



Standard Consumer Safety Specification for Toy Safety¹

This standard is issued under the fixed designation F963; 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

The purpose of this consumer safety specification is to establish nationally recognized safety requirements for toys. Although this specification will not eliminate the need for the exercise of parental responsibility in selecting toys appropriate to the age of a child, or parental supervision in situations in which children of various ages may have access to the same toys, its application will minimize accidents in the normal, intended use and reasonably foreseeable abuse of the toys covered by this specification. This specification was developed originally as a Voluntary Product Standard under the auspices of the National Bureau of Standards, Department of Commerce, and published in 1976 (PS 72–76). The present revision is intended to update the safety requirements to include the following by reference: published federal mandatory requirements, relevant voluntary standards, certain new requirements for addressing potential hazards, and several technical revisions based on producer experience with the original standard.

1. Scope

1.1 This specification² relates to possible hazards that may not be recognized readily by the public and that may be encountered in the normal use for which a toy is intended or after reasonably foreseeable abuse. It does not purport to cover every conceivable hazard of a particular toy. This specification does not cover product performance or quality, except as related to safety. Except for the labeling requirements pointing out the functional hazards and age range for which the toy is intended, this specification has no requirements for those aspects of a toy that present an inherent and recognized hazard as part of the function of the toy. Such an example is a sharp point necessary for the function of a needle. The needle is an inherent hazard that is well understood by the purchaser of a toy sewing kit, and this hazard is communicated to the user as part of the normal educational process.

1.2 On the other hand, while a riding toy has inherent hazards associated with its use (for example, falling off onto the sidewalk), the possible hazards associated with its construction (sharp edges, exposed mechanisms, etc.) will be minimized by the application of this specification.

1.3 This specification covers requirements and contains test methods for toys intended for use by children under 14 years of age. Different age limits for various requirements will be found in this specification. These limits reflect the nature of the hazards and expected mental or physical ability, or both, of a child to cope with the hazards.

1.4 Articles not covered by this specification are as follows:

Bicycles

Tricycles

Non-Powered Scooters

(see Consumer Safety Specification [F2264](#))

Recreational Powered Scooters and Pocket Bikes

(see Consumer Safety Specification [F2641](#))

Sling shots and sharp-pointed darts

Playground equipment

Non-powder guns

Kites

Hobby and craft items in which the finished item is not primarily of play value

Model kits in which the finished item is not primarily of play value

Crayons, paints, chalks, and other similar art materials in which the material itself or the finished item is not primarily of play value, except that all art materials, whether or not a component of a toy, must comply with LHAMA, in accordance with [4.29.1-4.29.3](#).

Toy Chests

Sporting goods, camping goods, athletic equipment, musical instruments, juvenile products, and furniture; however, toys that are their counterparts are covered. (It is recognized that there is often a fine line between,

¹ This consumer safety specification is under the jurisdiction of ASTM Committee [F15](#) on Consumer Products and is the direct responsibility of Subcommittee [F15.22](#) on Toy Safety.

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² Toy Industry Association, Inc. (TIA) sometimes provides its interpretations of this specification through its counsel as a service to its members and others. The TIA's interpretations are not reviewed or approved by ASTM and should be viewed as TIA's alone.

for example, a musical instrument or a sporting item and its toy counterpart. The intention of the producer or distributor, as well as normal use and reasonably foreseeable abuse, determines whether the item is a toy counterpart.)

Powered models of aircraft, rockets, boats, and land vehicles; however, toys that are their counterparts are covered.

Constant air inflatables

1.5 General guidelines for age labeling toys and toy packaging are contained in [Annex A1](#).

1.6 Information regarding packaging and shipping is contained in [Annex A2](#).

1.7 This consumer safety specification includes the following sections:

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1.8 The values stated first are to be regarded as the standard. The values given in parentheses are for information only.

1.9 The following precautionary statement pertains only to the test methods portion, Section 8, of this 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:³

- [D374 Test Methods for Thickness of Solid Electrical Insulation](#)
- [D642 Test Method for Determining Compressive Resistance of Shipping Containers, Components, and Unit Loads](#)
- [D880 Test Method for Impact Testing for Shipping Containers and Systems](#)
- [D999 Test Methods for Vibration Testing of Shipping Containers](#)
- [D1193 Specification for Reagent Water](#)
- [D2240 Test Method for Rubber Property—Durometer Hardness](#)
- [D3421 Practice for Extraction and Determination of Plasticizer Mixtures from Vinyl Chloride Plastics⁴](#)
- [D4236 Practice for Labeling Art Materials for Chronic Health Hazards](#)

³ 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.

⁴ Withdrawn. The last approved version of this historical standard is referenced on www.astm.org.

