
Safety of toys —

Part 9:

**Safety aspects related to mechanical
and physical properties —
Comparison of ISO 8124-1, EN 71-1,
and ASTM F963**

iTeh STANDARD PREVIEW

(standards.iteh.ai)

Sécurité des jouets —

*Partie 9: Aspects de sécurité relatifs aux propriétés mécaniques et
physiques — Comparaison des ISO 8124-1, EN 71-1 et ASTM F963*

[https://standards.iteh.ai/catalog/standards/sist/507caa43-e92b-4896-89b8-
eb178d494f62/iso-tr-8124-9-2018](https://standards.iteh.ai/catalog/standards/sist/507caa43-e92b-4896-89b8-eb178d494f62/iso-tr-8124-9-2018)



iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO/TR 8124-9:2018

[https://standards.iteh.ai/catalog/standards/sist/507caa43-e92b-4896-89b8-
eb178d494f62/iso-tr-8124-9-2018](https://standards.iteh.ai/catalog/standards/sist/507caa43-e92b-4896-89b8-eb178d494f62/iso-tr-8124-9-2018)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword	vii
Introduction	viii
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Comparison of scopes	1
5 Comparison of terms and definitions	5
5.1 General.....	5
5.2 Analysis of the main differences between the terms and definitions.....	8
5.2.1 Aquatic toy.....	8
5.2.2 Asphyxiation and choking.....	9
5.2.3 Ball.....	9
5.2.4 Close-to-the-ear toy.....	9
5.2.5 Electrical cable.....	9
5.2.6 Hand-held toy.....	9
5.2.7 Large and bulky toy.....	10
5.2.8 Marble.....	10
5.2.9 Paper.....	10
5.2.10 Projectile.....	11
5.2.11 Projectile toy with stored energy.....	11
5.2.12 Projectile toy without stored energy.....	11
5.2.13 Protective cap, protective cover or protective tip.....	12
5.2.14 Pull toy.....	12
5.2.15 Rattle.....	12
5.2.16 Squeeze toy.....	12
5.2.17 Yo-yo elastic tether toy.....	12
6 Comparison of requirements	13
6.1 General.....	13
6.2 Normal use.....	13
6.3 Reasonably foreseeable abuse.....	13
6.4 Material.....	16
6.4.1 General.....	16
6.4.2 Fillings.....	17
6.4.3 Expanding materials.....	17
6.4.4 Glass and porcelain.....	17
6.5 Small parts.....	18
6.5.1 General.....	18
6.5.2 Small parts exemptions.....	18
6.5.3 Test requirement for soft-filled toys and soft-filled parts of a toy.....	19
6.5.4 Test methods.....	19
6.6 Shape, size and strength of certain toys.....	20
6.6.1 General.....	20
6.6.2 Squeeze toys, rattles and certain other toys.....	22
6.6.3 Small balls.....	23
6.6.4 Pompons.....	24
6.6.5 Toy pacifiers.....	24
6.6.6 Balloons.....	24
6.6.7 Marbles.....	24
6.6.8 Hemispheric-shaped toys.....	25
6.6.9 Suction cups.....	26
6.6.10 Test templates.....	26
6.7 Edges.....	27

