

Test Report

Number: SZHH0203337801

Applicant: MICRO MOBILITY SYSTEM LTD
BAHNHOFSTRASSE 10, CH-8700,
KUSNACHT, SWITZERLAND

Date: Jun 19, 2025

Attn: April Sek

Sample Description:

Two (2) sets of submitted sample said to be :

Item Name : **Mini Micro Deluxe Rock & Go LED Ocean Slate**
Mini Micro Deluxe Rock & Go LED Lavender Mist
Mini Micro Deluxe Rock & Scoot LED Dusty Rose
Mini Micro Deluxe Rock & Scoot LED Olive Sage

Item No. : **MMD388**
MMD387
MMD386
MMD385

Labelled Age Group : 1-6+ years

Applicant Specified Age : 12-36 months for seat model, 24 months - 6+ years for without seat model

Grading for Testing

Packaging Provided by Applicant : Yes (artwork)

Country of Origin : China

Country of Destination : US EU UK CAN

Date Sample Received : Mar 20, 2025 & May 19, 2025

Testing Period : Mar 20, 2025 ~ Jun 19, 2025



Tests conducted:

As requested by the applicant, refer to attached page(s) for details.



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Conclusion:

<u>Tested Samples</u>	<u>Standard/Test Item</u>	<u>Result</u>
Submitted samples	EN 71-1: 2014+A1: 2018 for mechanical and physical properties	Pass
	EN 71-2: 2020 Flammability test	Pass
	Australian / New Zealand Standard on Safety of Toys AS/NZS ISO 8124.2:2023 flammability test	Pass
	Canada Consumer Product Safety Act Toys Regulation SOR 2011-17 for celluloid or cellulose nitrate test	Pass
	New Zealand Product Safety Standards (Children's Toys) Regulations 2005	Pass
	Australian / New Zealand Standard AS/NZS ISO 8124.1: 2023 Safety aspects related to mechanical and physical properties	Pass
	Consumer Product Safety Improvement Act (CPSIA) 2008 Section 103 Tracking Labels for Children Products, 15 U.S.C. §2063(a)(5) (CPSA), Consumer Product Safety Act Section 14(a) (5)	PASS
	U.S. ASTM F963-23 Physical and mechanical tests.	Pass
	Australian Consumer Goods (Toys for Children up to and including 36 Months of Age) Safety Standard 2023 on Physical Requirement	Pass
	U.S. ASTM F963-23 Flammability test of materials other than textile materials	Pass
	Canada Consumer Product Safety Act Toys Regulations SOR/2011-17 for mechanical and physical test	Pass
	EN 71-3:2019+A1:2021 on Migration of Certain Elements	Pass
	EN 71-3:2019+A2:2024 on Migration of Certain Elements	Pass
	BS EN 71-3:2019+A2:2024 on Migration of Certain Elements	Pass
Tested components of submitted samples	AS/NZS ISO 8124.3:2003 for toxic elements test (Australian Trade Practices Act 1974 with Consumer Protection Notice No. 1 of 2009 - Consumer Product Safety Standard for Lead and Certain Elements in Children's Toys)	Pass
	Canada Consumer Product Safety Act Surface Coating Materials Regulations SOR/2016-193 and Amendment SOR/2022-122 on Lead content	Pass
	Canada Consumer Product Safety Act Toys Regulations SOR/2011-17 and Amendment SOR/2022-122 Section 23 on toxic elements test	Pass
	Canada Consumer Products Containing Lead Regulations	Pass



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SOR/2018-83

Applicant's requirement on Lead content with reference to Annex XVII Entry 63 of the REACH Regulation (EC) No 1907/2006 and Amendment (EC) No 552/2009, (EU) No 836/2012, (EU) 2015/628 & The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019 No. 758) as amended	Pass
Applicant's requirement on Lead content with reference to Annex XVII Entry 63 of the REACH Regulation (EC) No 1907/2006 and Amendment (EC) No 552/2009, (EU) No 836/2012, (EU) 2015/628, (EU) 2023/923	Pass
AS/NZS ISO 8124.3:2021+Amd 1:2023 on migration of certain elements	Pass
U.S. Consumer Product Safety Improvement Act 2008 Title I, Section 101(15 USC 1278a) for Total Lead content in substrate	Pass
U.S. 16 CFR Part 1303 total Lead content	Pass
U.S. Consumer Product Safety Improvement Act 2008 Title I, Section 101(15 USC 1278a) for total Lead content in surface coating	Pass
Cadmium Content Requirement in Annex XVII Entry 23 of the EU REACH Regulation (EC) No 1907/2006 and Amendment (EC) No 552/2009, (EU) No 494/2011, (EU) No 835/2012 and (EU) 2016/217	Pass
U.S. ASTM F963-23 on soluble heavy elements test	Pass
U.S. ASTM F963-23 Section 4.3.5.2 on total Lead content in substrate	Pass
Organotin Content Requirement in Annex XVII Entry 20 of the REACH Regulation (EC) No 1907/2006 and Amendment (EC) No 552/2009 and (EU) No 276/2010 & The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019 No. 758) as amended	Pass
U.S. ASTM F963-23 Section 4.3.5.1 on total Lead content in surface coating	Pass
Organotin Content Requirement in Annex XVII Entry 20 of the REACH Regulation (EC) No 1907/2006 and Amendment (EC) No 552/2009 and (EU) No 276/2010	Pass
Cadmium Content Requirement in Annex XVII Entry 23 of the REACH Regulation (EC) No 1907/2006 and Amendment (EC) No 552/2009, (EU) No 494/2011, (EU) No 835/2012 and (EU) 2016/217 & The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019 No. 758) as amended	Pass
Consent Judgment No. RG-356892 for Toys on total Lead content based on the California Proposition 65	Pass



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EN 71-12:2016 for N-Nitrosamines and N-Nitrosatable Substances (in Elastomers) (UK toy designated standard)	Pass
N-Nitrosamines and N-Nitrosatable Substances requirement in Point 8 of Part 3 of Schedule 2 of The Toys (Safety) Regulations 2011 (S.I. 2011 No. 1881)	Pass
EN 71-12:2016 for N-Nitrosamines and N-Nitrosatable Substances (in Elastomers) (EU toy harmonised standard)	Pass
N-Nitrosamines and N-Nitrosatable Substances requirement in Point 8 of Part III of Annex II to Directive 2009/48/EC	Pass
UK The Toys (Safety) Regulations 2011 (S.I. 2011 No. 1881) and its Amendment(s) including S.I. 2019 No. 696 Schedule 2 Appendix C on Phenol	Pass
EU Toy Safety Directive 2009/48/EC and its Amendment(s) including (EU) 2017/774 Annex II Appendix C on Phenol	Pass
Consent Judgment No. BG-350969 for Toys on phthalate content based on the California Proposition 65	Pass
U.S. Consumer Product Safety Improvement Act 2008 Title I, Sec 108(a) & (b)(3) and U.S. 16 CFR Part 1307 for Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates	Pass
U.S. ASTM F963-23 Section 4.3.8 on Phthalate content	Pass
Phthalates Content Requirement in Annex XVII Entry 51 & 52 of the REACH Regulation (EC) No 1907/2006 and Amendment (EC) No 552/2009 and (EU) 2018/2005 & The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019 No. 758) as amended	Pass
Phthalates Content Requirement in Annex XVII Entry 51 & 52 of the EU REACH Regulation (EC) No 1907/2006 and Amendment (EC) No 552/2009 and (EU) 2018/2005	Pass
TCEP, TCPP and TDCP content requirement in Appendix C to Annex II to Directive 2009/48/EC and Amendment Directive 2014/79/EU	Pass
TCEP, TCPP and TDCP content requirement in Appendix C to Schedule 2 of The Toys (Safety) Regulations 2011 (S.I. 2011 No. 1881) as amended	Pass
UK POPs Regulation (EU) 2019/1021 and The Persistent Organic Pollutants Regulations 2007 (S.I. 2007 No. 3106) Regulation 5 Short Chain Chlorinated Paraffins (C10 - C13) (SCCP) Content	Pass
EU POPs Regulation (EU) 2019/1021 Short Chain Chlorinated Paraffin (C10 - C13) (SCCP) Content	Pass



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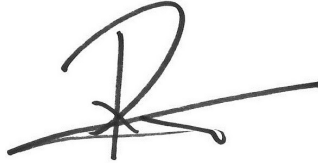
Germany AfPS GS 2019:01 PAK (PAH) on Polycyclic Aromatic Hydrocarbons (PAHs) Content Pass

Polycyclic Aromatic Hydrocarbons (PAHs) Content Requirement in Annex XVII Entry 50 of the REACH Regulation (EC) No 1907/2006 and Amendment (EC) No 552/2009 and (EU) No 1272/2013 & The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019 No. 758) as amended Pass

Polycyclic Aromatic Hydrocarbons (PAHs) Content Requirement in Annex XVII Entry 50 of the EU REACH Regulation (EC) No 1907/2006 and Amendment (EC) No 552/2009 and (EU) No 1272/2013 Pass

Submitted samples	EN IEC 62115:2020+A11:2020- Safety of electric toys	Pass (Subjected to remark)
	AS/NZS 62115:2018+A1:2021 - Safety of electric toys	Pass
	EN IEC 62115:2020+A11:2020 Annex E: Safety of electric toys incorporating optical radiation sources	Pass
	AS/NZS 62115:2018+A1:2021 Annex E: Safety of electric toys incorporating optical radiation sources	Pass

Authorized by:
For Intertek Testing Services
Shenzhen Ltd.



Rachel L. Guo
Vice President



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https://verifyindex.intertek.com.cn/home/index?id=hl_report_verify



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Tests Conducted

1 Mechanical and Physical Test

Test standard: European Standard on Safety of toys EN 71-1: 2014+A1: 2018.

The submitted samples were undergone the following abuse tests:		
Test	Clause	Parameter
Torque test	8.3	0.34 Nm
Tension test	8.4.2.1	90 N
Protective components	8.4.2.3	60 N
Drop test	8.5	850 mm x 5times
Tip over test	8.6	Three times
Impact test	8.7	1 kg
Compression test	8.8	110 N

Clause	Requirement	Result
4	General requirements	
4.1	Material	P
4.2	Assembly	P
4.3	Flexible plastic sheeting	NA
4.4	Toy bags	NA
4.5	Glass	NA
4.6	Expanding materials	NA
4.7	Edges	P
4.8	Points and metallic wires	P
4.9	Protruding parts	P
4.10	Parts moving against each other	NA
4.11	Mouth actuated toys and other toys intended to be put in the mouth	NA
4.12	Balloons	NA
4.13	Cords of toy kites and other flying toys	NA
4.14	Enclosures	NA
4.15	Toys intended to bear the mass of a child	P
4.16	Heavy immobile toys	NA
4.17	Projectile toys	NA
4.18	Aquatic toys and inflatable toys	NA
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	NA
4.20	Acoustics	NA
4.21	Toys containing a non-electrical heat source	NA
4.22	Small balls	NA
4.23	Magnets	NA
4.24	Yo-yo balls	NA
4.25	Toys attached to food	NA



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Tests Conducted

Clause	Requirement	Result
4.26	Toy disguise costumes	NA
4.27	Flying toys	NA
5	Toys intended for children under 36 months	
5.1	General requirements	P
5.2	Soft-filled toys and soft-filled parts of a toy	NA
5.3	Plastic sheeting	NA
5.4	Cords, chains and electrical cables in toys	NA
5.5	Liquid filled toys	NA
5.6	Speed limitation of electrically-driven ride-on toys	NA
5.7	Glass and porcelain	NA
5.8	Shape and size of certain toys	NA
5.9	Toys comprising monofilament fibres	NA
5.10	Small balls	NA
5.11	Play figures	NA
5.12	Hemispheric-shaped toys	NA
5.13	Suction cups	NA
5.14	Straps intended to be worn fully or partially around the neck	NA
5.15	Sledges with cords for pulling	NA
6	Packaging	NA
7	Warnings, markings and instructions for use	
7.1	General	P
7.2	Toys not intended for children under 36 months	NA
7.3	Latex balloons	NA
7.4	Aquatic toys	NA
7.5	Functional toys	NA
7.6	Hazardous sharp functional edges and points	NA
7.7	Projectile toys	NA
7.8	Imitation protective masks and helmets	NA
7.9	Toy kites	NA
7.10	Roller skates, inline skates and skateboards and certain other ride-on toys	P
7.11	Toys intended to be strung across a cradle, cot, or perambulator	NA
7.12	Liquid-filled teethingers	NA
7.13	Percussion caps specifically designed for use in toys	NA
7.14	Acoustics	NA
7.15	Toy bicycles	NA
7.16	Toys intended to bear the mass of a child	NA
7.17	Toys comprising monofilament fibres	NA
7.18	Toy scooters	P
7.19	Rocking horses and similar toys	NA
7.20	Magnetic/electrical experimental sets	NA
7.21	Toys with electrical cables exceeding 300 mm in length	NA



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Clause	Requirement	Result
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	NA
7.23	Toys intended to be attached to a cradle, cot or perambulator	NA
7.24	Sledges with cords for pulling	NA
7.25	Flying toys	NA
7.26	Improvised projectiles	NA

Abbreviation: P = Pass NA = Not Applicable NR=Not Requested

Note: According to 2009/48/EC, warnings and safety instructions shall be written in a language or languages easily understood by consumers.

Additional information according to the Toy Safety Directives 2009/48/EC requirement. These information also appears as a note within the EN 71 but are not standard requirements:

1. Marking

The manufacturer's and importer's name, registered trade name or registered trade mark, the address and the CE-marking shall be indicated on the toy or, where that is not possible, on its packaging or in a document accompany the toy. In addition, manufacturers shall ensure that their toys bear a type, batch, serial or model number or other element allowing their identification, or where the size or nature of the toy does not allow it, that the required information is provided on the packaging or in a document accompanying the toy.

