



Designation: F2670 – 17

Standard Consumer Safety Specification for Infant Bath Tubs¹

This standard is issued under the fixed designation F2670; 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 reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

INTRODUCTION

This consumer safety specification is intended to address certain incidents associated with the use of infant bath tubs. The U.S. Consumer Product Safety Commission (CPSC) identified drowning incidents which generally involved infant bath tubs being used in adult tubs containing water and left unattended by their caregiver. The CPSC also identified non-fatal incidents related to collapsing of infant bath tubs.

This specification does not address incidents in which infant bath tubs are unreasonably misused, are used in a careless manner that disregards the warnings and instructions that are provided with each product, or those instances where the caregiver leaves the infant unattended in the product.

This consumer safety specification is written within the current state-of-the-art product technology. It is intended that this specification will be updated whenever substantive information becomes available and known to ASTM which necessitates additional requirements or justifies the revision of existing requirements.

1. Scope

1.1 This consumer safety specification establishes performance requirements, test methods, and labeling requirements to promote the safe use of infant bath tubs. Specifically excluded from the scope of this standard are products commonly known as bath slings, typically made of fabric or mesh.

1.2 This consumer safety specification is intended to reduce the risk of death and minimize injury to infants resulting from use and reasonably foreseeable abuse of infant bath tubs.

1.3 No infant bath tub produced after the approval date of this consumer safety specification shall, either by label or other means, indicate compliance with this specification unless it conforms to all requirements contained herein.

1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.5 The following precautionary caveat pertains only to the test methods portion, Section 7, of this consumer safety specification: *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 and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents

2.1 *ASTM Standards*:²

[D3359 Test Methods for Measuring Adhesion by Tape Test](#)
[F963 Consumer Safety Specification for Toy Safety](#)

2.2 *Federal Standards*:³

[16 CFR 1303 Ban of Lead-Containing Paint and Certain Consumer Products Bearing Lead Containing Paint](#)

[16 CFR 1500 Federal Hazardous Substances Act Regulations](#)

[16 CFR 1500.48 Technical Requirements for Determining a Sharp Point in Toys and Other Articles Intended for Use by Children Under 8 Years of Age](#)

[16 CFR 1500.49 Technical Requirements for Determining a Sharp Metal or Glass Edge in Toys and Other Articles Intended for Use by Children Under 8 Years of Age](#)

[16 CFR 1500.50 Test Methods for Simulating Use and Abuse of Toys and Other Articles Intended for Use by Children](#)

¹ This consumer safety specification is under the jurisdiction of ASTM Committee F15 on Consumer Products and is the direct responsibility of Subcommittee F15.20 on Bath Seats.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, <http://www.access.gpo.gov>.

16 CFR 1500.51 Test Methods for Simulating Use and Abuse of Toys and Other Articles Intended for Use by Children 18 Months of Age or Less

16 CFR 1501 Method for Identifying Toys and Other Articles Intended for Use by Children Under 3 Years of Age Which Present Choking, Aspiration, or Ingestion Hazards Because of Small Parts

2.3 *ANSI Standard:*

ANSI Z535.4 Standard for Product Safety Signs and Labels

ANSI Z535.6 Product Safety Information in Product Manuals, Instructions, and Other Collateral Materials

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *conspicuous, adj*—label position so that the label is visible, when the occupant is in the product and the product is in any manufacturer’s recommended use position(s), to a person standing near the product at any one position around the product, but not necessarily visible from all positions.

3.1.2 *infant bath tub, n*—tub, enclosure, or other similar product intended to hold water and be placed into an adult bath tub, sink, or on top of other surfaces to provide support or containment, or both, for an infant in a reclining, sitting, or standing position during bathing by a caregiver.

3.1.3 *locking or latching mechanism, n*—method of preventing an infant bath tub from folding or collapsing during use.

3.1.4 *manufacturer’s recommended use position(s), n*—any position that is presented as a normal, allowable, or acceptable configuration for the use of the product by the manufacturer in any descriptive or instructional literature.

3.1.4.1 *Discussion*—This specifically excludes positions which the manufacturer shows in a like manner in its literature to be unacceptable, unsafe, or not recommended.

3.1.5 *nonpaper label, n*—any label material, such as plastic or metal, that either will not tear without the aid of tools or tears leaving a sharply defined edge or labels made of fabric.

3.1.6 *occupant, n*—that individual who is in an infant bath tub in one of the manufacturer’s recommended use positions.

3.1.7 *paper label, n*—any label material that tears without the aid of tools and leaves a fibrous edge.

