (6) years of age. While fabric is technically exempt from the small parts regulation, 16 CFR 1501, there have been CPSC recalls of children's product due to fabric small part detachments.
			Mechanical
Test Property	Test Method/Citation	No. Of Samples	Product Requirement
Bite Test: All Ages	16 CFR 1500.52 & 16 CFR 1500.53 (Modified) Citation: Federal Hazardous Substances Act		Modification: All hazardous conditions resulting from the bite test shall be rated as a failure. No potentially hazardous conditions (sharp points, sharp edges, or small parts) shall be detected.
Compression Test	16 CFR 1500.51-53 & ASTM F963, Sec. 8.10 Year: 2011 Citation: CPSIA Public Law 110-314		No hazards shall result when the sample is subjected to the applicable compression force as determined by age grade. 0-18 months: 20 lbf for 10 seconds Over 18 months-36 months: 25 lbf for 10 seconds Over 36 months- 96 months: 30 lbf for 10 seconds All Ages: 30 lbf for 10 seconds
Impact Test	16 CFR 1500.51-53 & ASTM F963, Sec. 8.7.1 Year: 2011 Citation: CPSIA Public Law 110-314		No hazards shall result when the sample is subjected to the applicable impact as determined by age grade. 0-18 months: 10 times at 4.5 feet Over 18 months-36 months: 4 times at 3 feet Over 36 months- 96 months: 4 times at 3 feet All Ages: 10 times at 4.5 feet
Material Quality	ASTM F963, Sec. 4.1 & 4.3.1 (Modified)		Modification: UL is unable to confirm if reprocessed materials are used. The manufacturer is responsible for conformance of such materials to the Federal Hazardous Substances Act. Toys may be made from new or reprocessed materials and shall be visually clean and free from infestation.

- cst - 1 sperty	Method/Citation	Samples	
Test Property	Test	No. Of	
			Chemical/Analytical
	Public Law 110-314		All Ages: 4 in-lbs for 10 seconds
	Citation: CPSIA		Over 36 months- 96 months: 4 in-lbs for 10 seconds
	Year: 2011		Over 18 months-36 months: 3 in-lbs for 10 seconds
	8.8		0-18 months: 2 in-lbs for 10 seconds
Torque Test	& ASTM F963, Sec.		by age grade.
Torque Test	16 CFR 1500.51-53		No hazards shall result when the sample is subjected to the applicable torque force as determine
	Citation: CPSIA Public Law 110-314		Over 36 months-96 months: 15 lbs for 10 seconds All Ages: 15 lbs for 10 seconds
	Year: 2011		Over 18 months-36 months: 15 lbs for 10 seconds
	8.9		0-18 months: 10 lbs for 10 seconds
	& ASTM F963, Sec.		by age grade.
Tension Test	16 CFR 1500.51-53		No hazards shall result when the sample is subjected to the applicable tension force as determin
	Public Law 110-314		
	Citation: CPSIA		
	Year: 2011		