	Product	Packaging
Manufacturer's name	Present	Present
Manufacturer's address	Present	Present
Importer's name	Present	Present
Importer's address	Present	Present
Product identification code	Present	Present
CE-marking	Present	Present

Below is additional information checking according to the UK Toy (Safety) Regulations requirement.

Marking

The manufacturer's and importer's name, registered trade name or registered trademark, the address and type, batch, serial or model number or other element allowing their identification shall be indicated on the product itself.

After checking, it was found that

	Product	Packaging
Name of authorised representative in Great Britain	Absent	Absent
Address of authorised representative in Great Britain	Absent	Absent

With reference to the guidance of using UKCA marking from 1 January 2021 by the Department for Business, Energy and Industrial Strategy.

After checking UKCA marking, it was found that



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Tests Conducted

	Product	Packaging
UKCA marking	Present	Present

2. Cleaning instruction

A toy intended for use by children under 36 months must be designed and manufactured in such a way that it can be cleaned. The toy shall fulfill the safety requirements also after having been cleaned in accordance with this point and the manufacturer's instructions. The manufacturer should, if applicable, provided instructions on how the toy has to be cleaned.

After checking, the cleaning instruction was found on the submitted samples.

2 Flammability Test

Test Standard: European Standard on Safety of Toys EN 71 - 2: 2020.

Clause	Testing items	Assessment
4.1	General requirements	P
4.2	Toys to be worn on the head	NA
4.3	Toy disguise costumes and toys intended to be worn by a child in play	NA
4.4	Toys intended to be entered by a child	NA
4.5	Soft filled toys	NA

Abbreviation: P = Pass NA = Not applicable

3 Flammability Test

Test Standard: Australian / New Zealand Standard on Safety of Toys AS/NZS ISO 8124.2:2023.

Clause	Testing Items	Assessment
4.1	General	P
4.2	Toys to be worn on the head	NA
4.3	Toy disguise costumes and toys intended to be worn by a child in a play	NA
4.4	Toys intended to be entered by a child	NA
4.5	Soft-filled toys	NA

Abbreviation: P = Pass NA = Not Applicable

Note:

Type of gas used in the test burner: butane



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Tests Conducted

4 Cellulose Nitrate and Celluloid

Test Standard : Canada Consumer Product Safety Act Toys Regulation SOR 2011-17 section 21.

	Assessment	Requirement
Cellulose Nitrate/Celluloid	Absent	Absent

5 Physical and mechanical tests for toys for children up to and including 36 months of age

Test standard: New Zealand Product Safety Standards (Children's Toys) Regulations 2005.

The submitted samples were undergone the normal use and the following reasonable foreseeable abuse tests in accordance with the Clause 5.24 of AS/NZS ISO 8124.1: 2002 before the assessment of the relevant requirement in Clause 4 and Annex A:

Clause	Test	Parameter
5.24.2	Drop test	4 x 93 ± 5 cm
5.24.3	Tip-over test	3 times
5.24.5	Torque test	0.45 ± 0.02 Nm
5.24.6	Tension test	70 ± 2 N
5.24.7	Compression test	114 ± 2 N

Section	Requirement	Result
4.1	Normal use	P
4.2	Reasonably foreseeable abuse	P
4.4	Small parts	-
4.4.1	Small parts for children under 36 months	P
4.5	Shape, size and strength of certain toys	-
4.5.1	Squeeze toys, rattles and certain other toys	NA
4.5.2	Small ball	NA
4.5.3	Pompom	NA
4.5.4	Preschool play figures	NA
4.5.5	Toy pacifiers	NA
4.25	Mouth-actuated toys	-
4.25a	Mouth-actuated toys and removable mouthpieces of mouth-actuated toys	NA
4.25b	Non-detachable mouthpieces of mouth-actuated toys	NA
4.25c	Mouth-actuated toys which contain loose components	NA
Annex A.2.3	Battery-operated toy	NA



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Tests Conducted

Abbreviation: P = Pass NA = Not applicable

NR = Not Requested

6 Physical and Mechanical Tests

Test Standard: Australian / New Zealand Standard AS/NZS ISO 8124.1: 2023 Safety aspects related to mechanical and physical properties.

The submitted samples were undergone the normal use and the following reasonable foreseeable abuse tests in accordance with the Clause 5.24 of AS/NZS ISO 8124.1: 2023 before the assessment of the relevant requirement in Clause 4:

Clause	Test	Parameter
5.24.2	Drop test	4x93±5cm
5.24.3	Tip-over test	3 times
5.24.4	Dynamic strength	--
5.24.5	Torque test	0.45±0.02Nm
5.24.6	Tension test	70±2N
5.24.7	Compression test	114±2N

Clause	Testing Items	Assessment
4.1.1	Normal use	P
4.1.2	Location of warning	P
4.2	Reasonably foreseeable abuse	P
4.3.1	Material	P
4.3.2	Expanding materials	NA
4.4.1	Small parts	P
4.4.2	Small part warning	NA
4.5	Shape, size and strength of certain toys	NA
4.6	Edges	P
4.7	Points	P
4.8	Projections	P
4.9	Metal wires and rods	NA
4.10	Plastic film or plastic bags in packaging and in toys	NA
4.11	Cords	NA
4.12	Folding mechanisms	NA
4.13	Holes, clearances and accessibility of mechanisms	P
4.14	Springs	NA
4.15	Stability and overload requirements	P
4.16	Enclosures	NA
4.17	Items that cover the face and simulated protective equipment	NA



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Clause	Testing Items	Assessment
4.18	Projectile toys	NA
4.19	Flying toys	NA
4.20	Aquatic toys	NA
4.21	Braking	NA
4.22	Toy bicycles	NA
4.23	Speed limitation of electrically driven ride-on toys	NA
4.24	Toys containing a heat source	P
4.25	Liquid-filled toys	NA
4.26	Mouth-actuated toys	NA
4.27	Toy roller skates, toy inline skates and toys skateboards	NA
4.28	Percussion caps specifically designed for use in toys	NA
4.29	Acoustic requirements	NA
4.30	Toy scooters	P
4.31	Magnets and magnetic components	NA
4.32	Yo-yo balls	NA
4.33	Straps intended to be worn fully or partially around the neck	NA
4.34	Sledges and toboggans with cords for pulling	NA
4.35	Jaw entrapment in handles and steering wheels	NA
4.36	Assembly	P
4.37	Functional toys	NA
4.38	Toys intended to come into contact with food	NA
4.39	Inflatable toys	NA
Annex B	Safety-labelling guidelines and manufacturer's markings	P
Annex D	Toy gun marking	NA

Abbreviation: P = Pass NA = Not applicable NR = Not Requested

Note :

(For electric toys)

The safety of electric toys also needs to be tested by AS/NZS 62115.



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7 Tracking Label Assessment

As per consumer product safety Act section 14(a) (5), 15 U.S.C. §2063(a)(5) (CPSA) and Consumer Product Safety Improvement Act (CPSIA) 2008 Section 103 Tracking Labels for Children Products.

Tracking label on the packaging: Present

Tracking label on the product: Present

Note: The tracking label assessment was based on the submitted sample and the information provided by the applicant. There was no verification on the validity of such information.

8 Physical and Mechanical Tests

Test standard: ASTM Standard Consumer Safety Specification for Toy Safety F963-23.

The submitted samples were undergone the use and abuse tests in accordance with The Federal Hazardous Substances Act (FHSA), Title 16, Code of Federal Regulations:

Test	FHSA	Parameter
Impact test	Section 1500.51(b)	10 x 4.5 ft
	Section 1500.53(b)	4 x 3.0 ft
Tip over test	---	3 times
Torque test	Section 1500.52(e)	3 in-lbf
	Section 1500.53(e)	4 in-lbf
Tension test	Section 1500.52(f)	15 lbf
	Section 1500.53(f)	15 lbf
Compression test	Section 1500.52(g)	25 lbf
	Section 1500.53(g)	30 lbf

The submitted samples were undergone the tests in accordance with section 8.5 through section 8.16 and 8.20 through 8.30 on normal use, abuse and specific tests for different types of toys whichever is applicable.

Section	Requirement	Result
4.1	Material quality (visual check on cleanliness)	P
4.3.7	Stuffing materials (10X magnification check on contaminations)	NA
4.5	Sound-producing toys	NA
4.6	Small Objects	P
4.7	Accessible edges	P
4.8	Projections	P
4.9	Accessible points	P
4.10	Wires or rods	NA
4.11	Nails and fasteners	P



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Section	Requirement	Result
4.12	Plastic film	NA
4.13	Folding mechanisms and hinges	NA
4.14	Cords, straps, and elastics	NA
4.15	Stability and over-load requirements	P
4.16	Confined spaces	NA
4.17	Wheels, tires and axles	P
4.18	Holes, clearance, and accessibility of mechanisms	P
4.19	Simulated protective devices (such as helmets, hats and goggles)	NA
4.20	Pacifiers	NA
4.21	Projectile toys	NA
4.22	Teethers and teething toys	NA
4.23	Rattles	NA
4.24	Squeeze toys	NA
4.25	Battery-operated toys	NA
4.26	Toys intended to be attached to a crib or playpen	NA
4.27	Stuffed and beanbag-type toys	NA
4.28	Stroller and carriage toys	NA
4.29	Art materials	NA
4.30	Toy gun marking	NA
4.31	Balloons	NA
4.32	Certain toys with nearly spherical ends	NA
4.33	Marbles	NA
4.34	Balls	NA
4.35	Pompoms	NA
4.36	Hemispheric-shaped objects	NA
4.37	Yoyo elastic tether toys	NA
4.38	Magnets	NA
4.39	Jaw entrapment in handles and steering wheels	NA
4.40	Expanding materials	NA
4.41	Toy chests	NA
5	Labelling requirement	P
6	Instructional literature	P
7	Producer's markings	
7.1	Name and Address of producer/distributor	Yes
7.2	Battery-Powered Ride-on Toy	NA
7.3	Toy chests	
7.3.1	Name and address of manufacturer/distributor/seller	NA
7.3.2	Code mark	NA

Abbreviation: P = Pass NA= Not Applicable NR=Not Requested



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9 Toys for Children up to and including 36 Months of Age (Physical Requirement)

Test Standard: AS/NZS ISO 8124-1: 2023 Australian/New Zealand Standard for Safety of Toys

Clause	Testing items	Assessment
10a	Normal Use	P
10b	Reasonably foreseeable abuse	P
10c	(Modified) Small parts (For children up to and including 36 months)	P
10d	(Modified) Squeeze toys, rattles, fasteners and certain other toys and components of toys	NA
10e	(Modified) Small balls	NA
10f	(Modified) Pompoms	NA
10g	(Modified) Pre-school play figures	NA
10h	(Modified) Toy pacifiers	NA
10i	(Modified) Mouth-actuated toys	NA
11(7)	(Modified) Annex A (Age-grading guidelines)	P
12(1)	Modifications to testing standards	
12(2)	(Modified) Test method - General	P
12(3)	(Modified) Small parts test	P
12(4)	(Modified) Washable toys	NA
12(5)	(Modified) Drop test	P
12(6)	(Modified) Compression test	P

Abbreviation: P = Pass

NA = Not applicable

10 Flammability Test

Test requirement: Section 4.2 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-23, the sample was tested according to Annex A5 Flammability Testing Procedure for Solids and Soft Toys.

Result: Ignited but self-extinguished before burn rate could be determined.



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11 Physical and Mechanical Test

Test standard: Canada Consumer Product Safety Act Toys Regulations SOR/2011-17.

The submitted samples were undergone the use and abuse tests in accordance with the Canada Consumer Product Safety Act Toys Regulations (SOR/2011-17):	
<u>Test</u>	<u>Parameter</u>
Drop test	4 x 1.372 m
Pull test	44.5 N
Push test	44.5N

No.	Requirement	Result
3	General - English and French bilingual statement	NA
	Packaging	
4	(a) The opening perimeter is less than 356mm	NA
	(b) The opening perimeter is 356mm or more	NA
	Electrical hazard	
5	Electrically operated toys	NA
6	Electrically heated toys	NA
	Mechanical hazard	
7	Small parts	P
8	Metal edges	P
9	Wire frames	NA
10	Plastic edges	P
11	Wooden surfaces, edges and corners	NA
12	Glass	NA
13	Fasteners	P
14	Folding mechanism, bracket or bracing	NA
15	Spring-wound driving mechanisms	NA
16	Projectile components	NA
17	Toys which a child can enter and which can be closed by a lid or door	NA
18	Stationary toy that is intended to bear the weight of a child	NA
	Auditory hazards	
19	Noise limit	NA
	Thermal hazards	
20	Heated surfaces, parts or substances	P



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No.	Requirement	Result
	Dolls, plush toys and soft toys	
28	Fastenings to attach parts, clothing or ornamentation	NA
29	Stuffing materials	NA
	(a) Clean and free from vermin	NA
	(b) Free from hard and sharp foreign matter	NA
30	Small parts -Squeaker, reed, valve or other similar device	NA
31	Eyes and noses	NA
	Plant seeds	
35	Plant seeds for making noise	NA
36	Plant seeds for stuffing material	NA
37	Shaft-like handle	NA
38	Toy steam engines boilers	NA
40	Rattle	NA
41	Elastics	NA
42	Yo-yo type balls	NA
	(a) Stretchable cords	NA
	(b) Similar product	NA
	Magnetic Toys	
43	Magnetic force	NA
44	(1) Exceptions of 44 (1)(a)	NA
	(1) Exceptions of 44 (1)(b)	NA
	(2) Warning – Container and instructions or use for 44 (1)(b)	NA

Abbreviation: P = Pass NA = Not Applicable NR=Not Requested

Test Report

Number: SZHH0203337801

Tests Conducted

12 EN 71-3:2019+A1:2021 on Migration of Certain Elements

(A) Test Result

With reference to EN 71-3:2019+A1:2021 and followed by Inductively Coupled Plasma Atomic Emission Spectrometry, Inductively Coupled Argon Mass Spectrometry, Ion Chromatography- Inductively Coupled Plasma-Mass Spectrometry, Ion Chromatography with UV-VIS and Gas Chromatographic - Mass Spectrometry.