3.1.8 *principal display panel, n*—that part of the product’s package that is most likely to be displayed, presented, shown or examined under normal or customary conditions of display for retail sale.

3.1.9 *smooth test surface, n*—any rigid plastic, metal, or porcelain surface to which the suction cups can adhere, and that is at least 2 in. (51 mm) larger in all directions than the largest dimensions of the suction cup attachment device on the infant bath tub.

3.1.10 *static load, n*—vertically downward load applied by weights or other means.

4. Calibration and Standardization

4.1 Unless otherwise noted, the infant bath tub shall be completely assembled in accordance with the manufacturer’s instructions.

4.2 The product to be tested shall be in a room with an ambient temperature of $73 \pm 9^{\circ}\text{F}$ ($23 \pm 5^{\circ}\text{C}$) for at least 1 h prior to testing. Testing then shall be conducted within this temperature range.

4.3 All testing required by this specification shall be conducted on the same product sample.

5. General Requirements

5.1 *Hazardous Sharp Edges or Points*—There shall be no hazardous sharp points or edges as defined in 16 CFR 1500.48 and 16 CFR 1500.49 before or after the product has been tested to this consumer safety specification.

5.2 *Small Parts*—There shall be no small parts as defined in 16 CFR 1501 before testing or liberated as a result of testing to this consumer safety specification.

5.3 *Lead in Paints*—All paint and surface coatings on the product shall comply with the requirements of 16 CFR 1303.

5.4 *Resistance to Collapse*—Latching or locking mechanisms designed to prevent the unintentional collapse of the product with the infant in it shall comply with the following requirements when properly placed in any manufacturer’s recommended use position(s).

5.4.1 During and upon completion of the test in accordance with 7.4, the product shall remain in the manufacturer’s recommended use position(s), and the latching or locking mechanism shall remain engaged and operative after testing.

5.4.2 For all single action mechanisms, the mechanism shall not release when tested in accordance with 7.1.1.

5.4.3 All double action mechanisms shall require two distinct and separate actions for release of the mechanism.

5.4.4 The mechanism shall also comply with the requirements of this section after cycling has been conducted in accordance with 7.1.2.

5.5 *Scissoring, Shearing, and Pinching*—The product, when in the manufacturer’s recommended use position(s), shall be designed and constructed to prevent injury to the occupant from any scissoring, shearing, or pinching when members or components rotate about a common axis or fastening point, slide, pivot, fold or otherwise move relative to one another. Scissoring, shearing, or pinching exists when the edges of the rigid parts admit a probe greater than 0.210 in. (5.33 mm) and less than 0.375 in. (9.53 mm) at any accessible point throughout the range of motion of such parts.

5.6 *Openings*—Holes or slots that extend entirely through a wall section of any rigid material less than 0.375 in. (9.53 mm) thick and admit a 0.210-in. (5.33 mm) diameter rod shall also admit a 0.375 in. (9.53 mm) diameter rod. Holes or slots that are between 0.210 in. (5.33 mm) and 0.375 in. (9.53 mm) and have a wall thickness less than 0.375 in. (9.53 mm) but are limited in depth to 0.375 in. (9.53 mm) maximum by another rigid surface shall be permissible (see Fig. 1 for examples). The product shall be evaluated in all manufacturer’s recommended use positions.

5.7 *Protective Components*—If a child can grasp any components between the thumb and forefinger, or teeth, such as caps, sleeves, or plugs used for protection from sharp edges,