6.7.1	General	27
6.7.2	Age range for application of the functional sharp edge exemption	28
6.7.3	Toys assembled by adults	28
6.7.4	Test method	28
6.8	Points	29
6.8.1	General	29
6.8.2	Age range for application of the functional sharp point exemption	30
6.8.3	Electrical conductors	30
6.8.4	Accessible, potentially hazardous sharp point in ASTM F963	30
6.8.5	Test method	30
6.9	Projections	30
6.9.1	General	30
6.9.2	Ends of rigid handlebars	31
6.9.3	Age grade	31
6.9.4	Bath toy projections	31
6.9.5	Protective components	31
6.10	Metal wires and rods	31
6.10.1	General	31
6.10.2	Scope of the metal wires and rods	32
6.10.3	Metal wire flexure test methods	32
6.11	Plastic film or plastic bags in packaging and in toys	33
6.11.1	General	33
6.11.2	Scope of plastic film or plastic bags in packaging and in toys	33
6.11.3	Minimum sheet thickness	33
6.11.4	Thickness of plastic balloons	34
6.11.5	Detached plastic sheeting	34
6.11.6	Perforated plastic film	34
6.11.7	Determination of plastic sheet area	34
6.12	Cords and elastics	35
6.12.1	General	35
6.12.2	Cord thickness	36
6.12.3	Fixed loops of cords or chains	36
6.12.4	Self-retracting cords	36
6.12.5	Toys with cords intended to be strung across a cradle, cot or perambulator	37
6.12.6	Free length of cords	38
6.12.7	Cords and chains on pull-along toys	38
6.12.8	Cords on toy bags	38
6.12.9	Comparison of cords, strings and lines for flying toys	39
6.12.10	Toys with electrical cables	39
6.12.11	Straps intended to be worn fully or partially around the neck	39
6.12.12	Cord warning	39
6.12.13	Test methods	40
6.13	Folding mechanisms	41
6.13.1	General	41
6.13.2	Hinge line clearance	42
6.13.3	Toy pushchairs, perambulators and similar toys	42
6.13.4	Requirement for folding devices having a scissor-like action	43
6.14	Holes, clearances and accessibility of mechanisms	44
6.14.1	General	44
6.14.2	Holes, clearances and accessibility of mechanisms	45
6.14.3	Accessible clearances for moveable segments	45
6.14.4	Chains or belts in ride-on toys	46
6.14.5	Other driving mechanisms	46
6.14.6	Winding keys	46
6.15	Springs	46
6.16	Stability and overload requirements	47
6.16.1	Stability requirements for ride-on toys and seats	47
6.16.2	Overload requirements for ride-on toys and seats	52

6.16.3	Stability of stationary floor toys	54
6.17	Enclosures	55
6.17.1	General	55
6.17.2	Impermeable material	55
6.17.3	Ventilation	55
6.17.4	Closures	56
6.18	Simulated protective equipment, such as helmets, hats and goggles	56
6.19	Projectile toys	57
6.19.1	General	57
6.19.2	General requirements of projectiles	58
6.19.3	Projectile range	58
6.19.4	Impact surface	59
6.19.5	Discharge mechanism	59
6.19.6	Kinetic energy	59
6.19.7	Arrow	63
6.19.8	Mouth-actuated projectile toys	64
6.19.9	Test method	64
6.20	Rotors and propellers	64
6.21	Aquatic toys	65
6.22	Braking	66
6.22.1	General	66
6.22.2	Braking device	66
6.22.3	Free-wheeling facility	67
6.22.4	Brake performance test	67
6.23	Toy bicycles	67
6.23.1	General	67
6.23.2	Braking system	68
6.23.3	Warning	68
6.24	Speed limitation of electrically driven ride-on toys	68
6.24.1	General	68
6.24.2	Seat requirements	69
6.24.3	Determination of maximum design speed of electrically-driven ride-on toys	69
6.25	Toys containing a heat source	70
6.25.1	General	70
6.25.2	Exemption for toys containing a heat source	70
6.25.3	The perspective of toys containing a heat source	71
6.25.4	Temperature rise of heat source	71
6.25.5	Test environment for toys containing a heat source	71
6.26	Liquid-filled toys	71
6.27	Mouth-actuated toys	72
6.28	Toy roller skates, toy inline skates and toy skateboards	72
6.29	Percussion caps	72
6.30	Acoustic requirements	73
6.30.1	General	73
6.30.2	Scope for the acoustic	73
6.30.3	Category	74
6.30.4	Rattle	74
6.30.5	Comparison of the acoustic requirements	74
6.30.6	Test method	74
6.31	Toy scooters	76
6.32	Magnets and magnetic components	77
6.33	Toy-gun marking	79
6.34	Yo-yo elastic tether toys (no reference in ISO 8124-1)	80
6.35	Toys attached to food	80
6.36	Jaw entrapment in handles and steering wheels	80
6.37	Toys comprising monofilament fibres which will cause long hair hazards	81
6.38	Packaging and packaging components (Spherical, egg-shaped or ellipsoidal, and hemispheric-shaped containers)	81

