
Safety of toys —

Part 9:

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

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*





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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

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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

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).

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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](#).

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.	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. <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>	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)
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.		