



CONSUMER PRODUCTS SERVICES DIVISION

LEGO SYSTEM A/S

Technical Report: (5222)322-0570
Date Received: November 18, 2022

November 30, 2022

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ANETTE KLAUSEN

LEGO SYSTEM A/S
ASTVEJ, DK 7190 BILUND
BILUND
DENMARK

RESULT: PASS

Item Name:	45345 LEGO® EDUCATION SPIKE™ ESSEN.. V29-6294631		
Vendor:	LEGO	Sample Size:	4
Supplier:	LEGO	Ref. No(s):	6294631
Program:	N/A	Project No.:	N/A
Labeled Age Grade:	6+	Master PO No.:	7000131658
Appropriate Age Grade:	NOT REQUESTED	Item No.:	45345
Client Specified Age Grade:	6+	Components can be made in:	COMPONENTS MADE IN DENMARK, MEXICO, HUNGARY, CHINA, INDONESIA, MALAYSIA, AUSTRIA AND THE CZECH REPUBLIC
Tested Age Grade:	OVER 6 YEARS OF AGE	Assortment No.:	N/A
EAN/UPC Code:	5702016677591	Stage:	MASS PRODUCTION
BOM Version:	N/A	Date Code:	4502
Generic Color ID:	N/A	Supplier No.:	122857
Ingoing item ID:	N/A	Material Group:	N/A
Producer name:	TRUVANT EUROPE	Product Category:	N/A
Producer address:	TRUVANT EUROPE PANATTONI LOGISTICS PARK STRYKOW SOSNOWIEC PIENKI UL. PRZEMYSLOWA 1 95-010 STRYKOW POLAND	Lot/Batch Number:	N/A
Accessibility:	N/A	Classification:	TOY
Tradename/type/brand:	N/A	Geography:	ROW
Distribution Country:	N/A	LEGO Licensee Name:	N/A
Required Test:	N/A	Launch:	N/A
PAB Bag Item Number:	N/A	PAB Bag Description:	N/A
BI Number:	N/A	BI Description:	N/A
Cardboard Packaging Item Number:	N/A	Cardboard Packaging Description:	N/A
Coo For Total Shipment:	N/A	NEMKO Number:	0470-RED-212901
GID INK:	N/A	Terminal voltage:	7.3V



TEST:

Mechanical/Physical

- Flammability [LEGO EN 71 Pt.2-20]
- LEGO - Flammability [ISO 8124 Pt.2-2014]
- Mechanical hazards (1-7) [EN 71 Pt.1-14+A1]
- Mechanical hazards [LEGO ISO 8124 Pt.1:18+A1A2]
- General labeling [2009/48/EC]
- LEGO - Flammability [EN 71 Pt.2-11:A1]
- Labeling [LEGO ISO 8124 Pt.1:18+A1A2]
- Australia projectile 2020 [LEGO]

Chemical

- Aust CPN 1 of 2009 Sol. HM [AS/NZS ISO 8124.3:12+A1:16]
- BBP / DBP / DEHP / DNOP / DINP / DIDP / DIBP content [ISO 8124-6:2018]
- DNOP/DINP/DIDP content [EC No. 1907/2006]
- Heavy metals content - Cat3 [EN 71-3:2019+A1:2021]
- Soluble heavy metal contents [ISO 8124 Pt.3-2020]
- BBP/DBP/DEHP/DIBP content (EU 2018/2005) [EC No. 1907/2006]
- Total heavy metals [94/62/EC]

Electrical

- Class 1 LED [IEC 60825-1]
- Electric toys safety [EN IEC 62115:2020+A11]
- IEC 62115:2017 ELECTRIC TOYS SAFETY

EXECUTIVE SUMMARY:

The sample(s) MEET the following requirement(s):

- The requirements of Australia Consumer Goods (Projectile Toys) Safety standard 2020.
- The flammability requirements of the European Standard "Safety of Toys", EN 71: Part 2: 2020.
- Labeling requirements of "CE marking, manufacturer/ Importer name and address, and product identification" under "Directive 2009/48/EC Safety of Toy".
- The flammability requirements of the European Standard "Safety of Toys", EN 71: Part 2: 2011+ A1: 2014.
- The flammability requirements of the ISO Standard, "Safety of toys", ISO 8124: Part 2: 2014.
- The labeling requirements of the tested subclauses of the ISO Standard, "Safety of toys", ISO 8124: Part 1: 2018 + A1: 2020 + A2: 2020.
- The mechanical and physical properties requirements of the tested subclauses of the European Standard, "Safety of toys", EN71: Part 1:2014+A1:2018, clauses 1-7.
- The mechanical and physical properties requirements of the tested subclauses of the ISO Standard, "Safety of toys", ISO 8124: Part 1: 2018 + A1: 2020 + A2: 2020.
- The classification in accordance with standard IEC 60825-1.
- The requirements of the tested clauses of the Standard EN IEC 62115:2020+A11:2020 "Electric toys - Safety"
- The requirements of the tested clauses of the Standard IEC 62115 :2017 "Electric toys - Safety"



EXECUTIVE SUMMARY:

The tested component sample(s) MEET the following requirement(s):

- The migration of certain elements requirements of the Australia Trade Practices Act 1974, Consumer Protection Notice No. 1 of 2009 (AS/NZS 8124: Part 3: 2012 with Amendment No. 1: 2016).
- The BBP, DBP, DEHP and DIBP content requirements of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 51 (amended up to EU No. 2018/2005).
- The DNOP, DINP and DIDP content requirement(s) of the European Parliament and Council Regulation (EC) No. 1907/2006 of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII Restrictions on the Manufacture, placing on the Market and Use of Certain Dangerous Substances, Mixtures and Articles, Entry 52.
- The migration of certain elements requirements of the European Standard, "Safety of Toys", EN 71 Part 3: 2019 + A1: 2021.
- The migration of certain elements requirements of the International Standard, "Safety of toys", ISO 8124-3: 2020.
- The heavy metals content requirement(s) of the European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste with its Latest Amendment.

The tested component sample(s) was tested to the following requirement(s) and the data provided is for informational purposes only:

- The BBP, DBP, DEHP, DNOP, DINP, DIDP and DIBP content requirements of the client's specification, when tested according to the method ISO 8124-6: 2018, "Safety of toys – Part 6: Certain phthalate esters in toys and children's products".