- D5276** Test Method for Drop Test of Loaded Containers by Free Fall
- F404** Consumer Safety Specification for High Chairs
- F406** Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards
- F834** Consumer Safety Specification for Toy Chests
- F1313** Specification for Volatile *N*-Nitrosamine Levels in Rubber Nipples on Pacifiers
- F1148** Consumer Safety Performance Specification for Home Playground Equipment
- F2264** Consumer Safety Specification for Non-Powered Scooters
- F2641** Consumer Safety Specification for Recreational Powered Scooters and Pocket Bikes
- F2853** Test Method for Determination of Lead in Paint Layers and Similar Coatings or in Substrates and Homogeneous Materials by Energy Dispersive X-Ray Fluorescence Spectrometry Using Multiple Monochromatic Excitation Beams
- F2923** Specification for Consumer Product Safety for Children’s Jewelry
- 2.2 *ANSI Standards:*⁵
- C18.1** American National Standard for Dry Cells and Batteries—Specifications
- S1.4 Specification for Sound Level Meters
- Z315.1 Safety Requirements for Tricycles
- 2.3 *European Standards:*⁶
- EN 71-1** Safety of toys - Part 1: Mechanical and physical properties
- EN 71-3** Safety of toys - Part 3: Migration of certain elements
- 2.4 *Federal Standards:*⁷
- 15 CFR 1150 Marking of Toys, Look-Alike and Imitation Firearms
- 16 CFR 1303** Ban of Lead-Containing Paint and Certain Consumer Products Bearing Lead Containing Paint
- 16 CFR 1500 Hazardous Substances Act Regulations, including the following sections:
- 16 CFR 1500.3** (c) (6) (vi) Definition of “flammable solid”
- 16 CFR 1500.14** Products requiring special labeling under section 3(b) of the act
- 16 CFR 1500.18** Banned toys and other banned articles intended for use by children
- 16 CFR 1500.19** Misbranded toys and other articles intended for use by children
- 16 CFR 1500.44** Method for determining extremely flammable and flammable solids
- 16 CFR 1500.47 Method for determining the sound pressure level produced by toy caps
- 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 1500.50-53** Test method for simulating use and abuse of toys and other articles intended for use by children
- 16 CFR 1500.83** Exemptions for small packages, minor hazards, and special circumstances
- 16 CFR 1500.85** Exemptions from classification as banned hazardous substances
- 16 CFR 1500.86** Exemptions from classification as a banned toy or other banned article for use by children
- 16 CFR 1500.87** Children’s products containing lead: inaccessible component parts
- 16 CFR 1500.88** Exemptions from lead limits under section 101 of the Consumer Product Safety Improvement Act for certain electronic devices
- 16 CFR 1500.91** Determinations regarding lead content for certain materials or products under section 101 of the Consumer Product Safety Improvement Act
- 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
- 16 CFR 1505** Requirements for Electrically Operated Toys or Other Electrically Operated Articles Intended for Use by Children
- 16 CFR 1510** Requirements for Rattles
- 16 CFR 1511** Requirements for Pacifiers
- 16 CFR 1610** Standard for Flammability of Clothing Textiles
- 21 CFR 110** Current Good Manufacturing Practice in Manufacturing, Processing, Packaging, or Holding Human Food
- 21 CFR 170-189** Food for Human Consumption
- 21 CFR 700-740 Requirements for Specific Cosmetic Products
- 21 CFR 73, 74, 81, 82 Color Additives
- 49 CFR 173.100, 109 Definition of Class C Explosives
- CPSC-CH-E1001-08.1** Standard Operating Procedure for Determining Total Lead (Pb) in Metal Children’s Products (including Children’s Metal Jewelry)⁸
- CPSC-CH-E1002-08.1** Standard Operating Procedure for Determining Total Lead (Pb) in Non-Metal Children’s Products⁸
- CPSC-CH-E1003-09** Standard Operating Procedure for Determining Lead (Pb) in Paint and Other Similar Surface Coatings⁸
- CPSC-CH-E1004-11** Standard Operating Procedure for Determining Cadmium (Cd) Extractability from Children’s Metal Jewelry⁸

⁵ Electronic copy available from American National Standards Institute website: www.ansi.org; hard copies from Global Engineering Documents, 15 Inverness Way East, Englewood, CO 80112.

⁶ Available from European Committee for Standardization (CEN), Avenue Marnix 17, B-1000, Brussels, Belgium, <http://www.cen.eu>.

⁷ Available from U.S. Consumer Product Safety Commission website: www.cpsc.gov or U.S. Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954; website: www.gpo.gov

⁸ Available from U.S. Consumer Product Safety Commission (CPSC), 4330 East West Hwy., Bethesda, MD 20814, <http://www.cpsc.gov>.