Category (III): Scraped-off toy material

Element	Result (mg/kg)		Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component			
	(9)	(25)		
Aluminium (Al)	ND	ND	300	28130
Antimony (Sb)	ND	ND	10	560
Arsenic (As)	ND	ND	10	47
Barium (Ba)	79	ND	10	18750
Boron (B)	ND	ND	50	15000
Cadmium (Cd)	ND	ND	5	17
Chromium (III) (Cr(III)) #	ND	ND	10	460
Chromium (VI) (Cr(VI))	ND	ND	0.025	0.053
Cobalt (Co)	ND	ND	10	130
Copper (Cu)	ND	ND	10	7700
Lead (Pb)	ND	ND	10	23
Manganese (Mn)	ND	ND	10	15000
Mercury (Hg)	ND	ND	10	94
Nickel (Ni)	ND	ND	10	930
Selenium (Se)	ND	ND	10	460
Strontium (Sr)	ND	ND	100	56000
Tin (Sn)	ND	ND	2.5	180000
Organic tin **	ND	ND	5	12
Zinc (Zn)	ND	116	100	46000

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(10)to(24),(26)to(53)		
Aluminium (Al)	ND	300	28130
Antimony (Sb)	ND	10	560
Arsenic (As)	ND	10	47
Barium (Ba)	ND	10	18750
Boron (B)	ND	50	15000
Cadmium (Cd)	ND	5	17
Chromium (III) (Cr(III)) #	ND	10	460
Chromium (VI) (Cr(VI))	ND	0.025	0.053
Cobalt (Co)	ND	10	130
Copper (Cu)	ND	10	7700
Lead (Pb)	ND	10	23
Manganese (Mn)	ND	10	15000
Mercury (Hg)	ND	10	94
Nickel (Ni)	ND	10	930
Selenium (Se)	ND	10	460



Test Report

Number: SZHH0203337801

Tests Conducted

Strontium (Sr)	ND	100	56000
Tin (Sn)	ND	2.5	180000
Organic tin **	ND	5	12
Zinc (Zn)	ND	100	46000

Remark : mg/kg = milligram per kilogram

++ = Unless the test results were marked with "Δ", organic tin contents were not directly determined and were derived from migration results of total tin.

- Organic tin test result was expressed as tributyl tin.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

= The reported value of migration of chromium (III) = migration value of total chromium – migration value of chromium (VI).

Δ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of dimethyl tin, methyl tin, butyl tin, dibutyl tin, tributyl tin, tetrabutyl tin, n-octyl tin, di-n-octyl tin, di-n-propyl tin, diphenyl tin and triphenyl tin after converted to tributyl tin by calculation. Other organic tin compounds may also be present in sample as stated in EN 71-3:2019+A1:2021.

Tested component(s): See component list in the last section of this report

(B) Categories of various toy materials

Category I: Dry, brittle, powder like or pliable

Solid toy material from which powder-like material is released during playing and semi-solid materials that may also leave residues on the hands during play. The material can be ingested. Contamination of the hands with the material may contribute to the oral exposure of the material (e.g. the cores of colouring pencils, chalk, crayons, modelling clays and plaster).

Category II: Liquid or sticky

Fluid or viscous toy material, which can be ingested or to which dermal exposure may occur during playing (e.g. liquid paints, finger paints, liquid ink in pens, glue sticks, slimes, bubble solution).

Category III: Scraped-off

Solid toy material with or without a coating, which can be ingested as a result of biting, tooth scraping, sucking or licking (e.g. coatings, lacquers, plastics, paper, textiles, glass, ceramic, metallic, wooden, bone, leather and other materials).



Test Report

Number: SZHH0203337801

Tests Conducted

13 EN 71-3:2019+A2:2024 on Migration of Certain Elements

(A) Test Result

With reference to EN 71-3:2019+A2:2024 and followed by Inductively Coupled Plasma Atomic Emission Spectrometry, Inductively Coupled Argon Mass Spectrometry, Ion Chromatography- Inductively Coupled Plasma-Mass Spectrometry, Ion Chromatography with UV-VIS and Gas Chromatographic - Mass Spectrometry.

Category (III): Scraped-off toy material

Element	Result (mg/kg)		Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component			
	(9)	(25)		
Aluminium (Al)	ND	ND	300	28130
Antimony (Sb)	ND	ND	10	560
Arsenic (As)	ND	ND	10	47
Barium (Ba)	79	ND	10	18750
Boron (B)	ND	ND	50	15000
Cadmium (Cd)	ND	ND	5	17
Chromium (III) (Cr(III)) #	ND	ND	10	460
Chromium (VI) (Cr(VI))	ND	ND	0.025	0.053
Cobalt (Co)	ND	ND	10	130
Copper (Cu)	ND	ND	10	7700
Lead (Pb)	ND	ND	10	23
Manganese (Mn)	ND	ND	10	15000
Mercury (Hg)	ND	ND	10	94
Nickel (Ni)	ND	ND	10	930
Selenium (Se)	ND	ND	10	460
Strontium (Sr)	ND	ND	100	56000
Tin (Sn)	ND	ND	2.5	180000
Organic tin **	ND	ND	5	12
Zinc (Zn)	ND	116	100	46000

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(10)to(24),(26)to(53)		
Aluminium (Al)	ND	300	28130
Antimony (Sb)	ND	10	560
Arsenic (As)	ND	10	47
Barium (Ba)	ND	10	18750
Boron (B)	ND	50	15000
Cadmium (Cd)	ND	5	17
Chromium (III) (Cr(III)) #	ND	10	460
Chromium (VI) (Cr(VI))	ND	0.025	0.053
Cobalt (Co)	ND	10	130
Copper (Cu)	ND	10	7700
Lead (Pb)	ND	10	23
Manganese (Mn)	ND	10	15000
Mercury (Hg)	ND	10	94
Nickel (Ni)	ND	10	930
Selenium (Se)	ND	10	460



Test Report

Number: SZHH0203337801

Tests Conducted

Strontium (Sr)	ND	100	56000
Tin (Sn)	ND	2.5	180000
Organic tin **	ND	5	12
Zinc (Zn)	ND	100	46000

Remark : mg/kg = milligram per kilogram

++ = Unless the test results were marked with "Δ", organic tin contents were not directly determined and were derived from migration results of total tin.

- Organic tin test result was expressed as tributyl tin.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

= The reported value of migration of chromium (III) = migration value of total chromium – migration value of chromium (VI).

Δ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of dimethyl tin, methyl tin, butyl tin, dibutyl tin, tributyl tin, tetrabutyl tin, n-octyl tin, di-n-octyl tin, di-n-propyl tin, diphenyl tin and triphenyl tin after converted to tributyl tin by calculation. Other organic tin compounds may also be present in sample as stated in EN 71-3:2019+A2:2024.

Tested component(s): See component list in the last section of this report

(B) Categories of various toy materials

Category I: Dry, brittle, powder like or pliable

Solid toy material from which powder-like material is released during playing and semi-solid materials that may also leave residues on the hands during play. The material can be ingested. Contamination of the hands with the material may contribute to the oral exposure of the material (e.g. the cores of colouring pencils, chalk, crayons, modelling clays and plaster).

Category II: Liquid or sticky

Fluid or viscous toy material, which can be ingested or to which dermal exposure may occur during playing (e.g. liquid paints, finger paints, liquid ink in pens, glue sticks, slimes, bubble solution).

Category III: Scraped-off

Solid toy material with or without a coating, which can be ingested as a result of biting, tooth scraping, sucking or licking (e.g. coatings, lacquers, plastics, paper, textiles, glass, ceramic, metallic, wooden, bone, leather and other materials).



Test Report

Number: SZHH0203337801

Tests Conducted

14 BS EN 71-3:2019+A2:2024 on Migration of Certain Elements

(A) Test Result

With reference to BS EN 71-3:2019+A2:2024 and followed by Inductively Coupled Plasma Atomic Emission Spectrometry, Inductively Coupled Argon Mass Spectrometry, Ion Chromatography- Inductively Coupled Plasma-Mass Spectrometry, Ion Chromatography with UV-VIS and Gas Chromatographic - Mass Spectrometry.

Category (III): Scraped-off toy material

Element	Result (mg/kg)		Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component			
	(9)	(25)		
Aluminium (Al)	ND	ND	300	28130
Antimony (Sb)	ND	ND	10	560
Arsenic (As)	ND	ND	10	47
Barium (Ba)	79	ND	10	18750
Boron (B)	ND	ND	50	15000
Cadmium (Cd)	ND	ND	5	17
Chromium (III) (Cr(III)) #	ND	ND	10	460
Chromium (VI) (Cr(VI))	ND	ND	0.025	0.053
Cobalt (Co)	ND	ND	10	130
Copper (Cu)	ND	ND	10	7700
Lead (Pb)	ND	ND	10	23
Manganese (Mn)	ND	ND	10	15000
Mercury (Hg)	ND	ND	10	94
Nickel (Ni)	ND	ND	10	930
Selenium (Se)	ND	ND	10	460
Strontium (Sr)	ND	ND	100	56000
Tin (Sn)	ND	ND	2.5	180000
Organic tin **	ND	ND	5	12
Zinc (Zn)	ND	116	100	46000

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(10)to(24),(26)to(53)		
Aluminium (Al)	ND	300	28130
Antimony (Sb)	ND	10	560
Arsenic (As)	ND	10	47
Barium (Ba)	ND	10	18750
Boron (B)	ND	50	15000
Cadmium (Cd)	ND	5	17
Chromium (III) (Cr(III)) #	ND	10	460
Chromium (VI) (Cr(VI))	ND	0.025	0.053
Cobalt (Co)	ND	10	130
Copper (Cu)	ND	10	7700
Lead (Pb)	ND	10	23
Manganese (Mn)	ND	10	15000
Mercury (Hg)	ND	10	94
Nickel (Ni)	ND	10	930
Selenium (Se)	ND	10	460



Test Report

Number: SZHH0203337801

Tests Conducted

Strontium (Sr)	ND	100	56000
Tin (Sn)	ND	2.5	180000
Organic tin **	ND	5	12
Zinc (Zn)	ND	100	46000

Remark : mg/kg = milligram per kilogram

++ = Unless the test results were marked with "Δ", organic tin contents were not directly determined and were derived from migration results of total tin.

- Organic tin test result was expressed as tributyl tin.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

= The reported value of migration of chromium (III) = migration value of total chromium – migration value of chromium (VI).

Δ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of dimethyl tin, methyl tin, butyl tin, dibutyl tin, tributyl tin, tetrabutyl tin, n-octyl tin, di-n-octyl tin, di-n-propyl tin, diphenyl tin and triphenyl tin after converted to tributyl tin by calculation. Other organic tin compounds may also be present in sample as stated in BS EN 71-3:2019+A2:2024.

Tested component(s): See component list in the last section of this report

(B) Categories of various toy materials

Category I: Dry, brittle, powder like or pliable

Solid toy material from which powder-like material is released during playing and semi-solid materials that may also leave residues on the hands during play. The material can be ingested. Contamination of the hands with the material may contribute to the oral exposure of the material (e.g. the cores of colouring pencils, chalk, crayons, modelling clays and plaster).

Category II: Liquid or sticky

Fluid or viscous toy material, which can be ingested or to which dermal exposure may occur during playing (e.g. liquid paints, finger paints, liquid ink in pens, glue sticks, slimes, bubble solution).

Category III: Scraped-off

Solid toy material with or without a coating, which can be ingested as a result of biting, tooth scraping, sucking or licking (e.g. coatings, lacquers, plastics, paper, textiles, glass, ceramic, metallic, wooden, bone, leather and other materials).



Test Report

Number: SZHH0203337801

Tests Conducted

15 Toxic Elements Analysis (General) (Australia Consumer Protection Notice No. 1 of 2009)

With reference to AS/NZS ISO 8124.3:2003, acid extraction method was used and toxic elements content were determined by Inductively Coupled Plasma - Optical Emission Spectrometry (ICP-OES).

Element	Result (mg/kg)	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(9)		
Sol. Barium (Ba)	55	5	1000
Sol. Lead (Pb)	ND	5	90
Sol. Cadmium (Cd)	ND	5	75
Sol. Antimony (Sb)	ND	5	60
Sol. Selenium (Se)	ND	5	500
Sol. Chromium (Cr)	ND	5	60
Sol. Mercury (Hg)	ND	5	60
Sol. Arsenic (As)	ND	2.5	25

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(10)to(53)		
Sol. Barium (Ba)	ND	5	1000
Sol. Lead (Pb)	ND	5	90
Sol. Cadmium (Cd)	ND	5	75
Sol. Antimony (Sb)	ND	5	60
Sol. Selenium (Se)	ND	5	500
Sol. Chromium (Cr)	ND	5	60
Sol. Mercury (Hg)	ND	5	60
Sol. Arsenic (As)	ND	2.5	25

Sol. = Soluble

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

16 Total Lead (Pb) Content (CCPSA SOR/2016-193 and Amendment SOR/2022-122)

As per Method C-02.2.2 published in Health Canada Product safety reference manual Book 5 - Laboratory Policies and Procedures Part B: Test Methods Section, acid digestion method was used and determined by Inductively Coupled Argon Plasma Spectrometry.