EXECUTIVE SUMMARY:

- Note: At the request of the client, the sample(s) was evaluated for use by children 9+.
- Note: At the request of client, the phthalate test for electronic components except wire/cable were not conducted.
- Note: For sample weights ranging from 0.01-0.1g, the analytical results are calculated as though 0.1g of the test portion has been used.
- Note: At the request of client, test(s) was conducted on the certain component(s) of the submitted samples(s) / submitted component(s).
- Note: Clause B.4 – Laboratory sample, Annex B of the European Standard, “Safety of Toys, EN 71-10:2005”, states that the limits will not apply to samples created by collecting material from more than one toy. Therefore, such component(s) was not subject to the formaldehyde content requirement in accessible paper components of the European Standard, “Safety of Toys: Organic Chemical Compounds - Requirement”, EN 71: Part 9: 2005, and Amendment A1: 2007.
- Note: Based on visual evaluation and/or material breakdown received, there is no applicable material(s) found in the sample(s) submitted and thus the corresponding testing of EC No. 1907/2006 Azodyes content (2017), EN 71 Pt.9 Formaldehyde in textile has/have not been conducted.
- Note: Based on visual evaluation and/or material breakdown received, there is no client’s specified material(s) found in the sample(s) submitted and thus the corresponding testing of client's lead content in substrate (100 ppm) has/have not been conducted, according to the client's instruction.
- Note: The statement of compliance is based on a 95% coverage probability for the expanded uncertainty of the measurement result.
The measurement result is within (or below) the specification limit when the measurement uncertainty is taken into account.
The binary statement with guard band (1 measurement uncertainty) was applied to statement of conformity.
- Note: Compliance with this standard is also on condition that the components as specified in clause 15 shall comply with the safety requirements specified in the relevant standard
- Note: Secondary battery supplied with electric toys shall comply with IEC 62133 which does not conduct in this report.
- Remark: Only markings in English present on the sample tested were checked and validated during this examination.
The text required by the standard should be translated into the official language of the country where the appliance will be sold



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EXECUTIVE SUMMARY:

The sample(s) MEETS the following requirement(s) and the result(s) has been transferred from Technical Report No. (5222)287-0610 dated October 21, 2022 :

- The BBP, DBP DEHP and DIBP content requirements of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 51 (amended up to EU No. 2018/2005).
- The DNOP, DINP and DIDP content requirement(s) of the European Parliament and Council Regulation (EC) No. 1907/2006 of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII Restrictions on the Manufacture, placing on the Market and Use of Certain Dangerous Substances, Mixtures and Articles, Entry 52.
- The migration of certain elements requirements of the European Standard, "Safety of Toys", EN 71 Part 3: 2019 + A1: 2021.
- The migration of certain elements requirements of the International Standard, "Safety of toys", ISO 8124-3: 2020.

The following requirement(s) and the result(s) has been transferred from Technical Report No. (5222)287-0610 dated October 21, 2022 and the data provided is for informational purposes only:

- The BBP, DBP, DEHP, DNOP, DINP, DIDP and DIBP content requirements of the client's specification, when tested according to the method ISO 8124-6: 2018, "Safety of toys – Part 6: Certain phthalate esters in toys and children's products".



EXECUTIVE SUMMARY:

The sample(s) MEETS the following requirement(s) and the result(s) has been transferred from Technical Report No. (5222)217-1024 dated August 12, 2022:

- The BBP, DBP, DEHP and DIBP content requirements of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 51 (amended up to EU No. 2018/2005).
- The DNOP, DINP and DIDP content requirement(s) of the European Parliament and Council Regulation (EC) No. 1907/2006 of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII Restrictions on the Manufacture, placing on the Market and Use of Certain Dangerous Substances, Mixtures and Articles, Entry 52.
- The migration of certain elements requirements of the European Standard, "Safety of Toys", EN 71 Part 3: 2019 + A1: 2021.
- The migration of certain elements requirements of the International Standard, "Safety of toys", ISO 8124-3: 2020.
- The migration of certain elements requirements of the Australia Trade Practices Act 1974, Consumer Protection Notice No. 1 of 2009 (AS/NZS 8124: Part 3: 2012 with Amendment No. 1: 2016).

The following requirement(s) and the result(s) has been transferred from Technical Report No. (5222)217-1024 dated August 12, 2022 and the data provided is for informational purposes only:

- The BBP, DBP, DEHP, DNOP, DINP, DIDP and DIBP content requirements of the client's specification, when tested according to the method ISO 8124-6: 2018, "Safety of toys – Part 6: Certain phthalate esters in toys and children's products".



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EXECUTIVE SUMMARY:

The sample(s) MEETS the following requirement(s) and the result(s) has been transferred from Technical Report No. (5222)210-0789 dated August 09, 2022:

- The BBP, DBP DEHP and DIBP content requirements of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 51 (amended up to EU No. 2018/2005).
- The DNOP, DINP and DIDP content requirement(s) of the European Parliament and Council Regulation (EC) No. 1907/2006 of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII Restrictions on the Manufacture, placing on the Market and Use of Certain Dangerous Substances, Mixtures and Articles, Entry 52.
- The migration of certain elements requirements of the European Standard, "Safety of Toys", EN 71 Part 3: 2019 + A1: 2021.
- The migration of certain elements requirements of the International Standard, "Safety of toys", ISO 8124-3: 2020.
- The migration of certain elements requirements of the Australia Trade Practices Act 1974, Consumer Protection Notice No. 1 of 2009 (AS/NZS 8124: Part 3: 2012 with Amendment No. 1: 2016).

The following requirement(s) and the result(s) has been transferred from Technical Report No. (5222)210-0789 dated August 09, 2022 and the data provided is for informational purposes only:

- The BBP, DBP, DEHP, DNOP, DINP, DIDP and DIBP content requirements of the client's specification, when tested according to the method ISO 8124-6: 2018, "Safety of toys – Part 6: Certain phthalate esters in toys and children's products".

BUREAU VERITAS HONG KONG LIMITED

Lai Ka Ming, Kent
Director
Toys and Juvenile Products Department



KL/py



RESULTS:

PART 1

The samples submitted on November 18, 2022 are as follow:

APPROPRIATE AGE GRADE DETERMINATION

The Appropriate Age Grade is determined with reference to the EN71: Part 1 : 2014 +A1:2018, CEN ISO/TR 8124-8:2016 Safety of toys - Part 8: Age Determination Guidelines prepared by Technical Committee CEN/TC 52 and Age Grade Determination Guidelines of the Consumer Product Safety Commission (CPSC).	
Note :	The most stringent age grade from the Labeled Age Grade and the Appropriate Age Grade will be used for testing.
Note :	If the client does not specify an age grade for testing or request Bureau Veritas Consumer Products Services, Inc. to determine an appropriate age grade, the labeled age grade will be used for testing.

EXPLANATION OF THE ABBREVIATIONS FOR PART 1, 2

Symbol	Explanation				
NM	The sample(s) DOES NOT MEET the requirement of this Subclause				
M	The sample(s) MEET the requirement of this Subclause				
N/A	Not Applicable				
NR	Not Requested				
NE	Not Evaluated				
NT	Not Tested				
NP	None Present				
P	Present				
R	Refer to Comment Section of this report				
Symbol	Language Present	Symbol	Language Present	Symbol	Language Present
B	Belgian language	G	German language	PR	Portuguese language
D	Danish language	GR	Greek language	S	Spanish language
E	English language	H	Dutch language	SD	Swedish language
F	Finnish language	I	Italian language	SZ	Swiss language
FR	French language	N	Norwegian language		



RESULTS:

PART 1

**MECHANICAL & PHYSICAL PROPERTIES
 (EN 71: PART 1 – 2014+A1 – 2018)**

Subclause	Requirement	Result
4.1	Material cleanliness	M
4.2	Assembly	NA
4.3	Flexible plastic sheeting	NA
4.4	Toy Bags	NA
4.5	Glass	NA
4.6	Expanding materials	NA
4.7 & 7.6	Edges	M
4.8 & 7.6	Points and metallic wires	M
4.8e	Splinters	M
4.9	Protruding parts	M
4.10.1	Folding and sliding mechanisms	NA
4.10.2	Driving mechanisms	M
4.10.3	Hinges	NA
4.10.4	Springs	NA
4.11	Mouth actuated toys and other toys intended to be put in the mouth	NA
4.12 & 7.3	Balloons	NA
4.13 & 7.9	Cord of toy kites and other flying toys	NA
4.14.1	Toys which a child can enter	NA
4.14.2 & 7.8	Masks and helmets	NA
4.15.1	Toys propelled by child	
4.15.1.2 & 7.10.1 & 7.10.2 & 7.10.3 & 7.10.4 & 7.16	Toys propelled by child – Instructions for use	NA
4.15.1.3	Toys propelled by child – Strength	NA
4.15.1.4	Toys propelled by child – Stability	NA
4.15.1.5	Toys propelled by child – Braking	NA
4.15.1.6	Toys propelled by child - Transmission	NA
4.15.1.7	Toys propelled by child – insertion mark	NA
4.15.1.8	Electrically-driven ride-on toys	NA
4.15.2	Toy bicycles	
4.15.2.2 & 7.15	Toy bicycles – Warnings and instructions for use	NA
4.15.2.3	Toy bicycles – Braking	NA
4.15.3 & 7.16 & 7.19	Rocking horses and similar toys	NA
4.15.4 & 7.16	Toys not propelled by child	NA
4.15.5 & 7.18	Toy scooters	NA



RESULTS:

PART 1

**MECHANICAL & PHYSICAL PROPERTIES
 (EN 71: PART 1 – 2014+A1 – 2018)**

Subclause	Requirement	Result
4.16	Heavy immobile toys	NA
4.17.2	All projectiles	M
4.17.3 & 7.7	Projectile toys with stored energy	NA
4.17.4 & 7.26	Certain projectiles toys without stored energy	M
4.18 & 7.4	Aquatic toys and inflatable toys	NA
4.19 & 7.13 & 7.14	Percussion caps	NA
4.20.2.1- 4.20.2.8, 4.20.2.10, 4.20.2.12	Acoustics	NA
4.20.2.9, 4.20.2.11 & 7.14	Acoustics – percussion toys & cap-firing toys	NA
4.21	Toys containing a non-electrical heat source	NA
4.22 & 7.2	Small balls	NA
4.23	Magnet	
4.23.2 a, b & c	Toy other than magnetic / electrical experimental sets intended for children over 8 years	NA
4.23.3 & 7.20	Magnetic / electrical experimental sets intended for children over 8 years	NA
4.24	Yo-yo ball	NA
4.25	Toys attached to food	NA
4.26	Toy Disguise Costumes	NA
4.27.1	Flying toys – General	NA
4.27.2 & 7.25.1	Rotors and propellers on flying toys	NA
4.27.3 & 7.25.2	Rotors and propellers on remote controlled flying toys	NA
FOR TOYS INTENDED FOR CHILDREN UNDER 36 MONTHS		
5.1	General	NA
5.1a	Small parts – as received	NA
5.1b	Small parts, sharp points, sharp edges – after tests	NA
5.1c	Cross section <2mm metal points & wires	NA
5.1e	Toys contain glue	NA
5.1f	Casing of toys	NA
5.2	Fillings, coverings and seams	NA
5.3	Adhesion of plastic sheeting	NA



RESULTS:

PART 1

**MECHANICAL & PHYSICAL PROPERTIES
 (EN 71: PART 1 – 2014+A1 – 2018)**

Subclause	Requirement	Result
5.4.2	Cords and chains in toys intended for children under 18 months	NA
5.4.3 & 7.22	Cords and chains in toys intended for children of 18 months or over but under 36 months	NA
5.4.4	Fixed loops, tangled loops and nooses	NA
5.4.5	Cords and chains on pull along toys	NA
5.4.6 & 7.21	Electrical cables	NA
5.4.7	Cross-sectional dimension of certain cords	NA
5.4.8	Self-retracting cords	NA
5.4.9 & 7.11 & 7.23	Toys attached to or intended to be strung across a cradle, cot or perambulator	NA
5.5 & 7.12	Liquid filled toys	NA
5.6	Electrically driven toys	NA
5.7	Glass and porcelain	NA
5.8	Shape and size	NA
5.9 & 7.17	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 & 7.24	Sledges with cords for pulling	NA
6	Packaging	M
WARNINGS, INSTRUCTIONS FOR USE		
7.1	General	M
7.2	Toys not intended for children under 36 months	NA
7.5	Functional toys	NA



RESULTS:

PART 1

FLAMMABILITY (EN 71 PART 2: 2011 + A1: 2014)

Subclause	Requirement	Result
4.1	Cellulose nitrate	NP
4.1	Surface flash on a piled surface	NA
4.1	Flammable gases	NA
4.1	Extremely flammable liquids, highly flammable liquids, flammable liquids and flammable gels	NA
4.2	Toys to be worn on the head	NA
4.3	Toy disguise costumes and toys intended to be worn by child in play	NA
4.3	warning on product and packaging (10 - 30 mm/s)	NA
4.4	Toys intended to be entered by a child	NA
4.4	warning on product and packaging (10 – 30 mm/s)	NA
4.5	Soft-filled toys	NA

REQUIREMENTS & TEST METHODS CROSS REFERENCE TABLE FOR PART 2

Sub-clause	Test Method	Sub-clause	Test Method	Sub-clause	Test Method	Sub-clause	Test Method
4.2.2	5.2	4.2.4	5.3	4.3	5.4	4.5	5.5
4.2.3	5.3	4.2.5	5.4	4.4	5.4	-	-



RESULTS:

PART 1

FLAMMABILITY (EN 71 PART 2: 2020)

Subclause	Requirement	Result
4.1	Cellulose nitrate	NP
4.1	Highly flammable solids	NP
4.1	Surface flash on a piled surface	NA
*4.1	Flammable gases	NA
*4.1	Extremely flammable liquids, highly flammable liquids, flammable liquids and flammable gels	NA
4.2	Toys to be worn on the head	NA
4.3	Toy disguise costumes and toys intended to be worn by child in play	NA
4.3	warning on product and packaging (10 - 30 mm/s)	NA
4.4	Toys intended to be entered by a child	NA
4.4	warning on product and packaging (10 - 30 mm/s)	NA
4.5	Soft-filled toys	NA

REQUIREMENTS & TEST METHODS CROSS REFERENCE TABLE FOR PART 2

Sub-clause	Test Method	Sub-clause	Test Method	Sub-clause	Test Method	Sub-clause	Test Method
4.2.2	5.2	4.2.4	5.3	4.3	5.4	4.5	5.5
4.2.3	5.3	4.2.5	5.4	4.4	5.4	-	-

2009/48/EC GENERAL LABELING REQUIREMENT

Requirement	Result
CE Mark	M
Manufacturer/ Importer name and address	M
Product Identification	M

M = Meet NM = Not Meet N/A = Not Applicable R = Refer to Comment Section



RESULTS:

PART 1

APPROPRIATE AGE GRADE DETERMINATION

The Appropriate Age Grade is determined with reference to the guidelines in the Annex A “Age-grading guidelines” of ISO 8124-1:2000 and Amendments 1:2007.	
Note :	The most stringent age grade from the Labeled Age Grade and the Appropriate Age Grade will be used for testing.
Note :	If the client does not specify an age grade for testing or request Bureau Veritas Consumer Products Services, Inc. to determine an appropriate age grade, the labeled age grade will be used for testing.