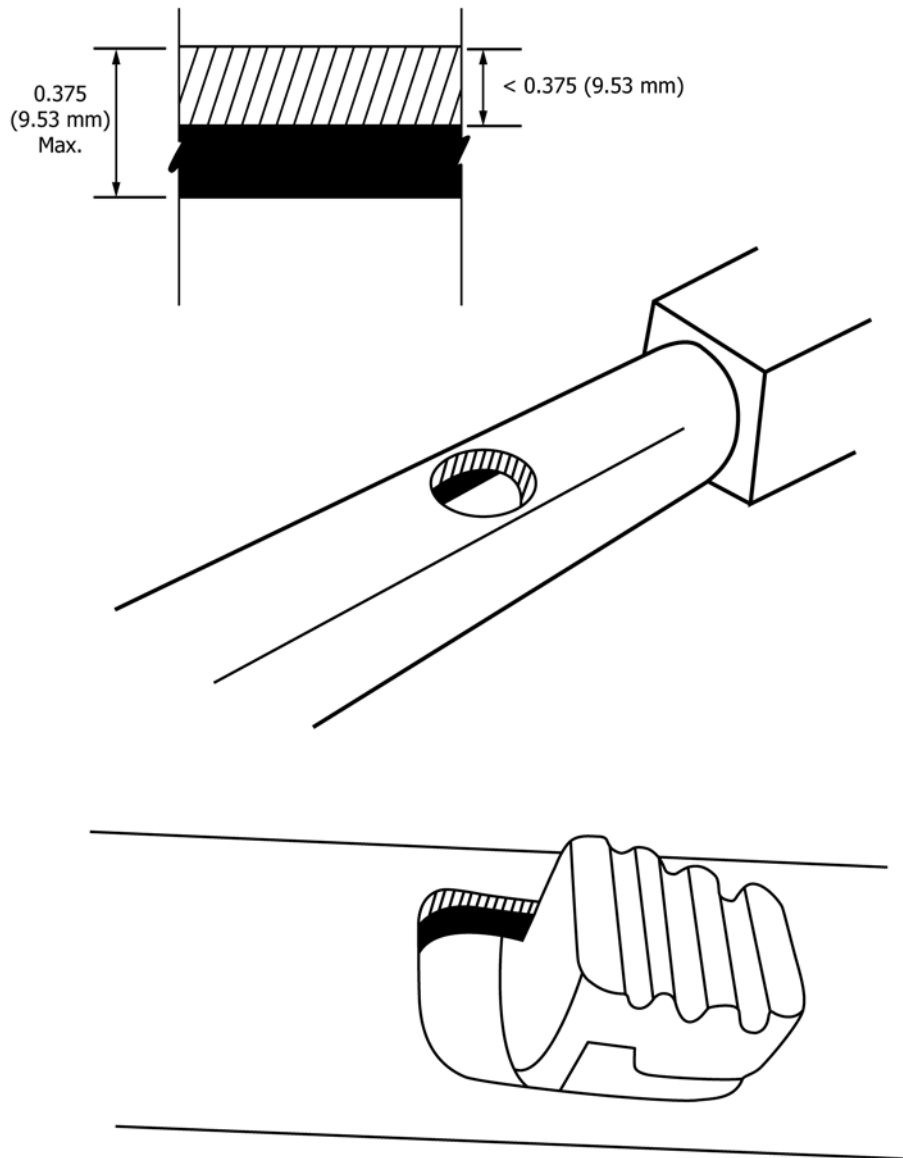


FIG. 1 Opening Examples

points, or entrapment of fingers or toes, or if there is at least a 0.040-in. (1.00-mm) gap between the component and its adjacent parent component when the product is in its manufacturer's recommended use position(s), such component shall not be removed when tested in accordance with 7.2.

5.8 *Requirements for Toys*—Toy accessories attached to, removable from, or sold with infant bath tubs, as well as their means of attachment, must meet applicable requirements of Consumer Safety Specification F963.

5.9 *Labeling:*

5.9.1 Warning labels, whether paper or nonpaper, shall be permanent when tested in accordance with 7.3.1 – 7.3.4.

5.9.2 Warning statements applied directly onto the surface of the product by hot stamping, heat transfer, printing, wood burning, etc. shall be permanent when tested in accordance with 7.3.1 and 7.3.5.

5.9.3 Nonpaper labels shall not liberate small parts when tested in accordance with 7.3.6.

6. Performance Requirements

6.1 *Restraint System*—Infant bath tubs may have a permanent or removable passive crotch restraint as part of their design. They shall not have any additional restraint system(s) which requires action on the part of the caregiver to secure or release the restraint.

6.2 *Static Load*—The product shall not break, become permanently deformed or damaged, or fail to comply with any of the other requirements of this specification when tested in accordance with 7.4.

6.3 *Specific Requirements for Suction Cups*—Infant bath tubs that utilize individual suction cups as a method of attachment to a surface shall comply with the following requirements:

6.3.1 Each suction cup shall remain attached to the product and shall not become damaged or broken after testing in accordance with 7.5.1.

6.3.2 The product shall remain attached to the test surface and shall not become damaged or broken after testing in accordance with 7.5.2.

7. Test Methods

7.1 *Latching or Locking Mechanism:*

7.1.1 *Single Action Release Mechanism*—With the product in each manufacturer’s recommended use position, gradually apply a 10-lbf (45-N) force to the locking or latching mechanism(s) in the direction tending to release it.

7.1.2 *Latching or Locking Mechanism Durability*—The latching or locking mechanism(s) shall be cycled through its normal operation a total of 2000 cycles. Each cycle shall consist of opening and closing the mechanism and erecting/folding the product. Cycling shall be conducted on a continuous basis.