Annex A (informative) Index of requirements in EN 71-1	82
Annex B (informative) Index of requirements in ASTM F963	92
Bibliography	100

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO/TR 8124-9:2018](https://standards.iteh.ai/catalog/standards/sist/507caa43-e92b-4896-89b8-eb178d494f62/iso-tr-8124-9-2018)

[https://standards.iteh.ai/catalog/standards/sist/507caa43-e92b-4896-89b8-
eb178d494f62/iso-tr-8124-9-2018](https://standards.iteh.ai/catalog/standards/sist/507caa43-e92b-4896-89b8-eb178d494f62/iso-tr-8124-9-2018)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 181, *Safety of toys*.

A list of all parts in the ISO 8124 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The purpose of this document is to compare and contrast the identified versions of ASTM F963:2011, EN 71-1:2014 and ISO 8124-1:2014. This document focuses on the contents of these three referenced standards as they relate to mechanical and physical properties including scope, definitions, general requirements, warnings and test methods.

For ease of use and readability, ISO 8124-1:2014, Clause 4 is listed in [Clause 6](#) of this document. For example, ISO 8124-1:2014, 4.3 relates to [6.4](#) of this document.

This document is an overview and, therefore, do not cover the entirety of all the differences among ISO 8124-1, ASTM F963 and EN 71-1. In addition, this document is not to be relied on to fully understand conformance with any of the referenced standards or the requirements within them. In the case of any discrepancies in the comparisons presented, please refer to the relevant clauses of the referenced standards.

The index of requirements in EN 71-1 is given in [Annex A](#).

The index of requirements in ASTM F963 is given in [Annex B](#).

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO/TR 8124-9:2018](#)

[https://standards.iteh.ai/catalog/standards/sist/507caa43-e92b-4896-89b8-
eb178d494f62/iso-tr-8124-9-2018](https://standards.iteh.ai/catalog/standards/sist/507caa43-e92b-4896-89b8-eb178d494f62/iso-tr-8124-9-2018)

Safety of toys —

Part 9:

Safety aspects related to mechanical and physical properties — Comparison of ISO 8124-1, EN 71-1, and ASTM F963

1 Scope

This document consists of a comparison of the mechanical and physical requirements covered by the following toy safety standards:

- a) ISO: ISO 8124-1:2014;
- b) Europe (CEN): EN 71-1:2014;
- c) USA: ASTM F963:2011.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 Comparison of scopes

The scope of applicable toy products covered by the referenced standards is generally similar, as shown in [Table 1](#).

Table 1 — Scope

ISO 8124-1:2014	EN 71-1:2014	ASTM F963:2011
The requirements in this part of ISO 8124-1 apply to all toys, i.e. any product or material designed or clearly intended for use in play by children under 14 years of age.	<p>This European Standard applies to toys for children, toys being any product or material designed or intended, whether or not exclusively, for use in play by children of less than 14 years.</p> <p><i>NOTE “The words “whether or not exclusively” have been added to the definition to indicate that the product does not have to be exclusively intended for playing purposes in order for it to be considered as a toy, but it can have other functions as well. For example, a key-ring with a teddy bear attached to it is considered as a toy, or a sleeping bag in the shape of a soft filled toy.”</i></p>	This specification covers requirements and contains test methods for toys intended for use by children under 14 years of age.

Table 2 illustrates the differences in the product types which are exempted from the scope of each standard.

