§ 1500.86 Exemptions from classification as a banned toy or other banned article for use by children.

(a) The term "banned hazardous substance" as used in section 2(q)(1)(A) of the act (repeated in §1500.3(b)(15)(i)(A)) of the act shall not apply to the following articles:

1. Toy rattles described in §1500.18(a)(1) in which the rigid wires, sharp protrusions, or loose small objects are internal and provided that such rattles are constructed so that they will not break or deform to expose or release the contents either in normal use or when subjected to reasonably foreseeable damage or abuse.

2. Dolls and stuffed animals and other similar toys described in §1500.18(a)(3) in which the components that have the potential for causing laceration, puncture wound injury, or other similar injury are internal, provided such dolls, stuffed animals, and other similar toys are constructed so that they will not break or deform to expose such components either in normal use or when subjected to reasonably foreseeable damage or abuse.

3. Any article known as a "baby-bouncer," "walker-jumper," or "baby-walker" and any other similar article (referred to in this paragraph as "article(s)") described in §1500.18(a)(6) provided:

(i) The frames are designed and constructed in a manner to prevent injury from any scissoring, shearing, or pinching when the members of the frame or other components rotate about a common axis or fastening point or otherwise move relative to one another; and

(ii) Any coil springs which expand when the article is subjected to a force that will extend the spring to its maximum distance so that a space between successive coils is greater than one-eighth inch (0.125 inch) are covered or
(iii) All holes larger than one-eighth inch (0.125 inch) in diameter and slots, cracks, or hinged components in any portion of the article through which a child could insert, in whole or in part a finger, toe, or any other part of the anatomy are guarded or otherwise designed to prevent injuries; and

(iv) The articles are designed and constructed to prevent accidental collapse while in use; and

(v) The articles are designed and constructed in a manner that eliminates from any portion of the article the possibility of presenting a mechanical hazard through pinching, bruising, lacerating, crushing, breaking, amputating, or otherwise injuring portions of the human body when in normal use or when subjected to reasonably foreseeable damage or abuse; and

(vi) Any article which is introduced into interstate commerce after the effective date of this subparagraph is labeled:

(A) With a conspicuous statement of the name and address of the manufacturer, packer, distributor, or seller; and

(B) With a code mark on the article itself and on the package containing the article or on the shipping container, in addition to the invoice(s) or shipping document(s), which code mark will permit future identification by the manufacturer of any given model (the manufacturer shall change the model number whenever the article undergoes a significant structural or design modification); and

(vii) The manufacturer or importer of the article shall make, keep, and maintain for 3 years records of sale, distribution, and results of inspections and tests conducted in accordance with this subparagraph and shall make such records available at all reasonable hours upon request by any officer or employee of the Consumer Product Safety Commission and shall permit such officer or employee to inspect and copy such records, to make such stock inventories as he deems necessary, and to otherwise check the correctness of such records.

(5) Clacker balls described in §1500.18(a)(7) that have been designed, manufactured, assembled, labeled, and tested in accordance with the following requirements, and when tested at the point of production or while in interstate commerce or while held for sale after shipment in interstate commerce do not exceed the failure rate requirements of the table in paragraph (a)(5)(vi) of this section:

(i) The toy shall be so designed and fabricated that:

(A) Each ball: Weighs less than 50 grams; will not shatter, crack, or chip; is free of cracks, flash (ridges due to imperfect molding), and crazing (tiny surface cracks); and is free of rough or sharp edges around any hole where the cord enters or over any surface with which the cord may make contact. Each ball is free of internal voids (holes, cavities, or air bubbles) if the balls are made of materials other than those materials (such as ABS (acrylonitrile butadiene styrene), nylon, and high-impact polystyrene) that are injection-molded and possess high-impact characteristics.

(B) The cord: Is of high tensile strength, synthetic fibers that are braided or woven, having a breaking strength in excess of 445 Newtons (100 pounds); is free of fraying or any other defect that might tend to reduce its strength in use; is not molded in balls made of casting resins which tend to wick up or run up on the outside of the cord; and is affixed to a ball at the center of the horizontal plane of the ball when it is suspended by the cord. Clacker balls where the mass of each ball is less than 12 grams (0.42 oz.) and the distance between the center of the pivot and the center of the ball cannot exceed 180 mm (7.1 inches) may have a minimum cord breaking strength of less than 445 Newtons (100 pounds), as computed by the following formula:

\[
\text{Adjusted Cord Breaking Strength in Newtons} = 0.1382 (m_b/R_p) R_p
\]

where \(m_b\) = mass of a single ball in grams and \(R_p\) = pivot length in mm.

(C) When the cord is attached to the ball by means of a knot, the end beneath the knot is chemically fused or otherwise treated to prevent the knot from slipping out or untying in use.