Element	Result (mg/kg)	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(1+2)		
Lead (Pb)	14	10	90

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(3),(4+5),(6+7),(8)to(11),(29)		
Lead (Pb)	ND	10	90



Test Report

Number: SZHH0203337801

Tests Conducted

The above limit was quoted according to Canada Consumer Product Safety Act Surface Coating Materials Regulations SOR/2016-193 and Amendment SOR/2022-122 for prohibition on Lead in stickers, films or surface coating materials.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

17 Toxic Elements Analysis (CCPSA SOR/2011-17 and Amendment SOR/2022-122)

With reference to Method C-02.2.1, C-07 published in Health Canada Product safety reference manual Book 5 - Laboratory Policies and Procedures Part B: Test Methods Section, acid digestion method was used and toxic elements content were determined by Inductively Coupled Plasma-mass Spectrometry.

Element	Result	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested component		
	(1+2)		
Tot. Lead (Pb)	14	10	90
Tot. Mercury (Hg)	ND	0.047	10

Element	Result θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested component		
	(3),(4+5),(6+7),(8)to(11),(29)		
Tot. Lead (Pb)	ND	10	90
Tot. Mercury (Hg)	ND	0.047	10

With reference to Section 8.3.2 to 8.3.5 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-23, extraction method was used and toxic elements content were determined by Inductively Coupled Argon Plasma Spectrometry.

Element	Result	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested component		
	(9)		
Sol. Cadmium (Cd)	ND	5	1000
Sol. Antimony (Sb)	ND	5	1000
Sol. Selenium (Se)	ND	5	1000
Sol. Arsenic (As)	ND	2.5	1000
Sol. Barium (Ba)	55	5	1000

Element	Result θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested component		
	(10),(11),(29)		
Sol. Cadmium (Cd)	ND	5	1000
Sol. Antimony (Sb)	ND	5	1000
Sol. Selenium (Se)	ND	5	1000
Sol. Arsenic (As)	ND	2.5	1000
Sol. Barium (Ba)	ND	5	1000

The above limit was quoted according to Canada Consumer Product Safety Act Toys Regulations SOR/2011-17 and Amendment SOR/2022-122 Section 23 for prohibition on toxic elements in stickers, films and surface coating materials.



Test Report

Number: SZHH0203337801

Tests Conducted

Tot. = Total
Sol. = Soluble
ND = Not detected (less than detection limit)
θ = Single result for each test component/group

Tested Component(s): See component list in the last section of this report

18 Total Lead (Pb) content (CCPSA SOR/2018-83)

As per Method C-02.2.2, C-02.3.2, C-02.4.1, published in Health Canada Product safety reference manual Book 5 - Laboratory Policies and Procedures Part B: Test Methods Section, acid digestion was used and Total Lead content was determined by Inductively Coupled Argon Plasma Spectrometry.

Element	Result (mg/kg)			Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component				
	(1+2)	(49)	(50)		
Lead (Pb)	14	46	44	10	90

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(3),(4+5),(6+7),(8)to(11),(12+13),(14+15),(16),(17+18),(19+20),(21+22+23),(24+25+26),(27)to(29),(30+31+32),(33+34+35),(36+37+38),(39+40+41),(42+43+44),(45+46+47),(48),(51+52),(53)to(83)		
Lead (Pb)	ND	10	90

The above limit was quoted according to Canada Consumer Products Containing Lead Regulations SOR/2018-83.

ND = Not detected (less than detection limit)
θ = Single result for each test component/group

Tested Components: See component list in the last section of this report

19 Total Lead (Pb) Content

With reference to IEC 62321-5:2013, acid digestion was used and total Lead content was determined by Inductively Coupled Argon Plasma Spectrometry.

Element	Result (%)			Detection Limit (%)	Limit (%)
	Tested Component				
	(1+2)	(49)	(50)		
Lead (Pb)	0.001	0.005	0.004	0.001	0.05

Element	Result (%) θ	Detection Limit (%)	Limit (%)
	Tested Component		
	(3),(4+5),(6+7),(8)to(11),(12+13),(14+15),(16),(17+18), (19+20),(21+22+23),(24+25+26),(27)to(29), (30+31+32),(33+34+35),(36+37+38),(39+40+41), (42+43+44),(45+46+47),(48),(51+52),(53)to(83)		
Lead (Pb)	ND	0.001	0.05



Test Report

Number: SZHH0203337801

Tests Conducted

The limit was quoted according to Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Amendment (EC) No 552/2009, (EU) No 836/2012, (EU) 2015/628, Annex XVII Entry 63 & The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019 No. 758) as amended, on total lead in jewellery articles and articles which may be placed in the mouth by children during normal or reasonably foreseeable conditions of use.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested Component(s): See component list in the last section of this report

20 Total Lead (Pb) Content (EU REACH Annex XVII Entry 63)

With reference to IEC 62321-5:2013, acid digestion was used and total Lead content was determined by Inductively Coupled Argon Plasma Spectrometry.

For jewellery articles, and for articles which may be placed in the mouth by children during normal or reasonably foreseeable conditions of use:

Element	Result (%)			Detection Limit (%)	Limit (%)
	Tested Component				
	(1+2)	(49)	(50)		
Lead (Pb)	0.001	0.005	0.004	0.001	0.05

Element	Result (%) θ	Detection Limit (%)	Limit (%)
	Tested Component		
	(3),(4+5),(6+7),(8)to(11),(12+13),(14+15),(16),(17+18),(19+20),(21+22+23),(24+25+26),(27)to(29),(30+31+32),(33+34+35),(36+37+38),(39+40+41),(42+43+44),(45+46+47),(48),(51+52),(53)to(83)		
Lead (Pb)	ND	0.001	0.05

The limit was quoted according to Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Amendment (EC) No 552/2009, (EU) No 836/2012, (EU) 2015/628, (EU) 2023/923, Annex XVII Entry 63 on total lead in jewellery articles and articles which may be placed in the mouth by children during normal or reasonably foreseeable conditions of use.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested component (s): See component list in the last section of this report



Test Report

Number: SZHH0203337801

Tests Conducted

21 Toxic Elements Analysis (Any Toy Material Except Modelling Clay and Putty, Finger Paint and Slime)
(AS/NZS ISO 8124.3:2021+Amd 1:2023)

With reference to AS/NZS ISO 8124.3:2021+Amd 1:2023, acid extraction method was used and toxic elements content were determined by Inductively Coupled Plasma - Optical Emission Spectrometry.

Element	Result (mg/kg)	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(9)		
Sol. Barium (Ba)	55	5	1000
Sol. Lead (Pb)	ND	5	90
Sol. Cadmium (Cd)	ND	5	75
Sol. Antimony (Sb)	ND	5	60
Sol. Selenium (Se)	ND	5	500
Sol. Chromium (Cr)	ND	5	60
Sol. Mercury (Hg)	ND	5	60
Sol. Arsenic (As)	ND	2.5	25

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(10)to(53)		
Sol. Barium (Ba)	ND	5	1000
Sol. Lead (Pb)	ND	5	90
Sol. Cadmium (Cd)	ND	5	75
Sol. Antimony (Sb)	ND	5	60
Sol. Selenium (Se)	ND	5	500
Sol. Chromium (Cr)	ND	5	60
Sol. Mercury (Hg)	ND	5	60
Sol. Arsenic (As)	ND	2.5	25

ND = Not detected (less than detection limit)

Sol. = Soluble

θ = Single result for each test component/group

Tested components: See component list in the last section of this report

22 Total Lead (Pb) Content in Substrate (U.S. CPSIA Section 101(15 USC 1278a))

As per Standard Operating Procedures for Determining total Lead (Pb) in children's products, test methods CPSC-CH-E1002-08.3 and/or CPSC-CH-E1001-08.3 were used and total Lead content was determined by Inductively Coupled Plasma - Optical Emission Spectrometry and/or Atomic Absorption Spectrometry.

Element	Result (mg/kg)		Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component			
	(49)	(50)		
Lead (Pb)	46	44	10	100



Test Report

Number: SZHH0203337801

Tests Conducted

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(11),(12+13),(14+15),(16),(17+18),(19+20),(21+22+23),(24+25+26),(27)to(29),(30+31+32),(33+34+35),(36+37+38),(39+40+41),(42+43+44),(45+46+47),(48),(51+52),(53)to(83)		
Lead (Pb)	ND	10	100

The above limit was quoted according to U.S. Consumer Product Safety Improvement Act 2008 Title I, Section 101(15 USC 1278a) for total Lead content in substrate.

ppm = parts per million = mg/kg

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested components: See component list in the last section of this report

23 Total Lead (Pb) Content in Surface Coating (U.S. 16 CFR Part 1303 and CPSIA Section 101(15 USC 1278a))

As per Standard Operating Procedure for Determining Lead (Pb) in paint and other similar surface coatings, test method CPSC-CH-E1003-09.1 was used and total Lead content was determined by Inductively Coupled Plasma - Optical Emission Spectrometry.

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(1+2)		
Lead (Pb)	14	10	90

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(3),(4+5),(6+7),(8)to(10)		
Lead (Pb)	ND	10	90

The above limit was quoted according to U.S. 16 CFR Part 1303 and U.S. Consumer Product Safety Improvement Act 2008 Title I, Section 101(15 USC 1278a) for total Lead content in surface coating.

ppm = parts per million = mg/kg

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report



Test Report

Number: SZHH0203337801

Tests Conducted

24 Cadmium (Cd) Content (EU REACH Annex XVII Entry 23)

With reference to IEC 62321-5:2013, acid digestion method was used and total Cadmium content was determined by Inductively Coupled Argon Plasma Spectrometry.

Element	Result (%) θ	Detection Limit (%)
	Tested Component	
	(1+2),(3),(4+5),(6+7),(8)to(11),(12+13),(14+15),(16),(17+18),(19+20),(21+22+23),(24+25+26),(27)to(29),(30+31+32),(33+34+35),(36+37+38),(39+40+41),(42+43+44),(45+46+47),(48)to(50),(51+52),(53),(84+85+86),(87+88+89),(94+95+96)	
Cadmium (Cd)	ND	0.0005

Limit:

Category	Limit (%)
Wet paint	0.01
Surface coating	0.1
Plastic	0.01
Metal parts of jewellery and hair accessories	0.01

The limit was quoted according to EU Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Amendment (EC) No 552/2009, (EU) No 494/2011, (EU) No 835/2012 and (EU) 2016/217, Annex XVII Entry 23 on Cadmium Content.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

25 Heavy Elements Analysis (Except modelling clay) (U.S. ASTM F963-23)

As per Section 4.3.5 and Section 8.3.2 to 8.3.5 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-23, heavy elements migration content were determined by Inductively Coupled Plasma - Optical Emission Spectrometry.

Element	Result (ppm)	Detection Limit (ppm)	Limit (ppm)
	Tested component		
	(9)		
Sol. Barium (Ba)	55	5	1000
Sol. Lead (Pb)	ND	5	90
Sol. Cadmium (Cd)	ND	5	75
Sol. Antimony (Sb)	ND	5	60
Sol. Selenium (Se)	ND	5	500
Sol. Chromium (Cr)	ND	5	60
Sol. Mercury (Hg)	ND	5	60
Sol. Arsenic (As)	ND	2.5	25



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Element	Result (ppm) θ	Detection Limit (ppm)	Limit (ppm)
	Tested component		
	(10)to(52)		
Sol. Barium (Ba)	ND	5	1000
Sol. Lead (Pb)	ND	5	90
Sol. Cadmium (Cd)	ND	5	75
Sol. Antimony (Sb)	ND	5	60
Sol. Selenium (Se)	ND	5	500
Sol. Chromium (Cr)	ND	5	60
Sol. Mercury (Hg)	ND	5	60
Sol. Arsenic (As)	ND	2.5	25

Sol. = Soluble

ppm = part per million = mg/kg

ND = Not detected (less than detection limit)

 θ = Single result for each test component/group

Tested Components: See component list in the last section of this report

26 Total Lead (Pb) Content in Substrate (U.S. ASTM F963-23 Section 4.3.5.2)

With reference to Section 4.3.5 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-23, test method CPSC-CH-E1001-08.3 or/and CPSC-CH-E1002-08.3 were used and total Lead content was determined by Inductively Coupled Plasma - Optical Emission Spectrometry and/or Atomic Absorption Spectrometry.

Element	Result (ppm)		Detection Limit (ppm)	Limit (ppm)
	Tested Component			
	(49)	(50)		
Lead (Pb)	46	44	10	100

Element	Result (ppm) θ	Detection Limit (ppm)	Limit (ppm)
	Tested Component		
	(11),(12+13),(14+15),(16),(17+18),(19+20),(21+22+23), (24+25+26),(27)to(29),(30+31+32),(33+34+35),(36+37+38), (39+40+41),(42+43+44),(45+46+47), (48),(51+52),(53)to(83)		
	ND		
Lead (Pb)		10	100

ppm = part per million = mg/kg

ND = Not detected (less than detection limit)

 θ = Single result for each test component/group

Tested Components: See component list in the last section of this report



Test Report

Number: SZHH0203337801

Tests Conducted

27 Organotin Content Screening

By acid digestion and determined by Inductively Coupled Argon Plasma Spectrometry.

Test Item	Result (%)	Detection Limit (%)	Limit (%)
	Tested Component		
	(9)		
Tin (Sn)	0.016	0.005	0.1

Test Item	Result (%) θ	Detection Limit (%)	Limit (%)
	Tested Component		
	(1+2),(3),(4+5),(6+7),(8),(10),(11), (12+13),(14+15),(16),(17+18), (19+20),(21+22+23),(24+25+26), (27)to(29),(30+31+32),(33+34+35), (36+37+38),(39+40+41), (42+43+44),(45+46+47), (48)to(50),(51+52),(53), (84+85+86),(87+88+89)		
Tin (Sn)	ND	0.005	0.1

The limit was quoted according to Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Amendment (EC) No 552/2009 and (EU) No 276/2010, Annex XVII Entry 20 & The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019 No. 758) as amended, on Organotin Content.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested components: See component list in the last section of this report

28 Total Lead (Pb) Content in Surface Coating (U.S. ASTM F963-23 Section 4.3.5.1)

With reference to Section 4.3.5 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-23, test method CPSC-CH-E1003-09.1 was used and total Lead content was determined by Inductively Coupled Plasma - Optical Emission Spectrometry.