Table 2 — Exemptions

ISO 8124-1:2014	EN 71-1:2014	ASTM F963:2011
Bicycles, except for those considered to be toys, i.e. those having a maximum saddle height of 435 mm.	Bicycles with a maximum saddle height of more than 435 mm, measured as the vertical distance from the ground to the top of the seat surface, with the seat in a horizontal position and with the seat pillar set to the minimum insertion mark (see NOTE 1)	Bicycles
Slingshots	Slings and catapults Items that are propelled into free flight by a child releasing an elastic band (e.g. Aeroplanes and rockets) are considered as catapults (see NOTE 2)	Sling shots
Darts with metal points;	Products and games using sharp-pointed missiles, such as sets of darts with metallic points (see NOTE 1)	Sharp-pointed darts
Home and public playground equipment	Playground equipment intended for public use (see NOTE 2)	Playground equipment
Compressed air- and gas-operated guns and pistols	Guns and pistols using compressed gas, with the exception of water guns and water pistols (see NOTE 1)	Non-powder guns
Kites (except for the electric resistance of their strings, which is included)	—	Kites (except for electric resistance of kite strings and hand-held lines over 6 ft (1,8 m) long, attached to flying devices intended for use as playthings)
<p>NOTE 1 For the purpose of EN 71-1, these product types are not considered as toys. There are guidance documents issued by CEN to assist in the classification of toys.</p> <p>NOTE 2 EN 71-1 does not apply to these toys.</p>		

Table 2 (continued)

ISO 8124-1:2014	EN 71-1:2014	ASTM F963:2011
Model kits, hobby and craft items, in which the finished item is not primarily of play value.	—	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
Sporting goods and equipment, camping goods, athletic equipment, musical instruments and furniture; however, toys which are their counterparts are included.	—	Sporting goods, camping goods, athletic equipment, musical instruments, juvenile products, and furniture. However, toys that are their counterparts are covered.
Models of aircraft, rockets, boats and land vehicles powered by combustion engines; however, toys which are their counterparts are included.	Toy vehicles equipped with combustion engines (see NOTE 2)	Powered models of aircraft, rockets, boats, and land vehicles; however, toys that are their counterparts are covered.
Collectible products not intended for children under 14 years of age.	Products for collectors, provided that the product or its packaging bears a visible and legible indication that it is intended for collectors of 14 years of age and above. Examples of this category are: — detailed and faithful scale models; — kits for the assembly of detailed; — Scale models; — folk dolls and decorative dolls and other similar articles; — historical replicas of toys.	—
Holiday decorations that are primarily intended for ornamental purposes.	Decorative objects for festivities and celebrations (see NOTE 1)	—
Aquatic equipment intended to be used in deep water, swimming-learning devices and flotation aids for children such as swim-seats and swim-aids.	Aquatic equipment intended to be used in deep water, and swimming learning devices for children, such as swim seats and swimming aids (see NOTE 1)	—
Toys installed in public places (e.g. Arcades and shopping centres)	Automatic playing machines, whether coin operated or not, intended for public use (see NOTE 2)	—
Puzzles having more than 500 pieces or without a picture, for specialists	Puzzles with more than 500 pieces (see NOTE 1)	—
Fireworks including percussion caps, except percussion caps specifically designed for toy	Fireworks, including percussion caps which are not specifically designed for toys (see NOTE 1)	—
NOTE 1 For the purpose of EN 71-1, these product types are not considered as toys. There are guidance documents issued by CEN to assist in the classification of toys.		
NOTE 2 EN 71-1 does not apply to these toys.		

Table 2 (continued)

ISO 8124-1:2014	EN 71-1:2014	ASTM F963:2011
Products containing heating elements intended for use under the supervision of an adult in a teaching context	Products intended for use for educational purposes in schools and other pedagogical contexts under the surveillance of an adult instructor, such as science equipment (see NOTE 1)	—
Steam engines	Toy steam engines (see NOTE 2)	—
Video toys that can be connected to a video screen and operated at a nominal voltage greater than 24 V	—	—
Babies' pacifiers (dummies)	Babies' soothers (see NOTE 1)	—
Faithful reproduction of firearm	Reproductions of real fire arms (see NOTE 1)	—
Electric ovens, irons or other functional products operated at a nominal voltage greater than 24 V	Functional educational products, such as electric ovens, irons or other functional products, as defined in 2009/48/EC, operated at a nominal voltage exceeding 24 V which are sold exclusively for teaching purposes under adult supervision (see NOTE 1)	—
Bows for archery with an overall relaxed length exceeding 120 cm	Bows for archery over 120 cm long (see NOTE 1)	—
Fashion jewellery for children	Fashion accessories for children which are not for use in play (see NOTE 1)	—
—	Sports equipment including roller skates, inline skates, and skate boards intended for children with a body mass of more than 20 kg (see NOTE 1)	—
—	Scooters and other means of transport designed for sport or which are intended to be used for travel on public roads or public pathways	—
—	Electrically driven vehicles which are intended to be used for travel on public roads, public pathways, or the pavement thereof (see NOTE 1)	—
—	Electronic equipment, such as personal computers and game consoles, used to access interactive software and their associated peripherals, unless the electronic equipment or the associated peripherals are specifically designed for and targeted at children and have a play value on their own, such as specially designed personal computers, key boards, joy sticks or steering wheels (see NOTE 1)	—