MECHANICAL & PHYSICAL PROPERTIES – (ISO 8124.1:2018+A1:2020+A2:2020)

Subclause	Requirement	Result
4.1	Normal use	M
4.2	Reasonably foreseeable abuse	M
4.3	Material	M
4.4	Small parts	N/A
4.5	Shape, size and strength of certain toys	M
4.6	Edges	M
4.7	Points	M
4.8	Projections	M
4.9	Metal wires and rods	M
4.10	Plastic film or plastic bags in packaging and in toys	M
4.11	Cords	N/A
4.12	Folding mechanisms	N/A
4.13	Holes, clearances and accessibility of mechanisms	M
4.14	Springs	N/A
4.15	Stability and overload requirements	N/A
4.16	Enclosures	N/A
4.17	Simulated protective equipment	N/A
4.18	Projectile toys	M
4.19	Flying toys	N/A
4.20	Aquatic toys	N/A
4.21	Braking	N/A
4.22	Toy bicycles	N/A
4.23	Speed limitation of electrically driven ride-on toys	N/A
4.24	Toys containing a heat source	N/A
4.25	Liquid-filled toys	N/A



RESULTS:

PART 1

MECHANICAL & PHYSICAL PROPERTIES – (ISO 8124.1:2018+A1:2020+A2:2020)

Subclause	Requirement	Result
4.26	Mouth-actuated toys	N/A
4.27	Toy roller skates, toy inline skates and toy skateboards	N/A
4.28	Percussion caps specifically designed for use in toys	N/A
4.29	Acoustic requirement	N/A
4.30	Toy scooters	N/A
4.31	Magnets and magnetic components	N/A
4.32	Yo-yo balls	N/A
4.33	Straps intended to be worn fully or partially around the neck	N/A
4.34	Sledges and toboggans with cords for pulling	N/A
4.35	Jaw entrapment in handles and steering wheels	N/A
4.36	Assembly	N/A

M = Meet NM = Not Meet N/A = Not Applicable R = Refer to Comment Section

FLAMMABILITY (ISO 8124-2: 2014)

Subclause	Requirement	Result
4.1	Celluloid (cellulose nitrate)	NP
4.1	Surface flash on a piled surface	NA
4.1	Flammable Gases	NA
4.1	Extremely flammable liquids, highly flammable liquids, flammable liquids and flammable gels	NA
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
4.3	warning on product and packaging (10 - 30 mm/s)	NA
4.4	Toys intended to be entered by a child	NA
4.4	warning on product and packaging (10 - 30 mm/s)	NA
4.5	Soft - filled toys	NA

M = Meet NM = Not Meet N/A = Not Applicable R = Refer to Comment Section P = Present NP = Not Present

Australia Consumer Goods (Projectile Toys) Safety Standard 2020

Section	Requirement	Result
9	AS/NZS 8124.1:2019 Clause 4.18 projectile toys with modification in warning statement and Clause 4.19 rotors and propellers	M
13	Warning	M

M = Meet NM = Not Meet NA = Not Applicable NT = Not Tested R = Refer to Comment Section



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Test Item(s)	Item / Component Description(s)	Location(s)	G. ID/ Item ID
I015	grey printed bright yellow plastic	HUB, NO. 12, 338N2	
I016	deep grey printed yellow plastic	RECHARGEABLE BATTERY, NO. 4, 338N2	
I017	flat grey printed blue plastic	MOTOR, NO. 14, 404N2, 44G1	
I018	dull grey printed white plastic	MOTOR, NO. 14, 404N2, 44G1	
I019	off brown printed bright blue plastic	LIGHT, NO. 1, 204N, 249G1	
I020	off white printed black plastic	SENSOR COLOUR, NO. 2, 37I2, 32G2	
I021	dull black plastic	RECHARGEABLE BATTERY, NO. 4, 338N2	
I022	clear / multicolor printed white paper sticker	sticker of box	
I023	black printed flat white paper sticker	box	
I025	yellow soft plastic	6313995 - PREPACK BOX 47X47, 1 PCS V-BELT DIA. 33	4544151
I026	Black coating	4614195 - DOG W. DECO	4614195
I027	Dark brown coating	4614195 - DOG W. DECO	4614195
I028	White coating	4614195 - DOG W. DECO	4614195
I029	Black coating	6039464 - MINI HEAD NO. "752"	6039464
I030	Reddish brown coating	6039464 - MINI HEAD NO. "752"	6039464
I031	White coating	6039464 - MINI HEAD NO. "752"	6039464
I032	Black coating	6116616 - MINI HEAD NO. 1675	6116616
I033	Medium mougat coating	6116616 - MINI HEAD NO. 1675	6116616
I034	Bright red coating	6116616 - MINI HEAD NO. 1675	6116616
I035	White coating	6116616 - MINI HEAD NO. 1675	6116616



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Test Item(s)	Item / Component Description(s)	Location(s)	G. ID/ Item ID
I036	Nougat coating	6116616 - MINI HEAD NO. 1675	6116616
I037	Black coating	6123714 - MINI HEAD "NO. 1762"	6123714
I038	Medium mougat coating	6123714 - MINI HEAD "NO. 1762"	6123714
I039	Dark azur coating	6123714 - MINI HEAD "NO. 1762"	6123714
I040	White coating	6123714 - MINI HEAD "NO. 1762"	6123714
I041	Bright red coating	6123714 - MINI HEAD "NO. 1762"	6123714
I042	Black coating	6123730 - MINI HEAD "NO. 1771"	6123730
I043	Medium mougat coating	6123730 - MINI HEAD "NO. 1771"	6123730
I044	Reddish brown coating	6123730 - MINI HEAD "NO. 1771"	6123730
I045	White coating	6123730 - MINI HEAD "NO. 1771"	6123730
I046	Cyan metallic coating	6252746 - FLAT TILE 2X2, ROUND, NO. 1116	6252746
I047	Black coating	6252746 - FLAT TILE 2X2, ROUND, NO. 1116	6252746
I048	Lacquer coating	6284599 - FLAT TILE 1X1 - ROUND "NO. 8"	6284599
I049	Black coating	6284599 - FLAT TILE 1X1 - ROUND "NO. 8"	6284599
I050	white soft plastic	USB CABLE, NO.2	6322774
I051	off white soft plastic	USB CABLE, NO.2	6322774
I052	green soft plastic	USB CABLE, NO.2	6322774
I053	bright red soft plastic	USB CABLE, NO.2	6322774
I054	bright black soft plastic	USB CABLE, NO.2	6322774
I055	SEBS 85 NATURE	block	1118