		AS	< or = 200 μg
- wretaiiic	4.3.5.2 & 8.3.5.5(3)	Required	
Toys	& CPSC-CH-E1004-		
	11 Year: 2011		
	Citation: CPSIA		
	Public Law 110-314		
Soluble Migrated	ASTM F963, Sec.	As	All substrates shall meet the following:
Elements: Substrate	4.3.5.2 & 8.3		Soluble Antimony: < or = 60 ppm;
Diements. Substrate	Year: 2011	recquirea	Soluble Arsenic: < or = 25 ppm;
	Citation: CPSIA		Soluble Barium: < or = 1,000 ppm;
	Public Law 110-314		Soluble Cadmium: < or = 75 ppm;
			Soluble Chromium: < or = 60 ppm;
			Soluble Lead: < or = 90 ppm;
			Soluble Mercury: < or = 60 ppm;
			Soluble Selenium: < or = 500 ppm
Soluble Migrated Elements: Surface	ASTM F963, Sec. 4.3.5.1 & 8.3	As	All surface coatings shall meet the following: Soluble Antimony: < or = 60 ppm;
Coating	Year: 2011	Required	Soluble Arithmony. $<$ or $=$ 00 ppm; Soluble Arsenic: $<$ or $=$ 25 ppm;
Couning	Citation: CPSIA		Soluble Barium: < or = 1,000 ppm;
	Public Law 110-314		Soluble Cadmium: < or = 75 ppm;
			Soluble Chromium: < or = 60 ppm;
			Soluble Lead: < or = 90 ppm;
			Soluble Mercury: < or = 60 ppm;
			Soluble Selenium: < or = 500 ppm
Total Lead	CPSC-CH-E1003-		< or = 90 ppm lead content for the following:
Containing Paint/Surface	09.1 Year: 2011		Wet paint and/or other similar surface coating materials; Toward Children's materials.
Coating	Citation: 16 CFR		2) Toys and Children's products that bear paint and/or similar surface coating materials; 3) Furniture that bears paint and/or similar surface coating materials.
Coating	1303 & 16 CFR	liquid	NOTES:
	1109.21	riquiu	1) A maximum of 3 materials or composites and only "like" materials can be composited.
			2) Individual States may have additional requirements regarding the presence of lead in consumer
			products; this section relates only to the U.S. Federal Regulation 16 CFR1303, and is not intended
			to represent compliance with any individual State regulation.
Total Lead in All	TP0072, TP0165,	1	A warning statement is required for the following:
Products: Illinois	TP0166, TP0167		1) Toys containing paint if lead content in their surface coatings is >40 ppm and < or = 90 ppm; 2)
Lead Poisoning Prevention Act	Revision: Current Citation: 410 ILCS		Children's Jewelry if lead content in their surface coatings is >40 ppm and < or = 90 ppm or in their
rievention Act	Challon: 410 ILCS		substrates is >40 ppm and < or = 100 ppm; 3) Child Care Articles if lead content in their surface

Toxics in Packaging	TP0072, TP0165, TP0166, TP0167, CTN 2915 Year: 2008 Revision: Current Citation: State Legislation	1	coatings is >40 ppm and < or = 90 ppm or in their substrates is >40 ppm but < or = 100 ppm; and 4) Other Lead Bearing Substances (including Adult items) if lead content in their surface coatings or substrates is >600 ppm. Modification: Composite testing is performed. The sum of the concentrations of lead, mercury, cadmium and hexavalent chromium that can be found in any package or packaging components, including inks or labels: < or = 100 ppm (0.01%). For recycled materials, the sum of the concentrations of lead, mercury, cadmium and hexavalent chromium that can be found in any package or packaging components, including inks or labels, shall not exceed 200 ppm (0.02%).
	(Modified)		Flammability
	_		Fiammadinty
Test Property	Test	No. Of	Product Requirement
restrioperty	Method/Citation	Samples	1 Todact Requirement
Flammability of	16 CFR 1500.44 &	4,	Determination of whether an item is a flammable solid is based upon the acceptance/rejection
Solids: Toys	ASTM F963 (2011),	Whenever	criteria of the referenced standard.
	Sec. 4.2 & Annex A5	Practical	

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of the country of origin of the article, at the time of importation into the Customs territory of the United States. Containers of articles excepted from marking shall be marked with the name of the country of origin of the article unless the container is also excepted from marking. Visual Inspection Product and its packaging shall bear permanent distinguishing marks as required and to the extent CPSIA Tracking §2063(a)(5) (CPSA) Visual Inspection Warranties are not required. However, if a warranty is included with the product, the warranty must Magnuson-Moss Citation: 16 CFR 701 be in writing and must contain all of the information prescribed by the Act. Warranty Act Plastic Bag Visual Inspection If bag thickness is 1 mil or greater, report as PASS. Suffocation Warning If bag thickness is <1 mil, in order to establish compliance (pass/fail), the bag's dimensions need to Business & be considered in conjunction with the labeling specifications of the individual jurisdictions as Professions Code, Sec. 22200-22205, CALIFORNIA - You must label if: 1) Thickness is an average less than one mil, and 2) Size of opening is larger than 25 square inches or a capacity of more than 125 cubic inches. Municipal Code C.7-CHICAGO, IL - requirement is for polyethylene bag, other than one used for food products 28-050, MA 105 weighing not more than five pounds, intended for household. MASSACHUSETTS & NEW YORK CMR 630.000, 10 - You must label if: 1) Thickness is less than one mil, and 2) Size of opening has a diameter of NY ADC 12.12. RI seven inches or more, and 3) Length and width when added together totals 25 inches or more. Code 11-9-16 & VA RHODE ISLAND - You must label if: 1) Thickness is less than one mil, and 2) Size of opening is Code 18.2-320 larger than five inches in diameter. VIRGINIA - You must label dry cleaning bags if: 1) Thickness is less than one mil, and 2) Length totals twenty-five inches or more. CALIFORNIA & RHODE ISLAND - Total length and width of: <30 inches = 10 point type minimum = or > 30 inches and < 40 inches = 14 point type minimum = or > 40 inches and < 60 inches = 18 point type minimum = or > 60 inches = 24 point type minimum. MASSACHUSETTS - Total length and width of: = or > 25 linches and < 40 inches = 14 point type minimum = or > 40 inches and < 60 inches = 18 point type minimum = or > 60 inches = 24 point type minimum. Label shall appear on both sides of bag. If total length and total width is more than 40 inches (when added), label shall be repeated at 20 inch intervals. NEW YORK - Total length and width of: = or > 25 inches and < 30 inches = 10 point type minimum = or > 30 inches and < 40 inches = 14 point type minimum = or > 40 inches and < 60 inches = 18 point type minimum = or > 60 inches = 24 point type minimum. VIRGINIA - 36 point type minimum. Plastic bags in California, Massachusetts, New York, Rhode Island, and Virginia require the following warning: "WARNING: To avoid danger of suffocation, keep this plastic bag away from babies and children. Do not use this bag in cribs, beds, carriages or play pens. This bag is not a toy." If the warning is required based on thickness and opening size, but not present, then the test shall be