NOTE 1 For the purpose of EN 71-1, these product types are not considered as toys. There are guidance documents issued by CEN to assist in the classification of toys.

NOTE 2 EN 71-1 does not apply to these toys.

Table 2 (continued)

ISO 8124-1:2014	EN 71-1:2014	ASTM F963:2011
—	Interactive software, intended for leisure and entertainment, such as computer games, and their storage media, such as cds (see NOTE 1)	—
—	Child-appealing luminaires (see NOTE 1)	—
—	Electrical transformers for toys (see NOTE 1)	—
—	Personal protective equipment, including flotation aids such as arm bands and swim seats; and swimming goggles, sunglasses and other eye protectors as well as bicycle and skateboard helmets (see NOTE 1)	—
—	—	Tricycles
—	—	Non-powered scooters (see consumer safety specification f2264)
—	—	Recreational powered scooters and pocket bikes(see Consumer Safety Specification F2641)
—	—	Crayons, paints, chinks, 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 to 4.29.3.
—	—	Toy chests
—	—	Constant air inflatables
NOTE 1 For the purpose of EN 71-1, these product types are not considered as toys. There are guidance documents issued by CEN to assist in the classification of toys.		
NOTE 2 EN 71-1 does not apply to these toys.		

5 Comparison of terms and definitions

5.1 General

Table 3 illustrates the terms that are defined in the referenced standards.

Table 3 — Defined terms

ISO 8124-1:2014	EN 71-1:2014	ASTM F963:2011
3.1 accessible	3.1 accessible	3.1.2 accessible
3.2 aquatic toy	3.2 aquatic toy	3.1.4 aquatic toy
3.3 arrow	—	—
3.4 backing	3.4 backing	—
3.5 ball	3.5 ball	3.1.6 ball
3.6 battery-operated toy	—	3.1.8 battery-operated toy
3.7 burr	3.6 burr	3.1.9 burr
3.8 close-to-the-ear toy	3.10 close-to-the-ear toy	3.1.12 close-to-the-ear toy

Table 3 (continued)

ISO 8124-1:2014	EN 71-1:2014	ASTM F963:2011
3.9 collapse	3.11 collapse	3.1.14 collapse
3.10 continuous sound	—	3.1.17 continuous sound
3.11 cord	3.12 cord	3.1.18 cord
3.12 crushing	3.14 crushing	3.1.20 crushing
3.13 C-weighted peak sound pressure level ($L_{p_{Cpeak}}$)	3.43 peak emission sound pressure level	3.1.11 C-weighted peak sound pressure level (L_{Cpeak}) 3.1.54 peak sound pressure level (L_{Cpk})
3.14 dart	—	—
3.15 discharge mechanism	—	3.1.23 discharge mechanism
3.16 driving mechanism	3.15 driving mechanism	3.1.24 driving mechanism
3.17 edge	3.16 edge	3.1.21 curled edge
3.17.1 curled edge		3.1.40 hemmed edge
3.17.2 hemmed edge		3.1.67 rolled edge
3.17.3 rolled edge		
3.18 equivalent sound pressure level ($L_{p_{Aeq}}$)	3.64 time-averaged emission sound pressure level	3.1.27 equivalent sound pressure level (L_{Aeq})
3.19 expanding material	3.20 expanding material	—
3.20 explosive action	—	3.1.28 explosive action
3.21 fastener	3.21 fastening	3.1.30 fastener
3.22 feathering	—	3.1.31 feathering
3.23 flash	—	3.1.32 flash
3.24 folding mechanism	—	3.1.33 folding mechanism
3.25 free flight	—	—
3.26 functional magnet in electrical or electronic components of toys	3.27 functional magnet in electrical or electronic components of toys	—
3.27 functional toy	3.28 functional product 3.29 functional toy	—
3.28 fuzz	3.30 fuzz	3.1.34 fuzz
3.29 glass	—	—
3.30 hand-held toy	3.31 hand-held toy	3.1.35 hand-held toy
3.31 harm	—	—
3.32 hazard	—	3.1.36 hazard
3.33 hazardous projection	—	3.1.60 projection, hazardous
3.34 hazardous sharp edge	—	3.1.25 edge, hazardous
3.35 hazardous sharp point	—	3.1.56 point, hazardous
3.36 hinge-line clearance	3.32 hinge line	3.1.41 hinge-line clearance
3.37 impulsive sound	—	3.1.42 impulsive sound
3.38 lap joint	3.39 overlap joint	3.1.44 lap joint
3.39 large and bulky toy	3.33 large and bulky toy	3.1.45 large and bulky toy
3.40 leading edge	—	—
3.41 marble	marble is covered by the definition of "balls" in EN 71-1	3.1.47 marble
3.42 magnetic component	3.34 magnetic component	3.1.37 hazardous magnet 3.1.38 hazardous magnet component