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Test Item(s)	Item / Component Description(s)	Location(s)	G. ID/ Item ID
I056	NB PP BRIGHT YELLOW	block	129
I057	ABS BRIGHT PURPLE	block	17
I058	HV-ABS BRIGHT ORANGE	block	2121
I059	ABS DARK AZUR	block	2181
I060	ABS MEDIUM AZUR	block	2184
I061	HV-ABS BRIGHT RED	block	2204
I062	HV-ABS WHITE	block	2221
I063	ABS MEDIUM LILAC	block	23
I064	SEBS 34 BLACK	block	273
I065	ABS BRIGHT BLUE	block	28
I066	TR PP BRIGHT RED	block	320
I067	HV-POM MEDIUM STONE GREY	block	3381
I068	POM SILVER METALLIC	block	357
I069	HV-POM FLAME YELLOWISH ORANGE	block	383
I070	MABS LH TR. LIGHT BLUE	block	391
I071	POM NATURE	block	403
I072	TP WHITE	block	408
I073	TP TR.MEDIUM REDDISH VIOLET	block	410
I074	SEBS 85/1 MEDIUM AZUR	block	413
I075	TP BRIGHT ORANGE	block	414
I076	HV-ABS BRIGHT GREEN	block	4201
I077	MABS LH TR. BRIGHT GREEN	block	450
I078	MABS LH TRANSPERANT RED	block	451
I079	MABS LH, TRANSPARENT	block	468
I080	ABS MEDIUM NOUGAT	block	48
I081	ABS WHITE	block	481
I082	ABS BRIGHT RED	block	482
I083	HV-PC DARK STONE GREY	block	508
I084	HV-PC MEDIUM STONE GREY	block	511
I085	ABS BLACK	block	519
I086	ABS DARK STONE GREY	block	526
I087	ABS REDDISH BROWN	block	528



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Test Item(s)	Item / Component Description(s)	Location(s)	G. ID/ Item ID
I088	PC Bright Yellow	block	535
I089	ABS FLAME YELLOWISH ORANGE	block	537
I090	ABS DARK GREEN	block	541
I091	ABS BRIGHT REDDISH VIOLET	block	542
I092	ABS BRIGHT YELLOW	block	543
I093	ABS BRIGHT GREEN	block	550
I094	ABS BRIGHT ORANGE	block	561
I095	POM BLACK	block	579
I096	HV-POM BLACK	block	581
I097	POM BRIGHT RED	block	590
I098	HV-POM BRIGHT RED	block	591
I099	HI-PA BLACK	block	594
I100	PA 66 GF 33 MEDIUM STONE GREY	block	619
I101	TP TRANSPARENT	block	6242
I102	SEBS 78 BLACK	block	626
I103	SEBS 85 BRIGHT YELLOWISH-GREEN	block	743
I104	POM BRIGHT YELLOW	block	77
I105	SEBS 85 BRIGHT BLUE	block	798
I106	PA 66 GF 33 NATURE	block	863
I107	HI-PA NATURE	block	865
I108	SEBS-60/2 MEDIUM AZUR	block	874
I109	PA 66 GF 33 MEDIUM AZUR	block	876
I110	HV POM NATURE	block	906
I111	HD PE BIO DARK GREEN	block	907
I112	NB PP WHITE	block	944
I113	HI-PA WHITE	block	95
I114	MABS LH DIFFUSE WHITE	block	991



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I015	I016	I017	I018
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	LT 2	LT 2	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	2	LT 2	2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I019	I020	I021	I022
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	LT 2	LT 2	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	2	LT 2	2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I023	I025	I026	I027
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	4	LT 2	32
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	13
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	0.050	LT 0.05	1.4
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	0.050	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	3
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	2.4	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	2	LT 2	LT 2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I028	I029	I030	I031
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	360	LT 2	LT 2	250
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	0.35	LT 0.05	0.085	0.68
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	LT 2	LT 2	LT 2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I032	I033	I034	I035
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	66	LT 2	360
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	11	0.15	0.35
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	LT 2	LT 2	LT 2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I036	I037	I038	I039
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	820	LT 2	66	31
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	0.10	LT 0.05	11	6.4
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	5
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	410	LT 2	LT 2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I040	I041	I042	I043
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	250	LT 2	LT 2	66
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	0.68	0.15	LT 0.05	11
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	LT 2	LT 2	LT 2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I044	I045	I046	I047
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	360	11000	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	0.085	0.35	0.86	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	LT 2	LT 2	LT 2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I048	I049	I050	I051
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	LT 2	57	16
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	75
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	LT 0.05	0.099	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	10	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	4	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	8	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	3.6
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	4	2
Zinc (Zn)	mg/kg	46000	LT 2	LT 2	2	12
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I052	I053	I054	I055
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	6	15	11	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	3	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	2	11	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	3	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	10	2
Organic Tin	mg/kg	12	2.4	3.1	LT 2	6.2
Strontium (Sr)	mg/kg	56000	4	2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	8	2	2	2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I056	I057	I058	I059
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	2	LT 2	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	0.10	LT 0.05	0.050
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	0.050
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	4.5	LT 2	2.1
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	7	LT 2	3	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I060	I061	I062	I063
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	6	LT 2	LT 2	2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	LT 0.05	LT 0.05	0.10
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	7	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	2	LT 2	LT 2	4
Organic Tin	mg/kg	12	5.8	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	LT 2	2	11	2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I064	I065	I066	I067
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	4	LT 2	LT 2	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	0.10	LT 0.05	0.050	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	0.050	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	8	LT 2	4	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I068	I069	I070	I071
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	8	LT 2	LT 2	2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	0.050	LT 0.05	LT 0.05	0.050
Chromium VI (Cr VI)	mg/kg	0.053	0.050	LT 0.05	LT 0.05	0.050
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	3
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	2.3	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	2	4	4	3
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I072	I073	I074	I075
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	3	LT 2	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	2	LT 2	2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I076	I077	I078	I079
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	2	LT 2	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	LT 0.05	LT 0.05	0.050
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	0.050
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	LT 2	7	2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I080	I081	I082	I083
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	LT 2	LT 2	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	2.6	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	4	3	LT 2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I084	I085	I086	I087
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	3	LT 2	12
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	2	17	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	LT 0.05	0.050	0.050
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	0.050	0.050
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	3.8	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	3	200	LT 2	4
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I088	I089	I090	I091
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	3	2	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	0.050	LT 0.05	0.25
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	0.050	LT 0.05	0.25
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	4	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	LT 2	LT 2	LT 2	5
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I092	I093	I094	I095
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	2	LT 2	2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	0.099	LT 0.05	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	3	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	6.4	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	LT 2	LT 2	LT 2	15
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I096	I097	I098	I099
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	LT 2	LT 2	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	4	4	2	LT 2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I100	I101	I102	I103
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	0.0503	-
Aluminium (Al)	mg/kg	28130	4	3	4	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	4
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	0.10	LT 0.05	LT 0.05	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	6	LT 2	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	2
Organic Tin	mg/kg	12	3.0	2.1	2.1	5.0
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	6	LT 2
Zinc (Zn)	mg/kg	46000	7	LT 2	LT 2	2
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I104	I105	I106	I107
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	7	4	2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	LT 0.05	0.15	0.050	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	0.050	LT 0.05
Copper (Cu)	mg/kg	7700	LT 2	LT 2	7	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	8	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	LT 2
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	5
Organic Tin	mg/kg	12	LT 2	LT 2	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	7	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	LT 2	2	2	7
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I108	I109	I110	I111
Type	-	III	III	III	III	III
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	4	LT 2	LT 2
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	LT 2
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	LT 2
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	LT 2
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	LT 2
Chromium III (Cr III)	mg/kg	460	0.050	0.050	0.059	LT 0.05
Chromium VI (Cr VI)	mg/kg	0.053	0.050	0.050	LT 0.05	LT 0.05
Copper (Cu)	mg/kg	7700	2	6	LT 2	LT 2
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	LT 2
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	LT 2
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	LT 2
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	LT 2
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	LT 2
Selenium (Se)	mg/kg	460	LT 2	3	LT 2	LT 2
Tin (Sn)	mg/kg	180000	2	LT 2	LT 2	LT 2
Organic Tin	mg/kg	12	5.0	3.4	LT 2	LT 2
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	LT 2
Zinc (Zn)	mg/kg	46000	8	5	3	3
Conclusion	-	-	PASS	PASS	PASS	PASS