		reported as fail. If a warning is present, report the warning listed on the bag.
Producer Markings: Toys	ASTM F963, Sec. 7.1 Year: 2011 Citation: CPSIA Public Law 110-314	A toy's principal component or its packaging shall be legibly and conspicuously marked with the name and address of the producer or distributor.

Additional Testing as Required

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	Hazardous Conditions Safety Test Before and After Use & Abuse Testing				
Test Property	Test	No. Of	Product Requirement		
restrioperty	Method/Citation	Samples	1 route requirement		
Flexure Test: >18	16 CFR 1500.52 (d)	All	Modification: This test is intended for metal wires and rods, but other stiffening materials will be		
Months-96 Months	& ASTM F963, Sec.		tested. For materials other than metal, this test is reported for reference only, the result is not rated.		
	4.10 & 8.12		Wires or rods used as flexible skeletons in the interior of a toy shall comply with Section 4.10 and		
	(Modified)		shall not fracture to produce hazardous sharp points, edges or projection		
	Year: 2011		with Section 8.12.		
	Citation: CPSIA				
	Dublic				

Months	4.35 & 8.16 Year: 2011 Citation: CPSIA Public Law 110-314		Pompoms which detach during torque and tension tests must not pass entirely through the 1.75 inch (44.5 mm.) small balls test fixture under their own weight. Any components, pieces, or individual strands of the pompom that are liberated during the torque and tension tests shall not be subject to this requirement. Test the pompoms by putting the free ends of fiber into the gauge. A force of 15 lbf (67 N) shall be applied evenly within 5 seconds and maintained for additional 10 seconds.
			Mechanical
Test Property	Test Method/Citation	No. Of Samples	Product Requirement
Cords, Elastics & Straps: Breakaway	ASTM F963, Sec. 8.22.3 Year: 2011 Citation: CPSIA Public Law 110-314	All	If cords, straps, or elastics have loops that admit the base of the head probe, breakaway feature is required. Breakaway feature shall have a release force of less than 5.0 lbf (22.2 N).
Cords, Straps & Elastics	ASTM F963, Sec. 4.14 & 8.22 Year: 2011 Citation: CPSIA Public Law 110-314	All	Cords, straps and elastics on toys shall meet requirements for length, loop configuration and breakaway, retraction and attachment features, as applicable, before and after use and abuse testing, as outlined in the referenced standard.
Hinge-Line Clearance	ASTM F963, Sec. 4.13.2 Year: 2011 Citation: CPSIA Public Law 110-314	1	Applicable toys shall be constructed such that an accessible gap at the hinge line that will admit a 0.19 inch (5 mm) diameter rod will also admit a 0.5 inch (13 mm) diameter rod at all positions of the hinge.
Jaw Entrapment in Handles & Steering Wheels: 0-18 Months	ASTM F963, Sec. 4.39 Year: 2011 Citation: CPSIA Public Law 110-314	All	Openings in handles and steering wheels shall meet prescribed passage requirements, if applicable.
Nails & Fasteners	ASTM F963, Sec. 4.11 & 4.17 Year: 2011 Citation: CPSIA Public Law 110-314	1	Nails and fasteners shall not present point, edge, ingestion or projection hazards, and their points shall not protrude making them accessible.
Plastic Film	ASTM F963, Sec. 4.12 & 8.21		Flexible plastic film bags and sheets shall meet thickness or perforation requirements. NOTE: Results of this test for items which are dimensionally exempt are reported for informational