7.2 *Protective Components:*

7.2.1 Prior to conducting the torque and tension tests, first completely submerge the testable components for 20 min in clear water that is at an initial temperature of 100 to 105°F (37.8 to 40.6°C). Conduct the following tests within 10 min after removal from the water.

7.2.2 *Torque Test:*

7.2.2.1 Using any convenient method to hold the parent component in place, grasp the component to be tested and apply a torque evenly over a period of 5 s in a clockwise direction until either a rotation of 180° is attained or a torque value of 4 lbf-in. (0.4 N-m) has been reached.

7.2.2.2 Maintain the torque value or the 180° rotation for an additional 10 s and then allow the component to return to its original position.

7.2.2.3 Repeat this test using a torque in the counterclockwise direction.

7.2.3 *Tension Test*—The same component which has undergone the torque test also shall undergo the following tension test immediately following the torque test:

7.2.3.1 Using any convenient method to hold the parent component in place, grasp the component to be tested and apply a tension force of 15 lbf (67 N) evenly over a period of 5 s in the direction normally associated with the removal of the component. The device used to grasp the component should not compress or expand the component being tested so that it hinders any possible removal.

7.2.3.2 Maintain this force for an additional 10 s.

7.3 *Permanence of Labels and Warnings:*

7.3.1 To determine the permanence of a label or printing applied to the surface of the product, first completely submerge the label or printed area for 20 min in clear water that is at an initial temperature of 100 to 105°F (37.8 to 40.6°C). Drain off the excess water and let the label or printed area air dry for 24 h at 73 ± 9°F (23 ± 5°C), 20 to 70 % RH, prior to conducting any permanency tests.

7.3.2 A paper label (excluding labels attached by a seam) shall be considered permanent if, during an attempt to remove it without the aid of tools or solvents, it cannot be removed, it tears into pieces upon removal or such action damages the surface to which it is attached.

7.3.3 A nonpaper label (excluding labels attached by a seam) shall be considered permanent if, during an attempt to remove it without the aid of tools or solvents, it cannot be removed or such action damages the surface to which it is attached.

7.3.4 A warning label attached by a seam shall be considered permanent if it does not detach when subjected to a 15-lbf (67-N) pull force applied in any direction using a 3/4-in. diameter clamp surface.

7.3.5 Adhesion test for warnings applied directly onto the surface of the product.

7.3.5.1 Apply the tape test defined in Test Method B, Cross-Cut Tape Test of Test Methods **D3359**, eliminating parallel cuts.

7.3.5.2 Perform this test once in each different location where warnings are applied.

7.3.5.3 The warning statements will be considered permanent if the printing in the area tested is still legible and attached after being subjected to this test.

7.3.6 A nonpaper label, during an attempt to remove it without the aid of tools or solvents, shall not be removed or shall not fit entirely within the small parts cylinder defined in 16 CFR 1501 if it can be removed.

7.4 *Static Load Test:*

7.4.1 Install the product according to the manufacturer’s instructions onto a smooth test surface. In the case where the product must be supported on or near its ends, use an appropriate support structure to simulate this support.

7.4.2 Place a load on the center of the seating surface using a 6 to 8 in. (150 to 200 mm) diameter bag filled with steel shot which has a total weight of 50 lb (22.7 kg) or three times the maximum weight of the child recommended by the manufacturer, whichever is greater.

7.4.3 Remove the weight after a time period of 20 min.

7.5 *Suction Cup Tests:*

7.5.1 *Suction Cup Attachment to Infant Bath Tub:*

7.5.1.1 If the product can be used inside another enclosure that may contain water (for example, a sink or an adult bath tub), then install the product according to the manufacturer’s instructions onto the smooth test surface that is located inside a suitable enclosure that can be filled with water. Flood this outer enclosure, but not the infant bath tub itself, with clear water that is at an initial temperature of 100 to 105°F (37.8 to 40.6°C) to a depth of 2 in. (51 mm) above the highest point of the product occupant seating surface. Allow the product to soak for a minimum of 20 min.

7.5.1.2 Remove the product according to the manufacturer's instructions and immediately apply to each suction cup a tensile force of 25 lbf (111 N). Apply this force within 5 s and in the direction most likely to cause failure. Hold the force for an additional 10 s.

7.5.1.3 If the product cannot be used inside such other enclosure, install the product according to the manufacturer's instructions onto the smooth test surface, immediately remove it according to the manufacturer's instructions, and then perform the test in 7.5.1.2 without using the water soak.