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I112	I113	I114	-
Type	-	III	III	III	III	-
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	LT 2	2	-
Arsenic (As)	mg/kg	47	LT 2	LT 2	LT 2	-
Boron (B)	mg/kg	15000	LT 2	LT 2	LT 2	-
Barium (Ba)	mg/kg	18750	LT 2	LT 2	LT 2	-
Cadmium (Cd)	mg/kg	17	LT 2	LT 2	LT 2	-
Cobalt (Co)	mg/kg	130	LT 2	LT 2	LT 2	-
Chromium III (Cr III)	mg/kg	460	LT 0.05	LT 0.05	0.050	-
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	LT 0.05	0.050	-
Copper (Cu)	mg/kg	7700	LT 2	LT 2	LT 2	-
Mercury (Hg)	mg/kg	94	LT 2	LT 2	LT 2	-
Manganese (Mn)	mg/kg	15000	LT 2	LT 2	LT 2	-
Nickel (Ni)	mg/kg	930	LT 2	LT 2	LT 2	-
Lead (Pb)	mg/kg	23	LT 2	LT 2	LT 2	-
Antimony (Sb)	mg/kg	560	LT 2	LT 2	LT 2	-
Selenium (Se)	mg/kg	460	LT 2	LT 2	LT 2	-
Tin (Sn)	mg/kg	180000	LT 2	LT 2	LT 2	-
Organic Tin	mg/kg	12	LT 2	LT 2	3.2	-
Strontium (Sr)	mg/kg	56000	LT 2	LT 2	LT 2	-
Zinc (Zn)	mg/kg	46000	65	LT 2	5	-
Conclusion	-	-	PASS	PASS	PASS	-

mg/kg = milligrams per kilogram (ppm=parts per million)

* = Average of duplicate analysis

Organic tin = migration of total organic tin is expressed as tributyl tin cation content in mg/kg

= Verified results (see note)

LT = Less Than

FR = Failed Result

Remark: - Results of Cr III and Cr VI were reported as sum of soluble Chromium content unless specified.
 - Result(s) of organic tin was (were) calculated while assuming the tin content wholly contributed from tributyltin cation unless specified.

Note: If soluble chromium content or soluble tin content exceeded the screening limits of soluble chromium (VI) or organic tin content, the results were verified by below method
 - Chromium VI: EN71 part 3:2019+A1:2021, Annex F
 - Organic tin: EN71 part 3:2019+A1:2021, Annex G by Gas Chromatography – Mass Spectroscopy analysis.



RESULTS:

PART 1

HEAVY METALS PRESENT IN PACKAGING (European Council Directive 94/62/EC on Packaging and Packaging Waste)

Analyte	Sum of Pb, Cd, Hg & Cr VI	
Requirement: Maximum allowable limit:	100 mg/kg	

Analyte				Sum of Pb, Cd, Hg & Cr VI	Conclusion
Sample Description				Result (mg/kg)	
	Color / Component	Location	Style		
(A)	black printed white paper sticker	box lid	1	LT 20	PASS
(B)	translucent white plastic	plastic tie	1	LT 20	PASS
(C)	clear / multicolor printed white / grey paper card / glue	colored box	1	LT 20	PASS
(D)	black printed clear adhesive tape	colored box and insert box	1	LT 20	PASS
(E)	black / white printed clear plastic	polybags	1	LT 20	PASS
(F)	black printed bright clear plastic	polybag	1	LT 20	PASS
(G)	dull clear plastic	polybag	1	LT 20	PASS
(H)	black printed white / dull grey paper card / glue	insert boxes	1	LT 20	PASS
(I)	dull white / off grey paper card / glue	insert boxes and wrappers	1	LT 20	PASS
(J)	clear / multicolor printed white paper card	card	1	LT 20	PASS
(K)	multicolor printed off white paper	leaflets	1	LT 20	PASS
(L)	clear laminated multicolor printed white plastic sticker	frame of plastic sticker	1	LT 20	PASS
(M)	clear laminated dull white paper	backing sheet of plastic sticker	1	LT 20	PASS
(N)	bright clear laminated black printed white plastic sticker	label on HUB, NO. 12	1	42	PASS

LT = Less Than

* = Average of duplicate analysis

mg/kg = milligrams per kilogram (ppm=parts per million)

Pb = Lead, Cd = Cadmium, Hg = Mercury, Cr VI = Hexavalent chromium



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (ISO 8124 Part 3: 2020)

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	G. ID/ Item ID
Type II: Polymeric Materials			
A	grey printed bright yellow plastic	HUB, NO. 12, 338N2	
B	deep grey printed yellow plastic	RECHARGEABLE BATTERY, NO. 4, 338N2	
C	flat grey printed blue plastic	MOTOR, NO. 14, 404N2, 44G1	
D	dull grey printed white plastic	MOTOR, NO. 14, 404N2, 44G1	
E	off brown printed bright blue plastic	LIGHT, NO. 1, 204N, 249G1	
F	off white printed black plastic	SENSOR COLOUR, NO. 2, 37I2, 32G2	
G	dull black plastic	RECHARGEABLE BATTERY, NO. 4, 338N2	
Type III: Paper And Paper Board			
H	clear / multicolor printed white paper sticker	sticker of box	
I	black printed flat white paper sticker	box	
Type II: Polymeric Materials			
J	yellow soft plastic	6313995 - PREPACK BOX 47X47, 1 PCS V-BELT DIA. 33	4544151
Type I: Coatings			
K	Black coating	4614195 - DOG W. DECO	4614195
L	Dark brown coating	4614195 - DOG W. DECO	4614195
M	White coating	4614195 - DOG W. DECO	4614195
N	Black coating	6039464 - MINI HEAD NO. "752"	6039464
O	Reddish brown coating	6039464 - MINI HEAD NO. "752"	6039464
P	White coating	6039464 - MINI HEAD NO. "752"	6039464
Q	Black coating	6116616 - MINI HEAD NO. 1675	6116616
R	Medium mougat coating	6116616 - MINI HEAD NO. 1675	6116616
S	Bright red coating	6116616 - MINI HEAD NO. 1675	6116616
T	White coating	6116616 - MINI HEAD NO. 1675	6116616
U	Nougat coating	6116616 - MINI HEAD NO. 1675	6116616
V	Black coating	6123714 - MINI HEAD "NO. 1762"	6123714
W	Medium mougat coating	6123714 - MINI HEAD "NO. 1762"	6123714
X	Dark azur coating	6123714 - MINI HEAD "NO. 1762"	6123714
Y	White coating	6123714 - MINI HEAD "NO. 1762"	6123714
Z	Bright red coating	6123714 - MINI HEAD "NO. 1762"	6123714



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (ISO 8124 Part 3: 2020)