	Year: 2011		purposes only.
	Citation: CPSIA		
	Public Law 110-314		
Sound-Producing	16 CFR 1500.47, 16	1	Sound-emitting toys shall not exceed specified sound pressure level limits for individual categories
Toys	CFR 1500.86 &		of such toys.
	ASTM F963, Sec.		
	4.5, 8.5-8.10, & 8.19		
	Year: 2011		
	Citation: CPSIA		
	Public Law 110-314		
Washable Toys	ASTM F963, Sec.	1	No hazardous conditions shall result when the sample is subjected to six machine wash and tumble
	8.5.1		dry cycles, in accordance with the referenced standard.
	Year: 2011		
	Citation: CPSIA		
	Public Law 110-314		
Yo Yo Elastic Tether	ASTM F963, Sec.	All	Yo yo elastic tether toys are intended for children 36 months and over. Toys with an end mass
Toys	4.37 & 8.23		greater than 0.02 kg (0.044 lb) shall have a tether length less than 50 cm (20 in the length less than 50 cm
	Year: 2011		when the toy is rotating at any speed up to
	Citation: CPSIA		NOTE: C.
	Public Low 110		

Side	8.12 Year: 2011 Citation: CPSIA Public Law 110-314		Sections 4.25 and 6.5 under conditions of normal use and reasonably foreseeable abuse testing. Toys containing non-replaceable batteries shall be labeled in accordance with Section 5.15.
			Chemical/Analytical
Test Property	Test Method/Citation	No. Of Samples	Product Requirement
Mercury Content in Batteries	Acid Digestion followed by Instrumental Analysis Citation: United States Public Law 104-142, 110 Stat. 1329 & State Legislation	1	Novelty item or item that is designed for children: <5 mg per cell. Non-novelty item: <25 mg per cell.
			Labeling
Test Property	Test Method/Citation	No. Of Samples	Product Requirement
FCC Part 15 & FCC Part 18 Requirements	Written Confirmation Citation: 47 CFR 15.19, 47 CFR 15.103 & 47 CFR 18		1) For 47 CFR Part 15 devices in which the highest frequency generated and the highest frequency used are greater than 1.705MHz shall submit objective evidence in the form of the following: a) FCC Declaration of Conformity mark or FCC ID on the product for CB receiver, Superregenerative receiver, TV interface device, Cable system terminal device, Class B personal computers and peripherals, CPU boards and internal power supplies used with Class B personal computers, or Class B personal computers assembled using authorized CPU boards or power supplies. The DoC label must be designed to last the expected lifetime of the equipment in the environment in which the equipment may be operated and must not be readily detachable. If the FCC ID is applied then the FCC ID number shall be verified at http://transition.fcc.gov/oet/ea/fccid/. b) User manual with a statement that provides a caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. c) Devices which contain intentional transmitters (BT, WiFi, remote controls, etc.) shall have the FCC ID number affixed. The FCC ID number shall be verified at http://transition.fcc.gov/oet/ea/fccid/.

d) All devices shall contain on a label a statement, as applicable, from FCC Part 15.19 (note if the device is smaller than the palm of the hand, this statement may be in the manual).
NOTE: Devices that digital devices in which both the highest frequency generated and the highest frequency used are less than 1.705 MHz and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines are exempt for the technical requirements for CFR47 Part 15.

2) For 47 CFR Part 18 devices that operate at or above 9kHz and are designed to generate and use locally RF energy for industrial, scientific, medical, domestic or similar purposes, excluding applications in the field of telecommunication shall submit objective evidence in the form of the following:

a) Consumer ISM equipment shall be marked with the FCC Declaration of Conformity mark or FCC ID. The DoC label must be designed to last the expected lifetime of the equipment in the environment in which the equipment may be operated and must not be readily detachable. If the FCC ID is affixed to the label then the FCC ID number shall be verified at http://transition.fcc.gov/oet/ea/fccid/.

b) Equipment authorized under the Declaration of Conformity shall include the following compliance information (Note: The compliance information as separate characteristic compliance information).