7.5.2 *Suction Cup Attachment to Surfaces:*

7.5.2.1 If the product can be used inside another enclosure that may contain water (for example, a sink or an adult bath tub), then install the product according to the manufacturer's instructions onto the smooth test surface that is located inside a suitable enclosure that can be filled with water. Flood this outer enclosure, but not the infant bath tub itself, with clear water that is at an initial temperature of 100 to 105°F (37.8 to 40.6°C) to a depth of 2 in. (51 mm) above the highest point of the product occupant seating surface. Allow the product to soak for a minimum of 20 min.

7.5.2.2 Within 5 s, apply a vertical pull force of 25 lbf (111 N) at the center of the product. Hold the force for an additional 10 s.

7.5.2.3 Remove and install the product into the manufacturer's recommended use position(s) a total of 2000 cycles using the manufacturer's recommended method(s).

7.5.2.4 Repeat the testing specified in 7.5.2.2.

7.5.2.5 If the product cannot be used inside such other enclosure, install the product according to the manufacturer's instructions onto the smooth test surface, and then perform the tests in 7.5.2.2 – 7.5.2.4 without using the water soak.

8. Marking and Labeling

8.1 Each product and its retail package shall be marked or labeled clearly and legibly to indicate the following:

8.1.1 The name, place of business (city, state, and mailing address, including zip code), and telephone number of the manufacturer, distributor, or seller.

8.1.2 A code mark or other means that identifies the date (month and year at a minimum) of manufacture.

8.2 The marking and labeling on the product shall be permanent.

8.3 Any upholstery labeling required by law shall not be used to meet the requirements of this section.

8.4 *Warning Design for Product:*

8.4.1 The warnings shall be easy to read and understand and be in the English language at a minimum.

8.4.2 Any marking or labeling provided in addition to those required by this section shall not contradict or confuse the meaning of the required information, or be otherwise misleading to the consumer.

8.4.3 The warnings shall be conspicuous and permanent.

8.4.4 The warnings shall conform to ANSI Z535.4–2011, sections 6.1–6.4, 7.2–7.6.3, and 8.1, with the following changes.

8.4.4.1 In sections 6.2.2, 7.3, 7.5, and 8.1.2, replace “should” with “shall.”

8.4.4.2 In section 7.6.3, replace “should (when feasible)” with “shall.”

8.4.4.3 Strike the word “safety” when used immediately before a color (for example, replace “safety white” with “white”).

8.4.5 The safety alert symbol “△” and the signal word “**WARNING**” shall be at least 0.2 in. (5 mm) high and in bold capital letters. The remainder of the text shall be in characters whose upper case shall be at least 0.1 in. (2.5 mm) high, except where otherwise specified.

NOTE 1—For improved warning readability, typefaces with large height-to-width ratios, which are commonly identified as “condensed,” “compressed,” “narrow,” or similar should be avoided.

8.4.6 *Message Panel Text Layout:*

8.4.6.1 The text shall be left aligned, ragged right for all but one-line text messages, which can be left aligned or centered.

NOTE 2—Left aligned means that the text is aligned along the left margin, and in the case of multiple columns of text, along the left side of each individual column. See Fig. X1.1 in X1.5 of the appendix for examples of left aligned text.

8.4.6.2 The text in each column should be arranged in list or outline format, with precautionary (hazard avoidance) statements preceded by bullet points. Multiple precautionary statements shall be separated by bullet points if paragraph formatting is used.

8.5 Each product shall be marked or labeled with warnings as follows.

8.5.1 *Drowning Hazard Warnings:*

8.5.1.1 The following warning statement shall be included exactly as stated below:

Drowning Hazard: Babies have **drowned** while using infant bath tubs.

8.5.1.2 Additional warning statements shall address the following:

- (1) **Stay in arm's reach** of your baby.
- (2) Use in **empty** adult tub or sink.
- (3) Keep drain **open** in adult tub or sink.

NOTE 3—“Address” means that verbiage other than what is shown can be used as long as the meaning is the same or information that is product-specific is presented.

8.5.2 *Fall Hazard Warnings:*

8.5.2.1 The following warning statement shall be included exactly as stated below:

Fall Hazard: Babies have suffered **head injuries** falling from infant bath tubs.

8.5.2.2 Additional warning statements shall address the following:

- (1) Place tub **only** [insert manufacturer's intended location(s) for safe use (for example, in adult tub, sink, or on floor)].
- (2) **Never lift or carry** baby in tub.

NOTE 4—“Address” means that verbiage other than what is shown can be used as long as the meaning is the same or information that is product-specific is presented.