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	G. ID/ Item ID
Type I: Coatings			
AA	Black coating	6123730 - MINI HEAD "NO. 1771"	6123730
AB	Medium mougat coating	6123730 - MINI HEAD "NO. 1771"	6123730
AC	Reddish brown coating	6123730 - MINI HEAD "NO. 1771"	6123730
AD	White coating	6123730 - MINI HEAD "NO. 1771"	6123730
AE	Cyan metallic coating	6252746 - FLAT TILE 2X2, ROUND, NO. 1116	6252746
AF	Black coating	6252746 - FLAT TILE 2X2, ROUND, NO. 1116	6252746
AG	Lacquer coating	6284599 - FLAT TILE 1X1 - ROUND "NO. 8"	6284599
AH	Black coating	6284599 - FLAT TILE 1X1 - ROUND "NO. 8"	6284599
Type II: Polymeric Materials			
AI	white soft plastic	USB CABLE, NO.2	6322774
AJ	off white soft plastic	USB CABLE, NO.2	6322774
AK	green soft plastic	USB CABLE, NO.2	6322774
AL	bright red soft plastic	USB CABLE, NO.2	6322774
AM	bright black soft plastic	USB CABLE, NO.2	6322774
AN	SEBS 85 NATURE	block	1118
AO	NB PP BRIGHT YELLOW	block	129
AP	ABS BRIGHT PURPLE	block	17
AQ	HV-ABS BRIGHT ORANGE	block	2121
AR	ABS DARK AZUR	block	2181
AS	ABS MEDIUM AZUR	block	2184
AT	HV-ABS BRIGHT RED	block	2204
AU	HV-ABS WHITE	block	2221
AV	ABS MEDIUM LILAC	block	23
AW	SEBS 34 BLACK	block	273
AX	ABS BRIGHT BLUE	block	28
AY	TR PP BRIGHT RED	block	320
AZ	HV-POM MEDIUM STONE GREY	block	3381



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (ISO 8124 Part 3: 2020)

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	G. ID/ Item ID
Type II: Polymeric Materials			
BA	POM SILVER METALLIC	block	357
BB	HV-POM FLAME YELLOWISH ORANGE	block	383
BC	MABS LH TR. LIGHT BLUE	block	391
BD	POM NATURE	block	403
BE	TP WHITE	block	408
BF	TP TR.MEDIUM REDDISH VIOLET	block	410
BG	SEBS 85/1 MEDIUM AZUR	block	413
BH	TP BRIGHT ORANGE	block	414
BI	HV-ABS BRIGHT GREEN	block	4201
BJ	MABS LH TR. BRIGHT GREEN	block	450
BK	MABS LH TRANSPERANT RED	block	451
BL	MABS LH, TRANSPARENT	block	468
BM	ABS MEDIUM NOUGAT	block	48
BN	ABS WHITE	block	481
BO	ABS BRIGHT RED	block	482
BP	HV-PC DARK STONE GREY	block	508
BQ	HV-PC MEDIUM STONE GREY	block	511
BR	ABS BLACK	block	519
BS	ABS DARK STONE GREY	block	526
BT	ABS REDDISH BROWN	block	528
BU	PC Bright Yellow	block	535
BV	ABS FLAME YELLOWISH ORANGE	block	537
BW	ABS DARK GREEN	block	541
BX	ABS BRIGHT REDDISH VIOLET	block	542
BY	ABS BRIGHT YELLOW	block	543
BZ	ABS BRIGHT GREEN	block	550
CA	ABS BRIGHT ORANGE	block	561
CB	POM BLACK	block	579
CC	HV-POM BLACK	block	581



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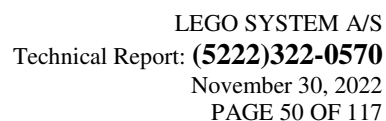
RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (ISO 8124 Part 3: 2020)

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	G. ID/ Item ID
Type II: Polymeric Materials			
CD	POM BRIGHT RED	block	590
CE	HV-POM BRIGHT RED	block	591
CF	HI-PA BLACK	block	594
CG	PA 66 GF 33 MEDIUM STONE GREY	block	619
CH	TP TRANSPARENT	block	6242
CI	SEBS 78 BLACK	block	626
CJ	SEBS 85 BRIGHT YELLOWISH-GREEN	block	743
CK	POM BRIGHT YELLOW	block	77
CL	SEBS 85 BRIGHT BLUE	block	798
CM	PA 66 GF 33 NATURE	block	863
CN	HI-PA NATURE	block	865
CO	SEBS-60/2 MEDIUM AZUR	block	874
CP	PA 66 GF 33 MEDIUM AZUR	block	876
CQ	HV POM NATURE	block	906
CR	HD PE BIO DARK GREEN	block	907
CS	NB PP WHITE	block	944
CT	HI-PA WHITE	block	95
CU	MABS LH DIFFUSE WHITE	block	991

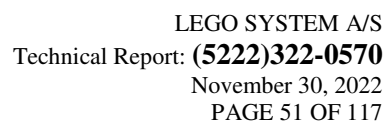


PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	
Max. Limit All except Type VIII and Type XI (mg/kg)	25	1000	75	60	60	90	60	500	
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500	
Max. Limit Type XI (mg/kg)	10	350	15	25	10	25	10	50	
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%	

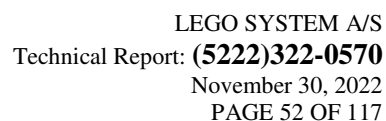
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PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

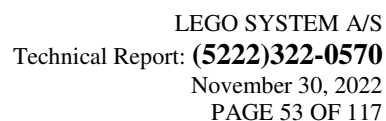
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PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

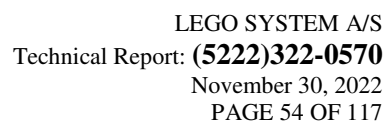
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PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

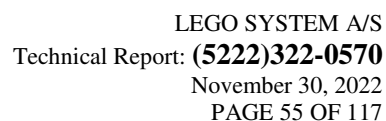
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PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

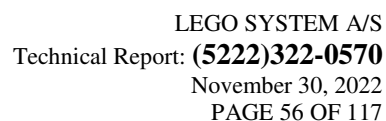
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PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

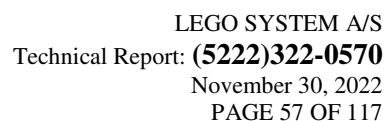
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PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

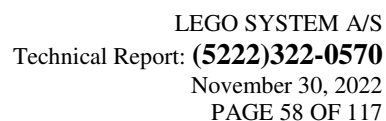
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PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

[illegible]



PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	
Max. Limit All except Type VIII and Type XI (mg/kg)	25	1000	75	60	60	90	60	500	
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500	
Max. Limit Type XI (mg/kg)	10	350	15	25	10	25	10	50	
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%	

[illegible]



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (ISO 8124 Part 3: 2020)

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	
Max. Limit All except Type VIII and Type XI (mg/kg)	25	1000	75	60	60	90	60	500	
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500	
Max. Limit Type XI (mg/kg)	10	350	15	25	10	25	10	50	
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%	

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount (g)	Conclusion
Sample	Result (mg/kg)									
CM	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
CN	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
CO	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
CP	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	3		PASS
CQ	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
CR	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
CS	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
CT	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
CU	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS

mg/kg = milligrams per kilogram (ppm=parts per million)