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Stuffed Plush Toy: Additional Testing as Required

			Mechanical
Test Property	Test Method/Citation	No. Of Samples	Product Requirement
Impact Test: All Ages, Plush	16 CFR 1500.51 & ASTM F963, Sec. 8.7.1 Year: 2011 Citation: CPSIA Public Law 110-314	Subset	No potentially hazardous conditions (sharp points, sharp edges or small parts) shall result when the sample is dropped 10 times from a height of 4.5 feet \pm 0.5 inch (1.37 m) onto a type IV vinyl tile-covered concrete floor.
Tension Test for Seams in Plush Stuffed Toys & Beanbag-Type Toys	16 CFR 1500.52 & ASTM F963, Sec. 4.27 & 8.9.1 Year: 2011 Citation: CPSIA Public Law 110-314	All	The seams of a stuffed toy or beanbag constructed of pliable materials shall withstand 15 ± 0.5 lbf (66.8 N) applied in any direction within 5 seconds and maintained for an additional 10 seconds.
Tension Test: All Ages, Plush	16 CFR 1500.52 & 16 CFR1500.53 & ASTM F963, Sec. 8.9 Year: 2011 Citation: CPSIA Public Law 110-314	Subset	No potentially hazardous conditions (sharp points, sharp edges or small parts) shall result when a tension load of 15 ± 0.5 lbf (66.8 N) is applied for ten seconds in both parallel and perpendicular directions.
Torque Test: All Ages, Plush	16 CFR 1500.53 & ASTM F963, Sec. 8.8 Year: 2011 Citation: CPSIA Public Law 110-314	Subset	No potentially hazardous conditions (sharp points, sharp edges or small parts) shall result when a torque of 4 +/- 0.2 inch-lbf (0.45 N-m) for ten seconds or 180 degrees in each direction.
			Chemical/Analytical
Test Property	Test Method/Citation	No. Of Samples	Product Requirement
Material Cleanliness	ASTM F963, Sec.	1	Loose fillers shall be free of objectionable matter originating from insect, bird, rodent, or other

	4.3.7 & AOAC 16.1.02 Year: 2011 Citation: CPSIA Public Law 110-314		animal infestation and of contaminants, such as splinters and metal chips to the extent possible in good manufacturing practice. NOTE: This test is subcontracted.			
Pennsylvania: Plush Stuffed Toy	ASTM F963, Sec. 4.3.7 Year: 2011 Citation: Title 34 Pennsylvania Code, Chapter 47, Sec. 47.317	All	Toys must meet Pennsylvania safety and cleanliness requirements in order to be declared fit for sale, gift or use in the Commonwealth of Pennsylvania.			
	Flammability					
Test Property	Test Method/Citation	No. Of Samples	Product Requirement			
Flammability of Solids: Plush Stuffed Toys	16 CFR 1500.44 & ASTM F963, Sec. 4.2 & Annexes A5 &	Whenever	Determination of whether an item is a flammable solid is based upon the criteria of the referenced standard			

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attroperty	Method/Citation	No. Of Samples	Product Requirement
Age Grading: Toys	ASTM F963, Sec. 5.2 & Annex A1 Year: 2011 Citation: CPSIA Public Law 110-314		A toy or its retail packaging should be clearly, conspicuously and appropriately labeled to indicate the minimum age for its intended use. In the absence of such a label, UL shall evaluate the toy for age grading and shall subject it to the most stringent applicable requirements.
Uniform Law Label: Toys	Visual Inspection Citation: Title 34 Pa. Code, Sec. 47.311, 47.316 & Ohio Revised Code Chap. 3713.08 & Administrative Code 4101:6-1-05(B) & 105 CMR 620.000		Label shall contain all of the prescribed information and shall be securely affixed to the article in a location which is clearly visible to the consumer.

Fabric: Additional Testing as Required

Fabric: Additional Testing as Required					
Colorfastness					
Test Property	Test Method/Citation	No. Of Samples	Product Requirement		
Colorfastness to Water	AATCC 107 Year: 2013		Color Change: Grade 4.0 Minimum Staining: Grade 3.0 Minimum Self-Staining: Grade 4.5 Minimum		
Colorfastness: Saliva	DIN 53160-1 Year: 2010		Shall meet the criteria as specified. Note: Sample shall not show a noticeable color transfer and exhibit a minimum color change of Class 4.0 and a minimum staining of Class 3.0.		

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