8.5.2.3 The Fall Hazard warning may be displayed as a separate warning, in which case the warning shall comply with the format and text requirements in 8.4. The Fall Hazard warnings shall not be displayed above or prior to the Drowning Hazard warnings.

8.5.3 Products utilizing suction cups as an attachment mechanism to the support surface, and which are not intended by the manufacturer to be used on any type of slip-resistant surface, shall also include a warning to this effect. In addition, if there are other types of surfaces that the manufacturer does not intend the product be used on, then additional warning(s) shall be included to this effect. Such warning shall comply with the format and text requirements in 8.4 and shall be displayed as a separate warning OR shall be shown at the bottom of the combined warning for the drowning and fall hazards, without repeating the safety alert symbol and signal word.

8.5.4 An example warning in the combined format described in this section is shown in Fig. 2. The warning statements' wording content, as well as the use of underlining, capital lettering, italics, or bold typeface, or a combination thereof, are at the discretion of the manufacturer.

8.6 *Warning Design for Package:*

8.6.1 Each product's retail package shall address the recommended age, weight, or developmental stage of the user.

8.6.2 Each product's retail package shall be labeled on the principal display panel with the warnings required in 8.5 and as specified in 8.4.1, 8.4.2, 8.4.4, 8.4.5, and 8.4.6. The warnings and statements are not required on the retail package if they are on the product and visible in their entirety and are not

concealed by the retail package. Cartons and other materials used exclusively for shipping the product are not considered retail packaging.

8.7 Warnings, statements, or graphic pictorials on the product and package shall not indicate or imply that the infant may be left in the product without an adult caregiver in attendance.

9. **Instructional Literature**

9.1 All products shall have instructional literature enclosed that explains the proper use of the product, shall be easy to read and understand, and shall be in the English language at a minimum. Such literature shall include instructions for assembly, maintenance, cleaning, inspections, and limitations of the product, as applicable, as well as the manufacturer's recommended use position(s).

9.2 *Warning Statements in Instructional Literature:*

9.2.1 Instructional literature shall include the warnings required in 8.5. However, the phrase "To prevent drowning" shall be added before the warning statements in 8.5.1.2 and the phrase "To prevent falls" shall be added before the warning statements in 8.5.2.2.

9.2.2 Warning statements in instructional literature shall also address the following in the drowning hazard warnings:

Never rely on a toddler or preschooler to help your baby or alert you to trouble. Babies have drowned even with other children in or near bath tub.

Babies can drown in as little as 1 in. of water. Use as little water as possible to bathe your baby.

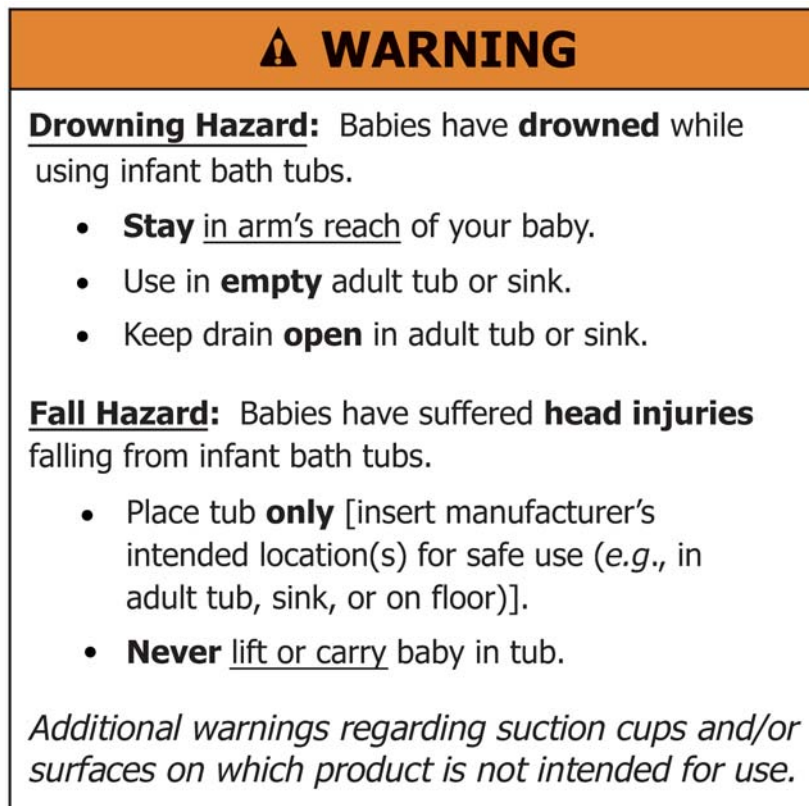


FIG. 2 Example of Warnings in Combined Format

9.2.3 Warning statements in instructional literature shall meet the format requirements specified in 8.4.4, 8.4.5, and 8.4.6 with the following two exceptions: (a) the Signal Word panel need not meet the color requirements and (b) clause 6.4 of ANSI Z535.4 need not be applied. An example warning that meets the requirements is shown in Fig. 3. The warning statements' wording content, as well as the use of underlining, capital lettering, italics, or bold typeface, or a combination thereof, are at the discretion of the manufacturer.