Table 3 (continued)

ISO 8124-1:2014	EN 71-1:2014	ASTM F963:2011
3.43 magnetic/electrical experimental set	3.35 magnetic/electrical experimental set	—
3.44 maximum A-weighted sound pressure level	3.36 maximum emission sound pressure level	3.1.1 A-weighted sound pressure level (L_{pA}) 3.1.49 maximum A-weighted sound pressure level (L_{AFmax})
3.45 metal	—	—
3.46 normal use	—	3.1.51 normal use
3.47 packaging	3.40 packaging	3.1.53 packaging
3.48 paper	3.41 paper	A5.2.6 paper (applied to flammability requirement)
3.49 play furniture	—	—
3.50 pompom	—	3.1.57 pompom
3.51 projectile	3.46 projectile	3.1.59 projectile
3.52 projectile toy with stored energy	3.47 projectile toy with stored energy	—
3.53 projectile toy without stored energy	3.48 projectile toy without stored energy	—
3.54 protective cap, protective cover or protective tip	—	3.1.61 protective cap or cover 3.1.62 protective tip
3.55 pull toy	3.49 pull-along or push toy	—
3.56 rattle	3.50 rattle	3.1.63 rattle
3.57 reasonably foreseeable abuse	—	3.1.64 reasonably foreseeable abuse
3.58 reference box	—	3.1.65 reference box
3.59 removable component	3.51 removable component	—
3.60 resilient material	—	—
3.61 rigidity	—	3.1.66 rigid
3.62 risk	—	—
3.63 simulated protective equipment	—	3.1.69 simulated protective equipment
3.64 soft-filled toy, stuffed toy	3.53 soft-filled toy	3.1.70 soft-filled toy/stuffed toy
3.65 splinter	3.54 splinter	3.1.71 splinter
3.66 springs	3.55 spring	3.1.39 helical spring
3.66.1 helical spring	3.55.1 helical spring	3.1.15 compression spring
3.66.1.1 compression spring	3.55.2 compression spring	3.1.29 extension spring
3.66.1.2 extension spring	3.55.3 extension spring	3.1.72 spiral spring
3.66.2 spiral spring	3.55.4 spiral spring	—
3.67 squeeze toy	3.56 squeeze toy	3.1.73 squeeze toy
3.68 table-top, floor and crib toy	3.60 table-top or floor toy	3.1.77 tabletop, floor, and crib toy
3.69 teether	3.63 teether	3.1.79 teether
3.70 tool	3.65 tool	3.1.80 tool
3.71 toy	—	3.1.81 toy
3.72 toy bicycle	3.67 toy bicycle	—
3.73 toy chest	—	3.1.82 toy chest
3.74 toy scooter	3.68 toy scooter	—