

**TOYS - BATTERY OPERATED TOYS**

TEST DESCRIPTION	REGULATION/TEST METHOD	REQUIREMENTS																																						
<b>MANDATORY</b>																																								
Label Verification	F.P. & L. Act (16 CFR 500) OR NIST Uniform Laws and Regulations Handbook 130	Manufacturer, packer, or distributor's name & address (city, state & zip)																																						
		Product Identification																																						
		Net quantity of contents shall be expressed in terms of weight or mass, measure, numerical count, or combination so as to give accurate information to facilitate consumer comparison (U.S. and metric units).																																						
Tracking labels for children's products	Consumer Product Safety Improvement Act of 2008	A permanent and distinguishing mark on the product and its packaging, to the extent practicable, enabling the manufacturer and purchaser to ascertain the name of the manufacturer or private labeler, location and date of production of the product.																																						
Country of Origin Marking	19 CFR 134.11	Shall indicate country of origin legibly, permanently, and incomparable size and close proximity to any mention of country other than country in which the article was manufactured or produced. Must be visible at point of purchase.																																						
Age Grading	ASTM F963-current version	<ul style="list-style-type: none"> <li>The toy shall be labelled to indicate the minimum age for intended use, or have such labelling on any retail packaging.</li> <li>For certain toys, such as costumes and riding toys, it may also be appropriate to label in terms of height or weight limitations.</li> </ul>																																						
Total Lead Content of Paints or Similar Surface Coating	16 CFR 1303	≤90ppm																																						
Illinois lead content in surface coatings	Illinois Lead Poisoning Prevention Act	≤40ppm																																						
Total Lead Content of Accessible Component Part	CPSIA of 2008 Section 101	≤100 ppm																																						
Soluble Heavy Metals Content	ASTM F963-current version	Antimony (Sb) 60, Arsenic (As) 25, Barium (Ba) 1000, Cadmium (Cd) 75, Chromium (Cr) 60, Lead (Pb) 90, Mercury (Hg) 60, Selenium (Se) 500																																						
Mechanical hazard - abuse testing - for toys for children up to 96 months	ASTM F963-current version  16 CFR 1500.50-53)	Report Components Tested. Report component breakage or failure. Requirement: No sharp edges /sharp points and small part.																																						
		<table border="1"> <thead> <tr> <th>Test</th> <th>Age (months)</th> <th>Force</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Drop test</td> <td>0-18</td> <td>10 × 4.5 ft ± 0.5 in.</td> </tr> <tr> <td>Over 18 - 36</td> <td>4 × 3.0 ft ± 0.5 in.</td> </tr> <tr> <td>Over 36 - 96</td> <td>4 × 3.0 ft ± 0.5 in.</td> </tr> <tr> <td rowspan="3">Torque test</td> <td>0-18</td> <td>2 ± 0.2 in.lbf</td> </tr> <tr> <td>Over 18 - 36</td> <td>3 ± 0.2 in.lbf</td> </tr> <tr> <td>Over 36 - 96</td> <td>4 ± 0.2 in.lbf</td> </tr> <tr> <td rowspan="3">Tension Test</td> <td>0-18</td> <td>10 ± 0.5 lbf</td> </tr> <tr> <td>Over 18 - 36</td> <td>15 ± 0.5 lbf</td> </tr> <tr> <td>Over 36 - 96</td> <td>15 ± 0.5 lbf</td> </tr> <tr> <td rowspan="3">Compression test</td> <td>0-18</td> <td>20 ± 0.5 lbf</td> </tr> <tr> <td>Over 18 - 36</td> <td>25 ± 0.5 lbf</td> </tr> <tr> <td>Over 36 - 96</td> <td>30 ± 0.5 lbf</td> </tr> <tr> <td rowspan="3">Flexure test</td> <td>0-18</td> <td>10 ± 0.5 lbf</td> </tr> <tr> <td>Over 18 - 36</td> <td>15 ± 0.5 lbf</td> </tr> <tr> <td>Over 36 - 96</td> <td>15 ± 0.5 lbf</td> </tr> </tbody> </table>	Test	Age (months)	Force	Drop test	0-18	10 × 4.5 ft ± 0.5 in.	Over 18 - 36	4 × 3.0 ft ± 0.5 in.	Over 36 - 96	4 × 3.0 ft ± 0.5 in.	Torque test	0-18	2 ± 0.2 in.lbf	Over 18 - 36	3 ± 0.2 in.lbf	Over 36 - 96	4 ± 0.2 in.lbf	Tension Test	0-18	10 ± 0.5 lbf	Over 18 - 36	15 ± 0.5 lbf	Over 36 - 96	15 ± 0.5 lbf	Compression test	0-18	20 ± 0.5 lbf	Over 18 - 36	25 ± 0.5 lbf	Over 36 - 96	30 ± 0.5 lbf	Flexure test	0-18	10 ± 0.5 lbf	Over 18 - 36	15 ± 0.5 lbf	Over 36 - 96	15 ± 0.5 lbf
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Phthalates	CPSIA sect. 108 Test method: CPSC-CH-C1001-09.3	<b>8 Phthalates</b> DEHP, DBP, BBP, DINP, DIBP, DPENP, DHEXP, DCHP Each ≤ 0.1% <b>Exempted Plastics:</b> - Polypropylene (PP) - Polyethylene (PE) - Acrylonitrile Butadiene Styrene (ABS) - High impact polystyrene (HIPS) - Crystal and general-purpose polystyrene - Medium-impact polystyrene (MIPS) - Super-high-impact polystyrene (SHIPS)														
Small Parts	16 CFR 1501	Toys intended for children under 36 months (3 years) of age shall not include removable, liberated components, or fragments of toys before or after use and abuse														
Accessible Sharp Points / Sharp Edges	16 CFR 1500.48/49	Shall not contain any hazardous sharp edges before and after use and abuse tests, if intended for children under 8 years of age.														