NOTE 5—For additional guidance on the design of warnings for instructional literature, please refer to ANSI Z535.6, American National Standard: Product Safety Information in Product Manuals, Instructions, and Other Collateral Materials.

9.3 Instructional literature shall also advise to test the temperature of the water in, or being put into, the infant bath tub prior to placing the infant into the product. Instructions

shall also indicate that the typical water temperature for bathing a baby should be between 90 and 100°F (32.2 and 37.8°C).

9.4 Instructional literature shall instruct to discontinue the use of the product if it becomes damaged, broken, or disassembled.

9.5 Instructional literature shall include the information as specified in 8.6.1.

9.6 Warnings, statements, or graphic pictorials in the instructions shall not indicate or imply that the infant may be left in the product without an adult caregiver in attendance.

10. Keywords

10.1 drowning; infant bath tub

<p>⚠ WARNING</p>
<p><u>Drowning Hazard:</u> Babies have drowned while using infant bath tubs.</p> <p>To prevent drowning:</p> <ul style="list-style-type: none"> • Stay <u>in arm’s reach</u> of your baby. • Never rely on a toddler or preschooler to help your baby or alert you to trouble. Babies have drowned even with other children in or near bath tub. • Babies can drown in as little as 1 inch of water. Use as <u>little water as possible</u> to bathe your baby. • Use in empty adult tub or sink. • Keep drain open in adult tub or sink. <p><u>Fall Hazard:</u> Babies have suffered head injuries falling from infant bath tubs.</p> <p>To prevent falls:</p> <ul style="list-style-type: none"> • Place tub only [insert manufacturer’s intended location(s) for safe use (e.g., in adult tub, sink, or on floor)]. • Never <u>lift or carry</u> baby in tub.

FIG. 3 Example of Warnings in Instructional Literature

APPENDIX

(Nonmandatory Information)

X1. RATIONALES

X1.1 *Subsection 7.1.2*—The timing of the durability cycling was revised so as to accommodate latching or locking mechanisms on some products that may require longer than 5 seconds to activate and deactivate. Continuous cycling is being prescribed to accommodate these potential longer activation/deactivation cycles, but the intent of the standard is to cycle the latching or locking mechanism at a rate as close to 12 cycles per minute as can be reasonably achieved for the specific mechanism.

X1.2 *Subsection 7.4.2*—The configuration of the static load was revised to allow for application of the load to soft or pliable seating surfaces without damaging the surface.