Element	Result (ppm)	Detection Limit (ppm)	Limit (ppm)
	Tested Component		
	(1+2)		
Lead (Pb)	14	10	90

Element	Result (ppm) θ	Detection Limit (ppm)	Limit (ppm)
	Tested Component		
	(3),(4+5),(6+7),(8)to(10)		
Lead (Pb)	ND	10	90



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Tests Conducted

ppm = part per million = mg/kg

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested Components: See component list in the last section of this report

29 Organotin Content Screening

By acid digestion and determined by Inductively Coupled Argon Plasma Spectrometry.

Test Item	Result (%)	Detection Limit (%)	Limit (%)
	Tested Component		
	(9)		
Tin (Sn)	0.016	0.005	0.1

Test Item	Result (%) θ	Detection Limit (%)	Limit (%)
	Tested Component		
	(1+2),(3),(4+5),(6+7),(8),(10),(11), (12+13),(14+15),(16),(17+18), (19+20),(21+22+23),(24+25+26), (27)to(29),(30+31+32),(33+34+35), (36+37+38),(39+40+41), (42+43+44),(45+46+47), (48)to(50),(51+52), (53),(84+85+86),(87+88+89)		
Tin (Sn)	ND	0.005	0.1

The limit was quoted according to Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Amendment (EC) No 552/2009 and (EU) No 276/2010, Annex XVII Entry 20 on Organotin Content.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested components: See component list in the last section of this report

30 Cadmium (Cd) Content (UK REACH Annex XVII Entry 23)

With reference to IEC 62321-5:2013, acid digestion method was used and total Cadmium content was determined by Inductively Coupled Argon Plasma Spectrometry.

Element	Result (%) θ	Detection Limit (%)
	Tested Component	
	(1+2),(3),(4+5),(6+7),(8)to(11),(12+13),(14+15),(16),(17+18), (19+20),(21+22+23),(24+25+26),(27)to(29),(30+31+32),(33+34+35), (36+37+38),(39+40+41),(42+43+44),(45+46+47),(48)to(50), (51+52),(53),(84+85+86),(87+88+89),(94+95+96)	
Cadmium (Cd)	ND	0.0005

Limit:

Category	Limit (%)
Wet paint	0.01
Surface coating	0.1
Plastic	0.01



Test Report

Number: SZHH0203337801

Tests Conducted

Metal parts of jewellery and hair accessories	0.01
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The limit was quoted according to Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Amendment (EC) No 552/2009, (EU) No 494/2011, (EU) No 835/2012 and (EU) 2016/217, Annex XVII Entry 23 & The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019 No. 758) as amended, on Cadmium Content.

ND = Not detected (less than detection limit)
θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

31 Total Lead Content (California Proposition 65 – Toys)

With reference to CPSC-CH-E1002-08.3 and/or CPSC-CH-E1001.08.3 and/or CPSC-CH-E1003-09.1 and followed by Inductively Coupled Argon Plasma Spectrometry.

Element	Result (mg/kg)	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(1+2)		
Lead (Pb)	14	10	90

Element	Result (mg/kg)		Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component			
	(49)	(50)		
Lead (Pb)	46	44	10	100

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(3),(4+5),(6+7),(8)to(10)		
Lead (Pb)	ND	10	90

Element	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(11),(12+13),(14+15),(16),(17+18),(19+20),(21+22+23), (24+25+26),(27)to(29),(30+31+32),(33+34+35),(36+37+38), (39+40+41),(42+43+44),(45+46+47),(48),(51+52),(53)to(83)		
Lead (Pb)	ND	10	100

The above limit was quoted from the Consent Judgment No. RG-356892 settled by superior court of the State of California for the county of Alameda, for Toys based on the California Proposition 65.

ND = Not detected (less than detection limit)
θ = Single result for each test component/group

Tested Component(s): See component list in the last section of this report



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Number: SZHH0203337801

Tests Conducted

32 N-Nitrosamines and N-Nitrosatable Substances in Elastomers (UK Toy Designated Standard EN 71-12:2016)

With reference to EN 71-12:2016, and followed by Liquid Chromatographic / Tandem Mass Spectrometer (LC/MS/MS) analysis.

Elastomer toys (components) that are (1) intended for use by children under 36 months but not intended nor likely to be placed into the mouth, or (2) intended for use by children of 36 months and over and intended to be placed into the mouth, or (3) balloons:

Test Item	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(17)to(20)		
N-Nitrosamines	ND	0.02	0.05
N-Nitrosatable substances	ND	0.05	1

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

N-Nitrosamines tested are N-nitrosodiethanolamine (NDELA), N-Nitrosodimethylamine (NDMA), N-nitrosodiethylamine (NDEA), N-nitrosodipropylamine (NDPA), N-nitrosodiisopropylamine (NDiPA), N-nitrosodibutylamine (NDBA), N-nitrosodiisobutylamine (NDiBA), N-nitrosodiisononylamine (NDiNA), N-nitrosomorpholine (NMOR), N-nitrosopiperidine (NPIP), N-nitrosodibenzylamine (NDBzA), N-nitroso-N-methyl-N-phenylamine (NMPHA), N-nitroso-N-ethyl-N-phenylamine (NEPhA).

Tested component(s): See component list in the last section of this report

33 N-Nitrosamines and N-Nitrosatable Substances in Elastomers (UK Toys (Safety) Regulations 2011 (S.I. 2011 No. 1881))

With reference to EN 71-12:2016, and followed by Liquid Chromatographic / Tandem Mass Spectrometer (LC/MS/MS) analysis.

Elastomer toys (components) that are (1) intended for use by children under 36 months but not intended nor likely to be placed into the mouth, or (2) intended for use by children of 36 months and over and intended to be placed into the mouth, or (3) balloons:

Test Item	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(17)to(20)		
N-Nitrosamines	ND	0.02	0.05
N-Nitrosatable substances	ND	0.05	1

The limit was quoted according to The Toys (Safety) Regulations 2011 (S.I. 2011 No. 1881), Schedule 2, Part 3, Point 8 on N-Nitrosamines and N-Nitrosatable Substances.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group



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Number: SZHH0203337801

Tests Conducted

N-Nitrosamines tested are N-nitrosodiethanolamine (NDELA), N-Nitrosodimethylamine (NDMA), N-nitrosodiethylamine (NDEA), N-nitrosodipropylamine (NDPA), N-nitrosodiisopropylamine (NDiPA), N-nitrosodibutylamine (NDBA), N-nitrosodiisobutylamine (NDiBA), N-nitrosodiisononylamine (NDiNA), N-nitrosomorpholine (NMOR), N-nitrosopiperidine (NPIP), N-nitrosodibenzylamine (NDBZA), N-nitroso-N-methyl-N-phenylamine (NMPHA), N-nitroso-N-ethyl-N-phenylamine (NEPHA).

Tested component(s): See component list in the last section of this report

34 N-Nitrosamines and N-Nitrosatable Substances in Elastomers (EU Toy Harmonised Standard EN 71-12:2016)

With reference to EN 71-12:2016, and followed by Liquid Chromatographic / Tandem Mass Spectrometer (LC/MS/MS) analysis.

Elastomer toys (components) that are (1) intended for use by children under 36 months but not intended nor likely to be placed into the mouth, or (2) intended for use by children of 36 months and over and intended to be placed into the mouth, or (3) balloons:

Test Item	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(17)to(20)		
N-Nitrosamines	ND	0.02	0.05
N-Nitrosatable substances	ND	0.05	1

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

N-Nitrosamines tested are N-nitrosodiethanolamine (NDELA), N-Nitrosodimethylamine (NDMA), N-nitrosodiethylamine (NDEA), N-nitrosodipropylamine (NDPA), N-nitrosodiisopropylamine (NDiPA), N-nitrosodibutylamine (NDBA), N-nitrosodiisobutylamine (NDiBA), N-nitrosodiisononylamine (NDiNA), N-nitrosomorpholine (NMOR), N-nitrosopiperidine (NPIP), N-nitrosodibenzylamine (NDBZA), N-nitroso-N-methyl-N-phenylamine (NMPHA), N-nitroso-N-ethyl-N-phenylamine (NEPHA).

Tested component(s): See component list in the last section of this report

35 N-Nitrosamines and N-Nitrosatable Substances in Elastomers (EU Toy Safety Directive 2009/48/EC)

With reference to EN 71-12:2016, and followed by Liquid Chromatographic / Tandem Mass Spectrometer (LC/MS/MS) analysis.

Elastomer toys (components) that are (1) intended for use by children under 36 months but not intended nor likely to be placed into the mouth, or (2) intended for use by children of 36 months and over and intended to be placed into the mouth, or (3) balloons:

Test Item	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(17)to(20)		
N-Nitrosamines	ND	0.02	0.05
N-Nitrosatable substances	ND	0.05	1



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Tests Conducted

The limit was quoted according to Directive 2009/48/EC on the safety of toys, Annex II, Part III, Point 8 on N-Nitrosamines and N-Nitrosatable Substances.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

N-Nitrosamines tested are N-nitrosodiethanolamine (NDELA), N-Nitrosodimethylamine (NDMA), N-nitrosodiethylamine (NDEA), N-nitrosodipropylamine (NDPA), N-nitrosodiisopropylamine (NDiPA), N-nitrosodibutylamine (NDBA), N-nitrosodiisobutylamine (NDiBA), N-nitrosodiisononylamine (NDiNA), N-nitrosomorpholine (NMOR), N-nitrosopiperidine (NPIP), N-nitrosodibenzylamine (NDBzA), N-nitroso-N-methyl-N-phenylamine (NMPPhA), N-nitroso-N-ethyl-N-phenylamine (NEPhA).

Tested component(s): See component list in the last section of this report

36 UK The Toys (Safety) Regulations 2011 (S.I. 2011 No. 1881) and its Amendment(s) including S.I. 2019 No. 696 Schedule 2 Appendix C on Phenol

With reference to EN 71-10:2005 and EN 71-11:2005.

Phenol migration from polymeric materials

Test Item	CAS No.	Result (mg/L)	Detection Limit (mg/L)	Limit (mg/L)
		Tested Component (11)to(53)		
Phenol	108-95-2	ND	1	5

The limit was quoted according to UK The Toys (Safety) Regulations 2011 (S.I. 2011 No. 1881) and its Amendment(s) including S.I. 2019 No. 696 Schedule 2 Appendix C on Phenol.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

37 EU Toy Safety Directive 2009/48/EC and its Amendment(s) including (EU) 2017/774 Annex II Appendix C on Phenol

With reference to EN 71-10:2005 and EN 71-11:2005.

Phenol migration from polymeric materials

Test Item	CAS No.	Result (mg/L) θ	Detection Limit (mg/L)	Limit (mg/L)
		Tested Component (11)to(53)		
Phenol	108-95-2	ND	1	5

The limit was quoted according to EU Toy Safety Directive 2009/48/EC and its Amendment(s) including (EU) 2017/774 Annex II Appendix C on Phenol.



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Tests Conducted

ND = Not detected (less than detection limit)
 θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

38 Phthalate Content (California Proposition 65 – Toys)

With reference to CPSC-CH-C1001-09.4 and followed by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

Test item	Result (%) θ	Detection Limit (%)	Limit (%)
	Tested component		
	(1+2),(3),(4+5),(6+7),(8)to(11), (12+13),(14+15),(16),(17+18), (19+20),(21+22+23),(24+25+26), (27)to(29),(30+31+32),(33+34+35), (36+37+38),(39+40+41),(42+43+44), (45+46+47),(48),(49+50),(51+52),(53)		
Dibutyl phthalate (DBP)	ND	0.01	0.1
Di-(2-ethyl hexyl) phthalate (DEHP)	ND	0.01	0.1
Benzyl butyl phthalate (BBP)	ND	0.01	0.1
Di-iso-decyl phthalate (DIDP)	ND	0.01	0.1
Di-n-hexyl phthalate (DnHP)	ND	0.01	0.1

The above limit was quoted from the Consent Judgment No. BG-350969 settled by superior court of the state of California for the county of Alameda, for Toys based on the California Proposition 65.

ND = Not detected (less than detection limit)
 θ = Single result for each test component/group

Tested Component(s): See component list in the last section of this report

39 Phthalate Content (U.S. CPSIA Section 108(a) & (b)(3) and U.S. 16 CFR Part 1307)

As per CPSC-CH-C1001-09.4, by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

Test item	CAS No.	Result (%) θ	Detection limit (%)	Limit (%)
		Tested component		
		(1+2),(3),(4+5),(6+7), (8)to(11),(12+13), (14+15),(16),(17+18), (19+20),(21+22+23), (24+25+26),(27)to(29), (30+31+32),(33+34+35), (36+37+38),(39+40+41), (42+43+44),(45+46+47), (48),(49+50), (51+52),(53)		
Dibutyl phthalate (DBP)	84-74-2	ND	0.01	0.1
Di-(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ND	0.01	0.1
Benzyl butyl phthalate (BBP)	85-68-7	ND	0.01	0.1
Di-iso-nonyl phthalate (DINP)	28553-12-0/ 68515-48-0	ND	0.01	0.1
Diisobutyl phthalate (DIBP)	84-69-5	ND	0.01	0.1



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Tests Conducted

Di-n-pentyl Phthalate (DPENP)	131-18-0	ND	0.01	0.1
Di-n-hexyl Phthalate (DHEXP)	84-75-3	ND	0.01	0.1
Dicyclohexyl Phthalate (DCHP)	84-61-7	ND	0.01	0.1

The above limit was quoted according to U.S. Consumer Product Safety Improvement Act 2008 Title I, Sec 108(a) & (b)(3) and U.S. 16 CFR Part 1307 for Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates.