(ii) The toy shall be tested at the time of production:

(A) By using the sampling procedure described in the table in subdivision
(vi) of this subparagraph to determine the number of units to be tested.

(B) By subjecting each ball tested to 10 drops of a 2.25 kg (5-pound) steel impact rod or weight (57-mm (2½-inch) diameter with a flat head) dropped 1220 mm (48 inches) in a vented steel or aluminum tube (60-mm (2½-inch) inside diameter) when the ball is placed on a steel or cast iron mount. Clacker balls where the mass of each ball is less than 12 grams (0.42 oz.) and the distance between the center of the pivot and the center of the ball cannot exceed 180 mm (7.1 inches) may be tested by dropping the impact weight from a height of less than 1220 mm (48 in.), where the height is computed as follows:

\[
\text{Adjusted drop height in mm} = 179 \times \frac{m_b^{0.2}}{(R_p^2)\text{, where } m_b = \text{mass of a single ball in grams and } R_p = \text{pivot length in mm.}}
\]

Any ball showing any chipping, cracking, or shattering shall be counted as a failure within the meaning of the third column of the table in paragraph (a)(5)(vi) of this section.

(C) By inspecting each ball tested for smoothness of finish on any surface of the ball which may come in contact with the cord during use. A cotton swab shall be rubbed vigorously over each such surface or area of the ball; if any cotton fibers are removed, the ball shall be counted as a failure within the meaning of the fourth column of the table in subdivision (vi) of this paragraph. The toy shall also be checked to ascertain that there is no visibly perceptible "wicking up" or "running up" of the casting resins on the outside of the cord in the vicinity where the ball is attached.

(D) By fully assembling the toy and testing the cord in such a manner as to test both the strength of the cord and the adequacy with which the cord is attached to the ball and any holding device such as a tab or ring included in the assembly. The fully assembled article shall be vertically suspended by one ball and a 445-Newton (100-pound) test applied to the bottom ball. Clacker balls where the mass of each ball is less than 12 grams (0.42 oz.) and the distance between the center of the pivot and the center of the ball cannot exceed 180 mm (7.1 inches) may be tested with a force of under 445 Newtons (100 pounds). The test force for these clacker balls shall be the same as the cord breaking strength calculated in §1500.86(a)(5)(i)(B). Any breaking, fraying, or unraveling of the cord or any sign of slippage, loosening, or unfastening shall be counted as a failure within the meaning of the fourth column of the table in paragraph (a)(5)(vi) of this section.

(E) By additionally subjecting any ring or other holding device to a 222-Newton (50-pound) test load applied to both cords; the holding device is to be securely fixed horizontally in a suitable clamp in such a manner as to support 50 percent of the area of such holding device and the balls are suspended freely. Clacker balls where the mass of each ball is less than 12 grams (0.42 oz.) and the distance between the center of the pivot and the center of the ball cannot exceed 180 mm (7.1 inches) may have their holding device tested with a force of less than 222 Newtons (50 pounds). The holding device test force for these clacker balls shall be half of the cord breaking strength calculated in §1500.86(a)(5)(i)(B). Any breaking, cracking, or crazing of the ring or other holding device shall be counted as a failure within the meaning of the fourth column of the table in paragraph (a)(5)(vi) of this section.

(F) By cutting each ball tested in half and then cutting each half perpendicularly to the first cut into three or more pieces of approximately equal thickness. Each portion is to be inspected before and after cutting, and any ball showing any flash, crack, crazing, or internal voids on such inspection is to be counted as a failure within the meaning of the fourth column of the table in paragraph (a)(5)(vi) of this section. Balls that are injection-molded and possess high-impact characteristics (such as injection-molded balls made of ABS, nylon, or high-impact polystyrene) though exempt from the requirements that there be no internal voids, must be tested to determine the presence of any flash, crack or crazing. A transparent ball shall be subjected to the same requirements except that it may be visually inspected without cutting.

(iii) The toy shall be fully assembled for use at time of sale, including the
(v) The toy shall be labeled:
(A) With a conspicuous statement of the name and address of the manufacturer, packer, distributor, or seller.
(B) To bear on the toy itself and/or the package containing the toy and/or the shipping container, in addition to the invoice(s) and shipping document(s), a code or mark in a form and manner that will permit future identification of any given batch, lot, or shipment by the manufacturer.
(C) To bear a conspicuous warning statement on the main panel of the retail container and display carton and on any accompanying literature: That if cracks develop in a ball or if the cord becomes frayed or loose or unfastened, use of the toy should be discontinued; and if a ring or loop or other holding device is present, the statement “In use, the ring or loop must be placed around the middle finger and the two cords positioned over the forefinger and held securely between the thumb and forefinger,” or words to that effect which will provide adequate instructions and warnings to prevent the holding device from accidentally slipping out of the hand. Such statements shall be printed in sharply contrasting color within a borderline and in letters at least 6 mm (1/4 inch) high on the main panel of the container and at least 3 mm (1/8) high on all accompanying literature.
(vi) The lot size, sample size, and failure rate for testing clacker balls are as follows:

<table>
<thead>
<tr>
<th>Number of units in batch, shipment, delivery, lot, or retail stock</th>
<th>Number of units in random sample</th>
<th>Failure rate constituting rejection when testing per §1500.86(a)(5)(i)(B)</th>
<th>Failure rate constituting rejection when testing per §1500.86(a)(5)(ii)(C), (D), (E), and (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 or less</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>51 to 90</td>
<td>13</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>91 to 150</td>
<td>20</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>151 to 280</td>
<td>32</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>281 to 500</td>
<td>50</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>501 to 1,200</td>
<td>80</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>1,201 to 3,200</td>
<td>125</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3,201 to 10,000</td>
<td>200</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>10,001 to 35,000</td>
<td>315</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>35,001 to 150,000</td>
<td>500</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>150,001 to 500,000</td>
<td>800</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>500,001 and over</td>
<td>1,250</td>
<td>11</td>
<td>62</td>
</tr>
</tbody>
</table>

(vii) Applicability of the exemption provided by this paragraph shall be determined through use of the table in paragraph (a)(5)(vi) of this section. A random sample of the number of articles as specified in the second column of the table shall be selected according to the number of articles in a particular batch, shipment, delivery, lot, or retail stock per the first column. A failure rate as shown in either the third or fourth column shall indicate that the entire batch, shipment, delivery, lot, or retail stock has failed and thus is not exempted under this paragraph from classification as a banned hazardous substance.

(6) Caps (paper or plastic) described in §1500.18(a)(5), provided:
(i) Such articles do not produce peak sound pressure levels greater than 158 decibels when tested in accordance with §1500.47, and provided any such articles producing peak sound pressure levels greater than 138 decibels but not greater than 158 decibels when tested in accordance with §1500.47 shall bear the following statement on the carton and in the accompanying literature in
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accordance with §1500.121: “WARNING—Do not fire closer than 1 foot to
the ear. Do not use indoors.”

(ii) Any person who elects to dis-
tribute toy caps in accordance with
paragraph (a)(6)(i) of this section shall
promptly notify the Consumer Product
Safety Commission, Bureau of Compli-
ance, Washington, D.C. 20207, of their
intention and shall conduct or partici-
pate in a program to develop caps that
produce a sound pressure level of not
more than 138 decibels when tested in
accordance with §1500.47.

(iii) Any person who elects to dis-
tribute caps in accordance with para-
graph (a)(6)(i) of this section shall,
after notification of his intentions to
the Commission in accordance with
paragraph (a)(6)(ii) of this section, sub-
mit to the Consumer Product Safety
Commission, Bureau of Compliance,
Washington, DC 20207, a progress report
not less frequently than once every 3
months concerning the status of his
program to develop caps that produce a
sound level of not more than 138 deci-
bels when tested in accordance with
§1500.47.

(7) Dive sticks and similar articles
described in §1500.18(a)(19) that come to
rest at the bottom of a container of
water in a position in which the long
axis of the article is greater than 45 de-
grees from vertical when measured in
accordance with the following test
method:

(i) Test equipment.

(A) A container that is filled with tap
water to a depth at least 3 inches [76
mm] greater than the longest dimen-
sion of the dive stick. The container
shall:

(1) Be sufficiently wide to allow the
dive stick to lie on the bottom with
its long axis in a horizontal position,
(2) Have clear side walls to permit ob-
servation of the dive stick under water,
and
(3) Be placed on a level surface and
have a flat bottom.

(B) A protractor or other suitable
angle measurement device that has an
indicator for 45 degrees from vertical.

(ii) Testing procedure

(A) If the dive stick is sold such that
the consumer is required to attach an
additional component(s) to the dive
stick, then the product shall be tested
both with and without the attach-
ment(s).

(B) From just above the water sur-
face, drop the dive stick into the con-
tainer.

(C) Let the dive stick sink and come
to rest at the bottom of the container.
If the dive stick is designed so that the
weight can be adjusted by adding water
or other substance, adjust the weight
so that the dive stick sinks and comes
to rest with its long axis positioned as
close to vertical as possible.

(D) Align the angle measurement de-
vice alongside the dive stick under-
water and wait for the dive stick to
come to rest if there is any water dis-
turbance. Determine whether the long
axis of the dive stick is greater than or
less than 45 degrees from vertical.