California Prop 65	Warning label or applicable testing	In lieu of warning label, product should meet all applicable Prop 65 requirements.														
Flammability	ASTM F963-current ver. 16 CFR 1500.44	Less Than 0.1"/Sec.														
Mercury Content in Batteries	Battery Act, US Public Law 104-142	Alkaline-manganese batteries, alkaline-manganese button cell batteries, zinc-carbon batteries, mercuric-oxide button cell batteries shall conform to respective requirements.														
Labeling for Battery-Operated Toys	ASTM F963-current version	- Toys with non-replaceable batteries that are accessible with the use of coin, screwdriver or other common household tool shall bear a statement that the battery is not replaceable. - If it is impractical to label the product, this information shall be placed on the packaging or in the instruction.														
Lithium metal batteries and Lithium-ion batteries	UN Manual of Tests and Criteria, Sixth Revised Edition, Amend 1, Part III, sub-section 38.3	Comply with the regulation. Battery test report should be available on request.														
<b>MANDATORY STATES REGULATIONS</b>																
Total heavy metals in packaging	Toxics in Packaging Clearinghouse (TPCH)	Packaging shall not contain the sum of mercury, cadmium, lead and chromium (VI) in concentration above 0.01% by weight.														
Plastic Bag Warnings	Various state laws	Plastic bags with a thickness of less than 1 mil (0.001 inch) having an opened end larger than 5 inches in diameter shall contain the following warning statement or equivalent: <b>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 playpens. This bag is not a toy.</b>														
Flame Retardants	Various state laws	<b>Not Detected.</b>														
Washington lead, cadmium and phthalates on children's product	Washington Children's Safe Products Act (CSPA)	≤40 ppm Cadmium; ≤90 ppm Lead; ≤1000 ppm Phthalates (combined).														
New York Toxic chemicals in children's products	The Toxic Free Toys Act (Albany, Suffolk County)	<table border="1"> <thead> <tr> <th data-bbox="771 1749 1101 1776">Compound</th> <th data-bbox="1101 1749 1508 1776">Max. levels in ppm</th> </tr> </thead> <tbody> <tr> <td data-bbox="771 1776 1101 1812">Antimony</td> <td data-bbox="1101 1776 1508 1812">60 (soluble)</td> </tr> <tr> <td data-bbox="771 1812 1101 1848">Arsenic</td> <td data-bbox="1101 1812 1508 1848">25 (soluble)</td> </tr> <tr> <td data-bbox="771 1848 1101 1883">Cadmium</td> <td data-bbox="1101 1848 1508 1883">75 (soluble)</td> </tr> <tr> <td data-bbox="771 1883 1101 1919">Lead in surface coating</td> <td data-bbox="1101 1883 1508 1919">90 (soluble)</td> </tr> <tr> <td data-bbox="771 1919 1101 1955">Lead in substrates</td> <td data-bbox="1101 1919 1508 1955">100 (total)</td> </tr> <tr> <td data-bbox="771 1955 1101 1980">Mercury</td> <td data-bbox="1101 1955 1508 1980">60 (Soluble)</td> </tr> </tbody> </table>	Compound	Max. levels in ppm	Antimony	60 (soluble)	Arsenic	25 (soluble)	Cadmium	75 (soluble)	Lead in surface coating	90 (soluble)	Lead in substrates	100 (total)	Mercury	60 (Soluble)
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