ND = Not detected (less than detection limit)
θ = Single result for each test component/group

Tested Components: See component list in the last section of this report

40 Phthalate Content (U.S. ASTM F963-23 Section 4.3.8)

As per Section 4.3.8 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-23, test method CPSC-CH-C1001-09.4 was used and followed by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

Test item	CAS No.	Result (%)θ	Detection limit (%)	Limit (%)
		Tested component (1+2),(3),(4+5),(6+7), (8)to(11),(12+13), (14+15),(16),(17+18), (19+20),(21+22+23), (24+25+26),(27)to(29), (30+31+32),(33+34+35), (36+37+38),(39+40+41), (42+43+44),(45+46+47), (48),(49+50), (51+52),(53)		
Dibutyl phthalate (DBP)	84-74-2	ND	0.01	0.1
Di-(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ND	0.01	0.1
Benzyl butyl phthalate (BBP)	85-68-7	ND	0.01	0.1
Di-iso-nonyl phthalate (DINP)	28553-12-0/ 68515-48-0	ND	0.01	0.1
Diisobutyl phthalate (DIBP)	84-69-5	ND	0.01	0.1
Di-n-pentyl Phthalate (DPENP)	131-18-0	ND	0.01	0.1
Di-n-hexyl Phthalate (DHEXP)	84-75-3	ND	0.01	0.1
Dicyclohexyl Phthalate (DCHP)	84-61-7	ND	0.01	0.1

ND = Not detected (less than detection limit)
θ = Single result for each test component/group

Tested Components: See component list in the last section of this report



Test Report

Number: SZHH0203337801

Tests Conducted

41 Phthalates Content (UK REACH Annex XVII Entry 51 & 52)

With reference to ISO 8124-6:2023, and phthalates content was determined by Gas Chromatographic-Mass Spectrometric (GC-MS).

For 4 phthalates

Test Item	CAS No.	Result (%) θ	Detection Limit (%)	Limit (%)
		Tested Component		
		(84+85+86),(87+88+89)		
Dibutyl phthalate (DBP)	84-74-2	ND	0.005	--
Di-(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ND	0.005	--
Benzyl butyl phthalate (BBP)	85-68-7	ND	0.005	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	0.005	--
Sum of DBP, DEHP, BBP and DIBP	--	ND	--	0.1

For 7 phthalates

Test Item	CAS No.	Result (%) θ	Detection Limit (%)	Limit (%)
		Tested Component		
		(1+2),(3),(4+5),(6+7),(8)to(11),(12+13),(14+15),(16),(17+18),(19+20),(21+22+23),(24+25+26),(27)to(29),(30+31+32),(33+34+35),(36+37+38),(39+40+41),(42+43+44),(45+46+47),(48),(49+50),(51+52),(53)		
Dibutyl phthalate (DBP)	84-74-2	ND	0.005	--
Di-(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ND	0.005	--
Benzyl butyl phthalate (BBP)	85-68-7	ND	0.005	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	0.005	--
Sum of DBP, DEHP, BBP and DIBP	--	ND	--	0.1
Di-iso-nonyl phthalate (DINP)	28553-12-0	ND	0.005	--
Di-n-octyl phthalate(DNOP)	117-84-0	ND	0.005	--
Di-iso-decyl phthalate (DIDP)	26761-40-0	ND	0.005	--
Sum of DINP, DNOP and DIDP	--	ND	--	0.1

The limit was quoted according to Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Amendment (EC) No 552/2009 and (EU) 2018/2005, Annex XVII Entry 51 & 52 & The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019 No. 758) as amended, on Phthalates content.



Test Report

Number: SZHH0203337801

Tests Conducted

ND = Not detected (less than detection limit)
θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

42 Phthalates Content (EU REACH Annex XVII Entry 51 & 52)

With reference to ISO 8124-6:2023, and phthalates content was determined by Gas Chromatographic-Mass Spectrometric (GC-MS).

For 4 phthalates

Test Item	CAS No.	Result (%) θ	Detection Limit (%)	Limit (%)
		Tested Component		
		(84+85+86),(87+88+89)		
Dibutyl phthalate (DBP)	84-74-2	ND	0.005	--
Di-(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ND	0.005	--
Benzyl butyl phthalate (BBP)	85-68-7	ND	0.005	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	0.005	--
Sum of DBP, DEHP, BBP and DIBP	--	ND	--	0.1

For 7 phthalates

Test Item	CAS No.	Result (%) θ	Detection Limit (%)	Limit (%)
		Tested Component		
		(1+2),(3),(4+5),(6+7),(8)to(11),(12+13),(14+15),(16),(17+18),(19+20),(21+22+23),(24+25+26),(27)to(29),(30+31+32),(33+34+35),(36+37+38),(39+40+41),(42+43+44),(45+46+47),(48),(49+50),(51+52),(53)		
Dibutyl phthalate (DBP)	84-74-2	ND	0.005	--
Di-(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ND	0.005	--
Benzyl butyl phthalate (BBP)	85-68-7	ND	0.005	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	0.005	--
Sum of DBP, DEHP, BBP and DIBP	--	ND	--	0.1
Di-iso-nonyl phthalate (DINP)	28553-12-0	ND	0.005	--
Di-n-octyl phthalate(DNOP)	117-84-0	ND	0.005	--
Di-iso-decyl phthalate (DIDP)	26761-40-0	ND	0.005	--
Sum of DINP, DNOP and DIDP	--	ND	--	0.1

The limit was quoted according to EU Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Amendment (EC) No 552/2009 and (EU) 2018/2005, Annex XVII Entry 51 & 52 on Phthalates content.



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ND = Not detected (less than detection limit)
 θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

43 TCEP, TCPP and TDCP Content

By solvent extraction, followed by Gas Chromatography Mass Spectrometry (GC-MS) analysis.

Test Item	CAS No.	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
		Tested Component (11),(12+13),(14+15), (16),(17+18),(19+20), (21+22+23), (24+25+26),(27)to(29), (30+31),(33+34+35), (36+37+38), (39+40+41), (42+43+44), (45+46+47),(48),(49), (51+52),(53),(90+91)		
Tris(2-chloroethyl)phosphate (TCEP)	115-96-8	ND	1	5
Tris(1-Chloro-2-propyl) phosphate (TCPP)	13674-84-5	ND	1	5
Tris(1,3-Dichloro-2-Propyl)Phosphate (TDCP)	13674-87-8	ND	1	5

The limits were quoted according to Directive 2009/48/EC on the safety of toys and Amendment Directive 2014/79/EU, Annex II, Appendix C on TCEP, TCPP and TDCP Content.

ND = Not detected (less than detection limit)
 θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

44 TCEP, TCPP and TDCP Content

By solvent extraction, followed by Gas Chromatography Mass Spectrometry (GC-MS) analysis.

Test Item	CAS No.	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
		Tested Component (11),(12+13),(14+15), (16),(17+18),(19+20), (21+22+23), (24+25+26),(27)to(29), (30+31),(33+34+35), (36+37+38), (39+40+41), (42+43+44), (45+46+47),(48),(49), (51+52),(53),(90+91)		
Tris(2-chloroethyl)phosphate (TCEP)	115-96-8	ND	1	5
Tris(1-Chloro-2-propyl) phosphate (TCPP)	13674-84-5	ND	1	5



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Tris(1,3-Dichloro-2-Propyl)Phosphate (TDCP)	13674-87-8	ND	1	5
---	------------	----	---	---

The limits were quoted according to The Toys (Safety) Regulations 2011 (S.I. 2011 No. 1881) as amended, Schedule 2, Appendix C on TCEP, TCPP and TDCP Content.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

45 UK POPs Regulation (EU) 2019/1021 and The Persistent Organic Pollutants Regulations 2007 (S.I. 2007 No. 3106) Regulation 5 Short Chain Chlorinated Paraffins (C10 - C13) (SCCP) Content

Solvent extraction and followed by Gas Chromatography-Mass Spectrometry (GC-MS).

For articles:

Test Item	CAS No.	Result (%) θ	Detection Limit (%)	Limit (%)
		Tested Component		
		(8),(9),(11),(12+13),(14+15),(16),(17+18),(19+20),(21+22+23),(24+25+26),(27)to(29),(30+31),(33+34+35),(36+37+38),(39+40+41),(42+43+44),(45+46+47),(48),(49),(51+52),(53),(84+85+86),(90+91),(92),(93)		
Short chain chlorinated paraffins (C10 - C13) (SCCP)	--	ND	0.005	0.15

The limit was quoted according to UK POPs Regulation (EU) 2019/1021 and The Persistent Organic Pollutants Regulations 2007 (S.I. 2007 No. 3106) Regulation 5 Short Chain Chlorinated Paraffins (C10 - C13) (SCCP) Content.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report



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Tests Conducted

46 EU POPs Regulation (EU) 2019/1021 Short Chain Chlorinated Paraffins (C10 - C13) (SCCP) Content

Solvent extraction and followed by Gas Chromatography-Mass Spectrometry (GC-MS).

For articles:

Test Item	CAS No.	Result (%) θ	Detection Limit (%)	Limit (%)
		Tested Component (8),(9),(11),(12+13),(14+15),(16), (17+18),(19+20),(21+22+23), (24+25+26),(27)to(29),(30+31), (33+34+35),(36+37+38), (39+40+41),(42+43+44), (45+46+47),(48),(49),(51+52),(53), (84+85+86),(90+91),(92),(93)		
Short chain chlorinated paraffins (C10 - C13) (SCCP)	--	ND	0.005	0.15

The limit was quoted according to EU POPs Regulation (EU) 2019/1021 Short Chain Chlorinated Paraffin (C10 - C13) (SCCP) Content.

ND = Not detected (less than detection limit)

 θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

47 Polycyclic Aromatic Hydrocarbons (PAHs) Content (Germany AfPS GS 2019:01 PAK)

With reference to AfPS GS 2019:01 PAK (PAH), PAHs content was determined by Gas Chromatography-Mass Spectrometry (GC-MS).

(I) Test Result

Children products including toys:

Compound	CAS No.	Result (mg/kg) θ	Limit (mg/kg)		
		(17)to(20)	Category 1	Category 2a	Category 3a
Phenanthrene	85-01-8	ND	--	--	--
Anthracene	120-12-7	ND	--	--	--
Fluoranthene	206-44-0	ND	--	--	--
Pyrene	129-00-0	ND	--	--	--
Sum (4 PAHs):	--	ND	1	5	20
Naphthalene	91-20-3	ND	1	2	10
Benzo(a)Anthracene	56-55-3	ND	0.2	0.2	0.5
Chrysene	218-01-9	ND	0.2	0.2	0.5
Indeno(1,2,3-cd)Pyrene	193-39-5	ND	0.2	0.2	0.5
Benzo(b)Fluoranthene	205-99-2	ND	0.2	0.2	0.5
Benzo(k)Fluoranthene	207-08-9	ND	0.2	0.2	0.5
Benzo(a)Pyrene	50-32-8	ND	0.2	0.2	0.5
Dibenzo(a,h)Anthracene	53-70-3	ND	0.2	0.2	0.5
Benzo(g,h,i)Perylene	191-24-2	ND	0.2	0.2	0.5
Benzo(e)Pyrene	192-97-2	ND	0.2	0.2	0.5



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Tests Conducted

Benzo(j)Fluoranthene	205-82-3	ND	0.2	0.2	0.5
Sum (15 PAHs):	--	ND	1	5	20
Classification of samples: Category	--	1	--	--	--
Conclusion	--	P	--	--	--

Compound	CAS No.	Result (mg/kg)	Limit (mg/kg)		
		(28+29)	Category 1	Category 2a	Category 3a
Phenanthrene	85-01-8	ND	--	--	--
Anthracene	120-12-7	ND	--	--	--
Fluoranthene	206-44-0	ND	--	--	--
Pyrene	129-00-0	ND	--	--	--
Sum (4 PAHs):	--	ND	1	5	20
Naphthalene	91-20-3	0.5	1	2	10
Benzo(a)Anthracene	56-55-3	ND	0.2	0.2	0.5
Chrysene	218-01-9	ND	0.2	0.2	0.5
Indeno(1,2,3-cd)Pyrene	193-39-5	ND	0.2	0.2	0.5
Benzo(b)Fluoranthene	205-99-2	ND	0.2	0.2	0.5
Benzo(k)Fluoranthene	207-08-9	ND	0.2	0.2	0.5
Benzo(a)Pyrene	50-32-8	ND	0.2	0.2	0.5
Dibenzo(a,h)Anthracene	53-70-3	ND	0.2	0.2	0.5
Benzo(g,h,i)Perylene	191-24-2	ND	0.2	0.2	0.5
Benzo(e)Pyrene	192-97-2	ND	0.2	0.2	0.5
Benzo(j)Fluoranthene	205-82-3	ND	0.2	0.2	0.5
Sum (15 PAHs):	--	0.5	1	5	20
Classification of samples: Category	--	3a	--	--	--
Conclusion	--	P	--	--	--