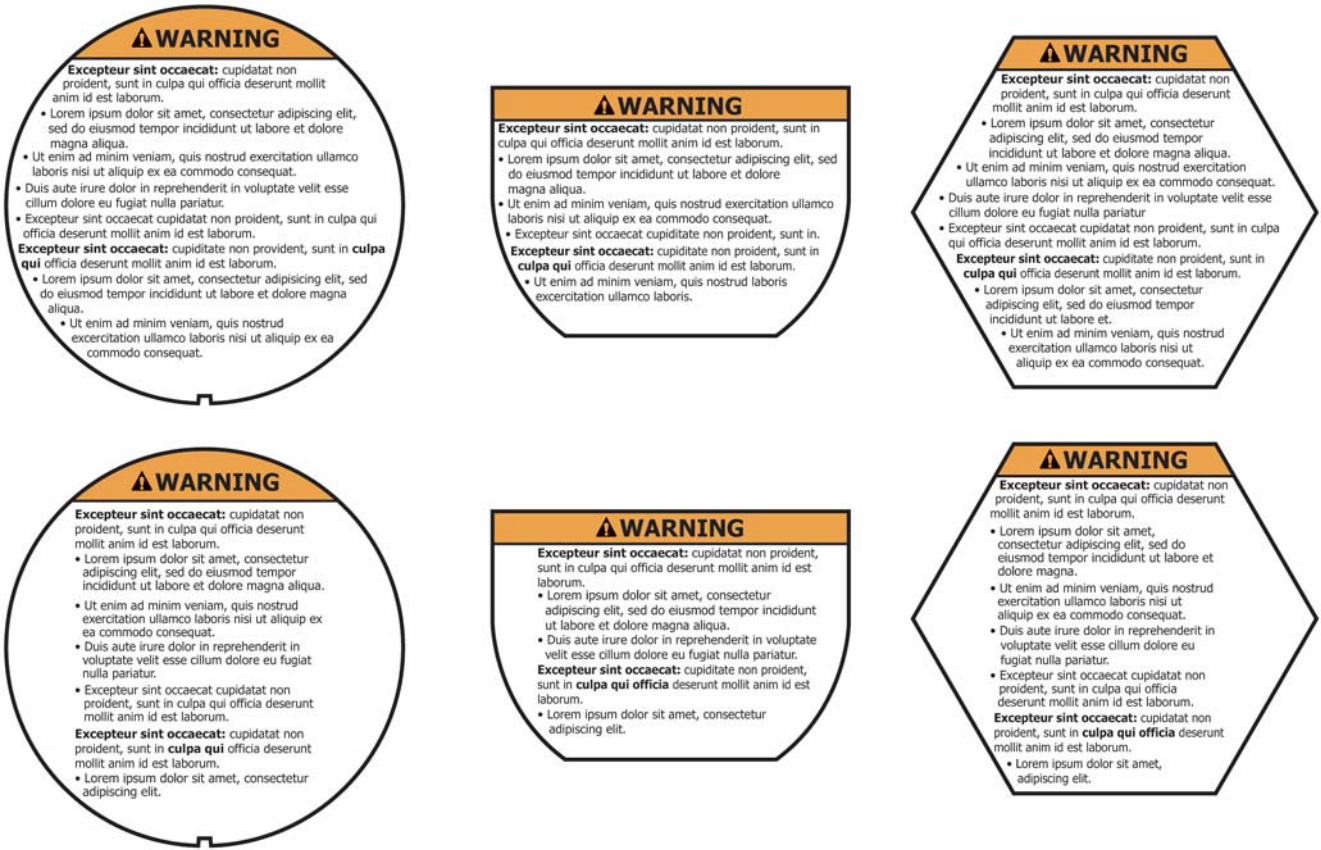
X1.3 *Section 8, Marking and Labeling*—This section was modified based on wording developed by the ASTM Ad Hoc

Committee on Standardized Wording for Juvenile Product Standards, as well as proposed language recommended by the CPSC in the NPR for Infant Bath Tubs.

X1.4 *Section 8, Warnings*—Submersions and falls were identified as risks that could be more fully addressed in the voluntary standard to reduce the risk of injury. These hazards cannot be eliminated by designing them out or guarding against them; therefore, enhanced warnings and instructions appear to be the only options available. Using published research and reviews as guidance (see Refs (1-5)⁴), a number of changes were developed to the existing F2670 – 13 sections on marking and labeling and instructional literature.

⁴ The boldface numbers in parentheses refer to a list of references at the end of this standard.

X1.5 Section 8.4.6.1, Message Panel Text Layout:



NOTE 1—The text shown for these warnings is filler text, known as lorem ipsum, commonly used to demonstrate graphic elements.

FIG. X1.1 Examples of Left Aligned Text

X1.6 Section 9, Instructional Literature—This section was modified to reflect pertinent revisions in the warnings sections.

REFERENCES

- (1) Chapanis, A. “Hazards Associated with Three Signal Words and Four Colours on Warning Signs,” *Ergonomics*, Vol 37, 1994, pp. 265–275.
- (2) Food and Drug Administration (FDA), “Over-The-Counter Human Drugs; Labeling Requirements; Final Rule,” *Federal Register*, Vol 64, No. 51, 1999, pp. 13253–13303.
- (3) Frascara, J., “Typography and the Visual Design of Warnings,” Ed. M. S. Wogalter, *Handbook of Warnings*, Mahwah, New Jersey/London: Lawrence Erlbaum Associates, 2006, pp. 385–405.
- (4) Laughery, K. R., and Wogalter, M. S., “A Three-Stage Model Summarizes Product Warning and Environmental Sign Research,” *Safety Science*, Vol 61, 2011, pp. 3–10.
- (5) Wogalter, M. S., and Vigilante, W. J., Jr., “Attention Switch and Maintenance,” Ed. M. S. Wogalter, *Handbook of Warnings*, Mahwah, New Jersey/London: Lawrence Erlbaum Associates, 2006, pp. 245–265.

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