(ii) Dive sticks and similar articles
described in §1500.18(a)(19) in which the
maximum force measured in the fol-
lowing test method is less than 5–lbf
[22N]. The test shall be conducted in
the ambient environment of the labora-
tory and not under water.

(i) Test equipment.

(A) A compression rig that has a
force gauge or equivalent device that is
calibrated for force measurements
within a minimum range of 0 to 5 lbf
[0–22 N] and with an accuracy of ±0.1 lbf
[±0.44 N] or better. The test rig shall
have a system to guide this force appli-
cation in the vertical direction and
shall have a means to adjust the rate of
load application.

(B) Compression disk—the loading
device that is attached to the force
gauge shall be a rigid metal disk with
a minimum diameter of 1.125 inches [29
mm].

(C) Vise or other clamping device.

(ii) Testing procedure

(A) Position the bottom of the dive
stick in the clamping device so that
the longest axis of the dive stick is
vertical. The bottom end of the dive
stick is the end that sinks to the bot-
tom of a pool of water. Secure the bot-
tom of the dive stick in the clamp such
that the clamping mechanism covers
no more than the bottom ½ inch [13
mm] of the dive stick.

(B) Apply a downward force at a rate
of 0.05 in/sec (±0.01 in/sec) [1.3 mm/sec
±0.3 mm/sec] at the top of the dive
stick with the compression disk positioned so that the plane of the disk contact surface is perpendicular to the long axis of the dive stick.

(C) Apply the load for a period of 40 seconds or until the maximum recorded force exceeds 5-lbf [22 N].

(D) Record the maximum force that was measured during the test.

(b) [Reserved]

(9) Boston Billow Nursing Pillow and substantially similar nursing pillows that are designed to be used only as a nursing aide for breastfeeding mothers. For example, are tubular in form, C- or crescent-shaped to fit around a nursing mother's waist, round in circumference and filled with granular material.


§ 1500.87 Children's products containing lead: inaccessible component parts.

(a) The Consumer Product Safety Improvement Act (CPSIA) provides for specific lead limits in children's products. Section 101(a) of the CPSIA provides that by February 10, 2009, products designed or intended primarily for children 12 and younger may not contain more than 600 ppm of lead. After August 14, 2009, products designed or intended primarily for children 12 and younger may not contain more than 300 ppm of lead. On August 14, 2011, the limit may be further reduced to 100 ppm after three years, unless the Commission determines that it is not technologically feasible to have this lower limit.

(b) Section 101(b)(2) of the CPSIA provides that the lead limits do not apply to component parts of a product that are not accessible to a child. This section specifies that a component part is not accessible if it is not physically exposed by reason of a sealed covering or casing and does not become physically exposed through reasonably foreseeable use and abuse of the product including swallowing, mouthing, breaking, or other children's activities, and the aging of the product, as determined by the Commission. Paint, coatings, or electroplating may not be considered to be a barrier that would render lead in the substrate to be inaccessible to a child.

(c) Section 101(b)(2) of the CPSIA directs the Commission to promulgate by August 14, 2009, this interpretative rule to provide guidance with respect to what product components or classes of components will be considered to be inaccessible.

(d) The accessibility probes specified for sharp points or edges under the Commissions' regulations at 16 CFR 1500.48–1500.49 will be used to assess the accessibility of lead-containing component parts of a children's product. A lead-containing component part would be considered accessible if it can be contacted by any portion of the specified segment of the accessibility probe. A lead-containing component part would be considered inaccessible if it cannot be contacted by any portion of the specified segment of the accessibility probe.

(e) For products intended for children that are 18 months of age or less, the use and abuse tests set forth under the Commission's regulations at 16 CFR 1500.50 and 16 CFR 1500.51 (excluding the bite test of §1500.51(c)), will be used to evaluate accessibility of lead-containing component parts of a children's product as a result of normal and reasonably foreseeable use and abuse of the product.

(f) For products intended for children that are over 18 months but not over 36 months of age, the use and abuse tests set forth under the Commission's regulations at 16 CFR 1500.50 and 16 CFR 1500.52 (excluding the bite test of §1500.52(c)), will be used to evaluate accessibility of lead-containing component parts of a children's product as a result of normal and reasonably foreseeable use and abuse of the product.

(g) For products intended for children that are over 36 months but not over 96 months of age, the use and abuse tests set forth under the Commission's regulations at 16 CFR 1500.50 and 16 CFR 1500.53 (excluding the bite test of §1500.53(c)), will be used to evaluate accessibility of lead-containing component parts of a children's product as a result of normal and reasonably foreseeable use and abuse of the product.

(h) For products intended for children over 96 months through 12 years of age, the use and abuse tests set forth