Compound	CAS No.	Result (mg/kg) θ	Limit (mg/kg)		
		(11)to(15).(21)to(27). (30).(31)	Category 1	Category 2a	Category 3a
Phenanthrene	85-01-8	ND	--	--	--
Anthracene	120-12-7	ND	--	--	--
Fluoranthene	206-44-0	ND	--	--	--
Pyrene	129-00-0	ND	--	--	--
Sum (4 PAHs):	--	ND	1	5	20
Naphthalene	91-20-3	ND	1	2	10
Benzo(a)Anthracene	56-55-3	ND	0.2	0.2	0.5
Chrysene	218-01-9	ND	0.2	0.2	0.5
Indeno(1,2,3-cd)Pyrene	193-39-5	ND	0.2	0.2	0.5
Benzo(b)Fluoranthene	205-99-2	ND	0.2	0.2	0.5
Benzo(k)Fluoranthene	207-08-9	ND	0.2	0.2	0.5
Benzo(a)Pyrene	50-32-8	ND	0.2	0.2	0.5
Dibenzo(a,h)Anthracene	53-70-3	ND	0.2	0.2	0.5
Benzo(g,h,i)Perylene	191-24-2	ND	0.2	0.2	0.5
Benzo(e)Pyrene	192-97-2	ND	0.2	0.2	0.5
Benzo(j)Fluoranthene	205-82-3	ND	0.2	0.2	0.5
Sum (15 PAHs):	--	ND	1	5	20
Classification of samples: Category	--	2a	--	--	--
Conclusion	--	P	--	--	--



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Tests Conducted

Compound	CAS No.	Result (mg/kg) θ	Limit (mg/kg)		
		(9),(16),(32+33),(34+35), (36+37),(38+39),(40+41), (42+43),(44+45),(46+47), (48+49),(50+51),(52+53)	Category 1	Category 2a	Category 3a
Phenanthrene	85-01-8	ND	--	--	--
Anthracene	120-12-7	ND	--	--	--
Fluoranthene	206-44-0	ND	--	--	--
Pyrene	129-00-0	ND	--	--	--
Sum (4 PAHs):	--	ND	1	5	20
Naphthalene	91-20-3	ND	1	2	10
Benzo(a)Anthracene	56-55-3	ND	0.2	0.2	0.5
Chrysene	218-01-9	ND	0.2	0.2	0.5
Indeno(1,2,3-cd)Pyrene	193-39-5	ND	0.2	0.2	0.5
Benzo(b)Fluoranthene	205-99-2	ND	0.2	0.2	0.5
Benzo(k)Fluoranthene	207-08-9	ND	0.2	0.2	0.5
Benzo(a)Pyrene	50-32-8	ND	0.2	0.2	0.5
Dibenzo(a,h)Anthracene	53-70-3	ND	0.2	0.2	0.5
Benzo(g,h,i)Perylene	191-24-2	ND	0.2	0.2	0.5
Benzo(e)Pyrene	192-97-2	ND	0.2	0.2	0.5
Benzo(j)Fluoranthene	205-82-3	ND	0.2	0.2	0.5
Sum (15 PAHs):	--	ND	1	5	20
Classification of samples: Category	--	3a	--	--	--
Conclusion	--	P	--	--	--

ND = Not detected (less than detection limit)

Detection limit = 0.2 mg/kg

 θ = Single result for each test component/group

P = Pass

Tested component(s): See component list in the last section of this report

(II) Categories for Products

Category 1: Materials intended to be placed in the mouth, or materials coming into long-term contact with skin (more than 30s) during the intended use

- in toys according to Directive 2009/48/EC
- or
- for the use by children up to 3 years of age

Category 2: Materials not covered by category 1, coming into long-term contact (more than 30s) or short-term repetitive contact with skin during the intended or foreseeable use

- 2a. use by children
- 2b. other consumer products

Category 3: Materials covered neither by category 1 nor by category 2, coming into short-term contact (up to 30s) with skin during the intended or foreseeable use

- 3a. use by children
- 3b. other consumer products



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48 Polycyclic Aromatic Hydrocarbons (PAHs) Content (UK REACH Annex XVII Entry 50)

With reference to AfPS GS 2019:01 PAK (PAH), PAHs content was determined by Gas Chromatography-Mass Spectrometry (GC-MS).

Compound	CAS No.	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
		Tested Component		
		(11)to(15),(17)to(27),(30),(31)		
Benzo[a]anthracene	56-55-3	ND	0.2	0.5
Chrysene	218-01-9	ND	0.2	0.5
Benzo[b]fluoranthene	205-99-2	ND	0.2	0.5
Benzo[k]fluoranthene	207-08-9	ND	0.2	0.5
Benzo[a]pyrene	50-32-8	ND	0.2	0.5
Dibenzo[a,h]anthracene	53-70-3	ND	0.2	0.5
Benzo[j]fluoranthene	205-82-3	ND	0.2	0.5
Benzo[e]pyrene	192-97-2	ND	0.2	0.5

The limit was quoted according to Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Amendment (EC) No 552/2009 and (EU) No 1272/2013, Annex XVII Entry 50 & The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019 No. 758) as amended, on Polycyclic Aromatic Hydrocarbons (PAHs) Content.

ND = Not detected (less than detection limit)

θ = Single result for each test component/group

Tested component(s): See component list in the last section of this report

49 Polycyclic Aromatic Hydrocarbons (PAHs) Content (EU REACH Annex XVII Entry 50)

With reference to AfPS GS 2019:01 PAK (PAH), PAHs content was determined by Gas Chromatography-Mass Spectrometry (GC-MS).

Compound	CAS No.	Result (mg/kg) θ	Detection Limit (mg/kg)	Limit (mg/kg)
		Tested Component		
		(11)to(15),(17)to(27),(30),(31)		
Benzo[a]anthracene	56-55-3	ND	0.2	0.5
Chrysene	218-01-9	ND	0.2	0.5
Benzo[b]fluoranthene	205-99-2	ND	0.2	0.5
Benzo[k]fluoranthene	207-08-9	ND	0.2	0.5
Benzo[a]pyrene	50-32-8	ND	0.2	0.5
Dibenzo[a,h]anthracene	53-70-3	ND	0.2	0.5
Benzo[j]fluoranthene	205-82-3	ND	0.2	0.5
Benzo[e]pyrene	192-97-2	ND	0.2	0.5

The limit was quoted according to EU Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Amendment (EC) No 552/2009 and (EU) No 1272/2013, Annex XVII Entry 50 on Polycyclic Aromatic Hydrocarbons (PAHs) content.



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Tests Conducted

ND = Not detected (less than detection limit)
 0 = Single result for each test component/group

Tested component(s): See component list in the last section of this report

50 Safety of Electric Toys

As per European Standard on Safety of Electric Toys EN IEC 62115:2020+A11:2020

Power source: Electro-magnetic induction

Normal Use Operation: Light is powered by electro-magnetic induction.

Clause	Requirement	Assessment
1	Scope	--
2	Normative reference	--
3	Term and definitions	--
4	General requirement	--
5	General conditions for test	--
6	Criteria for reduced testing	A
6.1	General	--
6.2	Short-circuit resistance	A
6.3	Low power electric toys	NA
6.4	Battery circuits	NA
7	Marking and instructions	P See remark (1)
7.1	General	P
7.2	Marking on electric toys	P
7.2.1	Identification	See remark (2)
7.2.2	Electric toys with replaceable batteries	NA
7.2.3	Transformer toys and power supply toys	NA
7.2.4	Electric toys with more than one power supply	NA
7.2.5	Electric toys with detachable lamps	NA
7.2.6	Symbols	NA
7.2.7	Durability	P
7.3	Instructions and markings on packaging	P
7.3.1	General	P
7.3.2	Transformer toys and power supply toys	NA
7.3.3	Electric toys that are used with replaceable batteries	NA
7.3.3.1	General	NA
7.3.3.2	Coin batteries	NA
7.3.3.3	Button batteries	NA
7.4	Instructions for electric toys that can be connected to class I equipment	NA
7.5	Instructions for ride-on electric toys	NA
7.6	Temperature warnings	NA
8	Power input	NA
9	Heating and abnormal operation	P



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Tests Conducted

Clause	Requirement	Assessment
9.1	General	P
9.2	Test condition	--
9.3	Normal operation	NA
9.4	Normal operation with insulation short-circuited	NA
9.5	Abnormal operation with temperature controls made inoperable	NA
9.6	With accessible moving parts locked	NA
9.7	Additional transformers and power supplies	NA
9.8	Abnormal supply to electric toys via a USB connection.	NA
9.9	Fault condition in electronic circuits	NA
9.10	Compliance criteria	P
10	Electric strength	NA
10.1	Electric strength at operating temperature	NA
10.2	Electric strength under humid conditions	NA
11	Electric toys used in water, electric toys used with liquid and electric toys cleaned with liquid	NA
12	Mechanical strength	P
12.1	Enclosures	P
12.2	Attachment strength	NA
13	Construction	P
13.1	Nominal supply voltage	P
13.2	Transformers, power supplies and battery chargers	NA
13.3	Thermal cut-outs.	NA
13.4	Batteries	NA
13.4.1	Small batteries	NA
13.4.2	Other batteries	NA
13.4.3	Electrolyte leakage	NA
13.4.4	Electric toys placed above a child	NA
13.4.5	Parallel connection of batteries	NA
13.4.6	Battery compartment fasteners	NA
13.5	Plug and sockets	NA
13.6	Charging batteries	NA
13.7	Series motors	NA
13.8	Working voltage	NA
13.9	Electric toys connecting to other equipment.	NA
13.10	Speed limitation of ride-on electric toys	NA
14	Protection of cords and wires	P
14.1	Edges and moving parts	P
14.2	Fixed parts	NA
15	Components	P
15.1.1	General	P
15.1.2	Switches and automatic controls	NA
15.1.3	Other components	P
15.2	Prohibited components	P
15.3	Transformers and power supplies	NA
15.4	Battery chargers	NA



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Tests Conducted

Clause	Requirement	Assessment
15.5	Batteries	NA
16	Screws and connections	P
16.1	Fixings	P
16.2	Connections	NA
17	Clearances and creepage distances	NA
18	Resistance to heat and fire	NA
18.1	Resistance to heat	NA
18.2	Resistance to fire	NA
18.2.1	General	NA
18.2.2	Non-metallic parts	NA
18.2.3	Insulating material	NA
19	Radiation and similar hazards	P
19.1	General	P
19.2	Optical radiation Toys incorporating lasers and or light emitting diodes (LED) or UV emitting lamps shall comply with Annex E. Electric toys incorporating LEDs shall comply with 19.E.2. Electric toys incorporating lasers shall comply with 19.E.3 Electric toys incorporating UV-emitting lamps shall comply with 19.E.4	P
19.3	Other electromagnetic radiation Electric toys with an integrated field source that may produce harmful electromagnetic radiation Measurements methods are given in Annex I.	NA
Annex D	Electric toys with protective electronic circuits D.1 General During the tests of 9.9 an electronic circuit prevents the hazardous conditions listed in 9.10 D.2 Dangerous malfunction ☐ D.2.1 General The electric toy cause an unintended operation that may impair safety or present a dangerous malfunction due to influence from electromagnetic phenomena (EMP) ☐ D.2.2 Electrostatic discharges In accordance with IEC 61000-4-2:2008, test level 4 ☐ D.2.3 Radiated fields In accordance with IEC 61000-4-3:2006+A1:2007+A2:2010 test level 3. cover 80 MHz to 1 000 MHz and 1,4 GHz to 2,0 GHz ☐ D.2.4 Transient bursts In accordance with IEC 61000-4-4:2012. - Test level 3 with a repetition rate of 5 kHz is applicable for signal and control lines - Test level 4 with a repetition rate of 5 kHz is applicable for the power supply lines ☐ D.2.5 Voltage surges In accordance with IEC 61000-4-5:2014,	NA



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Tests Conducted

Clause	Requirement	Assessment
	- Test level 4 is applicable for the line-to-line coupling mode, a generator having a source impedance of 2 Ω being used - Test level 4 is applicable for the line-to-earth coupling mode, a generator having a source impedance of 12Ω being used ☐ D.2.6 Injected current In accordance with IEC 61000-4-6:2013 test level 3 being applicable. During the test, all frequencies between 0,15 MHz to 80 MHz are covered ☐ D.2.7 Voltage dips and interruptions Class 3 voltage dips and interruptions in accordance with IEC 61000-4-11: 2004. ☐ D.2.8 Mains signals In accordance with IEC 61000-4-13:2002/AMD2:2015, Table 11 with test level class 2 using the frequency steps according to Table 10	
Annex J	Safety of remote controls for electric ride-on toys	NA

Abbreviation: P = Pass

A = Applicable NA = Not Applicable

Remark:

- (1) Only the English version of the marking and instructions were assessed. According to the standard, instruction sheets and other texts required by the standard shall be written in the official language of the country in which the product is to be sold.
- (2) Clause 7.2.1 Below are additional information according to the requirement in Toy Safety Directive 2009/48/EC relating to marking of toys and do not constitute requirements of this European Standard:
The manufacturer's and importer's name, registered trade name or registered trade mark, the address and type, batch, serial or model number or other element allowing their identification shall be indicated on the toy or, where that is not possible, on its packaging or in a document accompanying the toy.
= Great Britain-based authorised representatives will no longer be recognised in EU from 1 January 2021. Therefore, EU importer's name and address shall be indicated on the product itself.

51 Safety of Electric Toys

As per Australian / New Zealand Standard on Safety of Electric Toys AS/NZS 62115:2018+A1:2021

Power source: Electro-magnetic induction

Normal Use Operation: Light is powered by electro-magnetic induction.

Clause	Requirement	Assessment
1	Scope	--
2	Normative reference	--
3	Term and definitions	--
4	General requirement	--
5	General conditions for test	--
5.7.2	Electric toys that are used with batteries	NA
6	Criteria for reduced testing	A



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Tests Conducted

Clause	Requirement	Assessment
6.1	General	--
6.2	Short-circuit resistance	A
6.3	Low power electric toys	NA
6.4	Battery circuits	NA
7	Marking and instructions	P
7.1	General	P
7.2	Marking on electric toys	P
7.2.1	Identification	P
7.2.2	Electric toys with replaceable batteries	NA
7.2.3	Transformer toys and power supply toys	NA
7.2.4	Electric toys with more than one power supply	NA
7.2.5	Electric toys with detachable lamps	NA
7.2.6	Symbols	NA
7.2.7	Durability	P
7.3	Instructions and markings on packaging	P
7.3.1	General	P
7.3.2	Transformer toys and power supply toys	NA
7.3.3	Electric toys that are used with replaceable batteries	NA
7.3.3.1	General	NA
7.3.3.2	Coin batteries	NA
7.3.3.3	Button batteries	NA
7.4	Instructions for electric toys that can be connected to class I equipment	NA
7.5	Instructions for ride-on electric toys	NA
7.6	Temperature warnings	NA
8	Power input	NA
9	Heating and abnormal operation	P
9.1	General	P
9.2	Test condition	--
9.3	Normal operation	NA
9.4	Normal operation with insulation short-circuited	NA
9.5	Abnormal operation with temperature controls made inoperable	NA
9.6	With accessible moving parts locked	NA
9.7	Additional transformers and power supplies	NA
9.8	Abnormal supply to electric toys via a USB connection.	NA
9.9	Fault condition in electronic circuits	NA
9.10	Compliance criteria	P
10	Electric strength	NA
10.1	Electric strength at operating temperature	NA
10.2	Electric strength under humid conditions	NA
11	Electric toys used in water, electric toys used with liquid and electric toys cleaned with liquid	NA
12	Mechanical strength	P
12.1	Enclosures	P
12.2	Attachment strength	NA
13	Construction	P



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Clause	Requirement	Assessment
13.1	Nominal supply voltage	P
13.2	Transformers, power supplies and battery chargers	NA
13.3	Thermal cut-outs.	NA
13.4	Batteries	NA
13.4.1	Small batteries	NA
13.4.2	Other batteries	NA
13.4.3	Electrolyte leakage	NA
13.4.4	Electric toys placed above a child	NA
13.4.5	Parallel connection of batteries	NA
13.4.6	Battery compartment fasteners	NA
13.5	Plug and sockets	NA
13.6	Charging batteries	NA
13.7	Series motors	NA
13.8	Working voltage	NA
13.9	Electric toys connecting to other equipment.	NA
13.10	Speed limitation of ride-on electric toys	NA
14	Protection of cords and wires	P
14.1	Edges and moving parts	P
14.2	Fixed parts	NA
15	Components	P
15.1.1	General	P
15.1.2	Switches and automatic controls	NA
15.1.3	Other components	P
15.2	Prohibited components	P
15.3	Transformers and power supplies	NA
15.4	Battery chargers	NA
15.5	Batteries	NA
16	Screws and connections	P
16.1	Fixings	P
16.2	Connections	NA
17	Clearances and creepage distances	NA
18	Resistance to heat and fire	NA
18.1	Resistance to heat	NA
18.2	Resistance to fire	NA
18.2.1	General	NA
18.2.2	Non-metallic parts	NA
18.2.3	Insulating material	NA
19	Radiation and similar hazards	P
19.1	General	P
19.2	Optical radiation Toys incorporating lasers and or light emitting diodes (LED) or UV emitting lamps shall comply with Annex E. Electric toys incorporating LEDs shall comply with 19.E.2. Electric toys incorporating lasers shall comply with 19.E.3 Electric toys incorporating UV-emitting lamps shall comply with 19.E.4	P



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Clause	Requirement	Assessment
19.3	Other electromagnetic radiation Electric toys with an integrated field source that may produce harmful electromagnetic radiation Measurements methods are given in Annex I.	NA
Annex D	Electric toys with protective electronic circuits D.1 General During the tests of 9.9 an electronic circuit prevents the hazardous conditions listed in 9.10 D.2 Dangerous malfunction ☐ D.2.1 General The electric toy cause an unintended operation that may impair safety or present a dangerous malfunction due to influence from electromagnetic phenomena (EMP) ☐ D.2.2 Electrostatic discharges In accordance with IEC 61000-4-2:2008, test level 4 ☐ D.2.3 Radiated fields In accordance with IEC 61000-4-3:2006+A1:2007+A2:2010 test level 3. cover 80 MHz to 1 000 MHz and 1,4 GHz to 2,0 GHz ☐ D.2.4 Transient bursts In accordance with IEC 61000-4-4:2012. - Test level 3 with a repetition rate of 5 kHz is applicable for signal and control lines - Test level 4 with a repetition rate of 5 kHz is applicable for the power supply lines ☐ D.2.5 Voltage surges In accordance with IEC 61000-4-5:2014, - Test level 4 is applicable for the line-to-line coupling mode, a generator having a source impedance of 2 Ω being used - Test level 4 is applicable for the line-to-earth coupling mode, a generator having a source impedance of 12 Ω being used ☐ D.2.6 Injected current In accordance with IEC 61000-4-6:2013 test level 3 being applicable. During the test, all frequencies between 0,15 MHz to 80 MHz are covered ☐ D.2.7 Voltage dips and interruptions Class 3 voltage dips and interruptions in accordance with IEC 61000-4-11: 2004. ☐ D.2.8 Mains signals In accordance with IEC 61000-4-13:2002/AMD2:2015, Table 11 with test level class 2 using the frequency steps according to Table 10	NA
Annex J	Safety of remote controls for electric ride-on toys	NA

Abbreviation: P = Pass

A = Applicable NA = Not Applicable



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Tests Conducted

52 Optical Radiation

As per European Standard on Safety of Electric Toys EN IEC 62115:2020+A11:2020 Annex E: Safety of electric toys incorporating optical radiation sources.

Power Source: Electro-magnetic induction

Clause	Requirement / Test result	Verdict
19.E.2	Light-emitting diodes (LEDs) For white water-clear LED: Measured wavelength: Peak at: 447nm Spectral emission bandwidth: 231.1nm Measurement distance: 200mm Measured radiant intensity under normal operation: 0.0022Wsr^{-1} Limit: 0.190Wsr^{-1}	P
19.E.3	Lasers	NA
19.E.4	UV-emitting lamps	NA
19.E.5	Modulated accessible emission	P

Photos:





53 Optical Radiation

As per Australian / New Zealand Standard on Safety of Electric Toys AS/NZS 62115:2018+A1:2021 Annex E: Safety of electric toys incorporating optical radiation sources.

Power Source: Electro-magnetic induction

Clause	Requirement / Test result	Verdict
19.E.2	Light-emitting diodes (LEDs) For white water-clear LED: Measured wavelength: Peak at: 447nm Spectral emission bandwidth: 231.1nm Measurement distance: 200mm Measured radiant intensity under normal operation: 0.0022Wsr^{-1} Limit: 0.190Wsr^{-1}	P
19.E.3	Lasers	NA
19.E.4	UV-emitting lamps	NA
19.E.5	Modulated accessible emission	P

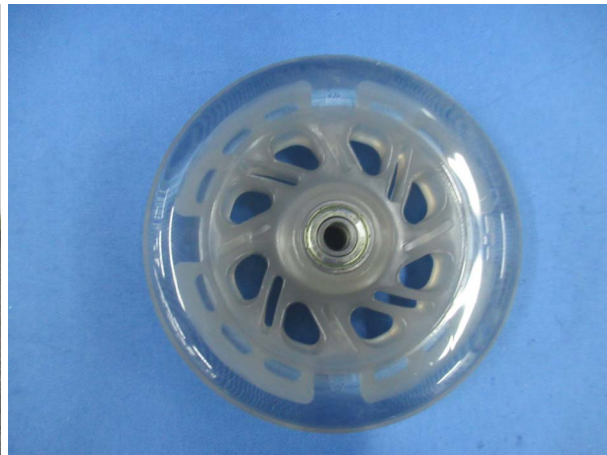


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Tests Conducted

Photos:



Component list:

- (1) Blue coating on plastic (tyre of all styles).
- (2) White coating on plastic (tyre of all styles).
- (3) Coatings (white, black, blue) on plastic (pattern of front deck of all styles).
- (4) Pink coating on metal (logo of lower T-bar of pink style).
- (5) Green coating on metal (logo of lower T-bar of green style).
- (6) Purple coating on metal (logo of lower T-bar of purple style).
- (7) Blue coating on metal (logo of lower T-bar of blue style).
- (8) White coating on metal (logo of T-bar of all styles).
- (9) Black coating on metal (square plate, footrest of all styles).
- (10) Coatings (red, white, transparent) on metal (logo of lower T-bar of all styles).
- (11) Transparent plastic label with inaccessible black coating (sticker of lower T-bar of all styles).
- (12) Pink plastic (board of pink style).
- (13) Green plastic (board of green style).
- (14) Purple plastic (board of purple style).
- (15) Blue plastic (board of blue style).
- (16) Black plastic (tubing of all styles).
- (17) Pink plastic (grip of pink style).
- (18) Green plastic (grip of green style).



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- (19) Purple plastic (grip of purple style).
- (20) Blue plastic (grip of blue style).
- (21) Pale black plastic (saddle of all styles).
- (22) Pink plastic (saddle of pink style).
- (23) Green plastic (saddle of green style).
- (24) Purple plastic (saddle of purple style).
- (25) Blue plastic (saddle of blue style).
- (26) Black plastic (frame of saddle of all styles).
- (27) Black plastic (plug of frame of saddle of all styles).
- (28) Grey plastic (lock of T-bar of all styles).
- (29) Silver color/grey plastic label (sticker of all styles).
- (30) Black plastic (quick release clamp, quick release lever, washer of quick release clamp of all styles).
- (31) Black plastic (pop button, base of pop button of T-bar of all styles).
- (32) Pink plastic (deck of pink style).
- (33) Green plastic (deck of green style).
- (34) Purple plastic (deck of purple style).
- (35) Blue plastic (deck of blue style).
- (36) Deep pink plastic (pattern of deck of pink style).
- (37) Deep green plastic (pattern of deck of green style).
- (38) Deep purple plastic (pattern of deck of purple style).
- (39) Deep blue plastic (pattern of deck of blue style).
- (40) Dark pink plastic (brake of pink style).
- (41) Dark green plastic (brake of green style).
- (42) Dark purple plastic (brake of purple style).
- (43) Dark blue plastic (brake of blue style).
- (44) Black plastic (lower deck of all styles).
- (45) Black plastic (hub of front wheel of all styles).
- (46) Black plastic (washer of hub of front wheel of all styles).
- (47) Black plastic (beam of front chassis of all styles).
- (48) Orange plastic (pad of front chassis of all styles).
- (49) Semi-transparent plastic (front tyre of all styles).
- (50) Transparent plastic (rear tyre of all styles).
- (51) Grey plastic (front wheel of all styles).
- (52) Black plastic (rear wheel of all styles).
- (53) Black plastic (footrest of all styles).
- (54) Silver color metal excluding coating (footrest of all styles).
- (55) Black treated metal (bolt of all styles).
- (56) Silver color metal excluding coating (upper plate of board of all styles).
- (57) Silver color metal excluding coating (lower plate of board of all styles).
- (58) Black treated metal (solder of all styles).
- (59) Black treated metal (handlebar of all styles).
- (60) Black treated metal (T-bar of all styles).
- (61) Silver color metal (weld joint of all styles).
- (62) Silver color metal (handlebar of all styles).
- (63) Silver color metal (upper T-bar of all styles).
- (64) Silver grey metal (bolt of quick release clamp of all styles).
- (65) Silver grey metal (axle of quick release lever of all styles).
- (66) Pink treated metal (lower T-bar of pink style).
- (67) Green treated metal (lower T-bar of green style).
- (68) Purple treated metal (lower T-bar of purple style).
- (69) Blue treated metal (lower T-bar of blue style).
- (70) Silver color metal (rivet of brake of all styles).
- (71) Silver color metal (plate of brake of all styles).
- (72) Silver color metal (bolt of brake of all styles).
- (73) Silver color metal (nut of brake of all styles).
- (74) Silver color metal (bolt of wheel of all styles).



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- (75) Silver color metal (nut of wheel of all styles).
- (76) Silver color metal (outer bearing of all styles).
- (77) Silver color metal (big bolt of front chassis of all styles).
- (78) Silver color metal (small bolt of front chassis of all styles).
- (79) Silver color metal (small nut of front chassis of all styles).
- (80) Black treated metal (round head screw of front chassis of all styles).
- (81) Black treated metal (large flat head screw of front chassis of all styles).
- (82) Black treated metal (small flat head screw of chassis of all styles).
- (83) Silver grey metal (spring of front chassis of all styles).
- (84) Blue plastic (inside of nut of all styles).
- (85) Dull beige plastic (holder of magnet).
- (86) Transparent plastic (case inside of wheel).
- (87) Transparent LED (inside of wheel).
- (88) Green PCB (PCB inside of wheel).
- (89) Red plastic label (tape inside of wheel).
- (90) Transparent plastic with coatings (blue, white) (rear tyre of all styles).
- (91) Pink plastic with coatings (white, black, blue) (deck of pink style).
- (92) Green PCB (PCB inside of wheel).& Red plastic label (tape inside of wheel).& Transparent LED (inside of wheel).
- (93) Coatings on metal (surface of all styles).
- (94) Transparent cellotape with inaccessible black coating (cellotape of transport box).
- (95) White foam (pad).
- (96) Transparent plastic with black printing (polybag).

@: Since the sample weight of the component was less than 10 mg, soluble heavy metal analysis was not applicable.

End of report

The statements of conformity reported have considered the decision rule agreed, namely that Intertek have taken account of measurement uncertainty as calculated by Intertek, and applied according to ILAC-G8:09/2019-(Non-binary acceptance based on guard band $w = U$) except designation from the customer, regulation or test specification. This decision rule only applies to the numeric test results. Full details of our agreed decision rules and the associated risk can be viewed: <https://www.intertek.com.cn/diypage/upload/SZ-AP15-HLS-QA.pdf>.

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