CR = adjusted analytical result

LT = Less Than

* = Average of duplicate analysis

As = Arsenic, Ba = Barium, Cd = Cadmium,

Cr = Chromium, Hg = Mercury, Pb = Lead,

Sb = Antimony, Se = Selenium



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (Australia Trade Practices Act 1974, Consumer Protection Notice No. 1 of 2009 (AS/NZS 8124: Part 3: 2012 with Amendment No. 1: 2016))

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	G. ID/ Item ID
Type II: Polymeric Materials			
A	grey printed bright yellow plastic	HUB, NO. 12, 338N2	
B	deep grey printed yellow plastic	RECHARGEABLE BATTERY, NO. 4, 338N2	
C	flat grey printed blue plastic	MOTOR, NO. 14, 404N2, 44G1	
D	dull grey printed white plastic	MOTOR, NO. 14, 404N2, 44G1	
E	off brown printed bright blue plastic	LIGHT, NO. 1, 204N, 249G1	
F	off white printed black plastic	SENSOR COLOUR, NO. 2, 37I2, 32G2	
G	dull black plastic	RECHARGEABLE BATTERY, NO. 4, 338N2	
Type III: Paper And Paper Board			
H	clear / multicolor printed white paper sticker	sticker of box	
I	black printed flat white paper sticker	box	
Type II: Polymeric Materials			
J	yellow soft plastic	6313995 - PREPACK BOX 47X47, 1 PCS V-BELT DIA. 33	4544151
Type I: Coatings			
K	Black coating	4614195 - DOG W. DECO	4614195
L	Dark brown coating	4614195 - DOG W. DECO	4614195
M	White coating	4614195 - DOG W. DECO	4614195
N	Black coating	6039464 - MINI HEAD NO. "752"	6039464
O	Reddish brown coating	6039464 - MINI HEAD NO. "752"	6039464
P	White coating	6039464 - MINI HEAD NO. "752"	6039464
Q	Black coating	6116616 - MINI HEAD NO. 1675	6116616
R	Medium mougat coating	6116616 - MINI HEAD NO. 1675	6116616
S	Bright red coating	6116616 - MINI HEAD NO. 1675	6116616
T	White coating	6116616 - MINI HEAD NO. 1675	6116616
U	Nougat coating	6116616 - MINI HEAD NO. 1675	6116616
V	Black coating	6123714 - MINI HEAD "NO. 1762"	6123714
W	Medium mougat coating	6123714 - MINI HEAD "NO. 1762"	6123714
X	Dark azur coating	6123714 - MINI HEAD "NO. 1762"	6123714
Y	White coating	6123714 - MINI HEAD "NO. 1762"	6123714
Z	Bright red coating	6123714 - MINI HEAD "NO. 1762"	6123714



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (Australia Trade Practices Act 1974, Consumer Protection Notice No. 1 of 2009 (AS/NZS 8124: Part 3: 2012 with Amendment No. 1: 2016))

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	G. ID/ Item ID
Type I: Coatings			
AA	Black coating	6123730 - MINI HEAD "NO. 1771"	6123730
AB	Medium mougat coating	6123730 - MINI HEAD "NO. 1771"	6123730
AC	Reddish brown coating	6123730 - MINI HEAD "NO. 1771"	6123730
AD	White coating	6123730 - MINI HEAD "NO. 1771"	6123730
AE	Cyan metallic coating	6252746 - FLAT TILE 2X2, ROUND, NO. 1116	6252746
AF	Black coating	6252746 - FLAT TILE 2X2, ROUND, NO. 1116	6252746
AG	Lacquer coating	6284599 - FLAT TILE 1X1 - ROUND "NO. 8"	6284599
AH	Black coating	6284599 - FLAT TILE 1X1 - ROUND "NO. 8"	6284599
Type II: Polymeric Materials			
AI	white soft plastic	USB CABLE, NO.2	6322774
AJ	off white soft plastic	USB CABLE, NO.2	6322774
AK	green soft plastic	USB CABLE, NO.2	6322774
AL	bright red soft plastic	USB CABLE, NO.2	6322774
AM	bright black soft plastic	USB CABLE, NO.2	6322774
AN	SEBS 85 NATURE	block	1118
AO	NB PP BRIGHT YELLOW	block	129
AP	ABS BRIGHT PURPLE	block	17
AQ	HV-ABS BRIGHT ORANGE	block	2121
AR	ABS DARK AZUR	block	2181
AS	ABS MEDIUM AZUR	block	2184
AT	HV-ABS BRIGHT RED	block	2204
AU	HV-ABS WHITE	block	2221
AV	ABS MEDIUM LILAC	block	23
AW	SEBS 34 BLACK	block	273
AX	ABS BRIGHT BLUE	block	28
AY	TR PP BRIGHT RED	block	320
AZ	HV-POM MEDIUM STONE GREY	block	3381



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (Australia Trade Practices Act 1974, Consumer Protection Notice No. 1 of 2009 (AS/NZS 8124: Part 3: 2012 with Amendment No. 1: 2016))

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	G. ID/ Item ID
Type II: Polymeric Materials			
BA	POM SILVER METALLIC	block	357
BB	HV-POM FLAME YELLOWISH ORANGE	block	383
BC	MABS LH TR. LIGHT BLUE	block	391
BD	POM NATURE	block	403
BE	TP WHITE	block	408
BF	TP TR.MEDIUM REDDISH VIOLET	block	410
BG	SEBS 85/1 MEDIUM AZUR	block	413
BH	TP BRIGHT ORANGE	block	414
BI	HV-ABS BRIGHT GREEN	block	4201
BJ	MABS LH TR. BRIGHT GREEN	block	450
BK	MABS LH TRANSPERANT RED	block	451
BL	MABS LH, TRANSPARENT	block	468
BM	ABS MEDIUM NOUGAT	block	48
BN	ABS WHITE	block	481
BO	ABS BRIGHT RED	block	482
BP	HV-PC DARK STONE GREY	block	508
BQ	HV-PC MEDIUM STONE GREY	block	511
BR	ABS BLACK	block	519
BS	ABS DARK STONE GREY	block	526
BT	ABS REDDISH BROWN	block	528
BU	PC Bright Yellow	block	535
BV	ABS FLAME YELLOWISH ORANGE	block	537
BW	ABS DARK GREEN	block	541
BX	ABS BRIGHT REDDISH VIOLET	block	542
BY	ABS BRIGHT YELLOW	block	543
BZ	ABS BRIGHT GREEN	block	550
CA	ABS BRIGHT ORANGE	block	561
CB	POM BLACK	block	579
CC	HV-POM BLACK	block	581



RESULTS:

PART 1

MIGRATION OF CERTAIN ELEMENTS (Australia Trade Practices Act 1974, Consumer Protection Notice No. 1 of 2009 (AS/NZS 8124: Part 3: 2012 with Amendment No. 1: 2016))

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	G. ID/ Item ID
Type II: Polymeric Materials			
CD	POM BRIGHT RED	block	590
CE	HV-POM BRIGHT RED	block	591
CF	HI-PA BLACK	block	594
CG	PA 66 GF 33 MEDIUM STONE GREY	block	619
CH	TP TRANSPARENT	block	6242
CI	SEBS 78 BLACK	block	626
CJ	SEBS 85 BRIGHT YELLOWISH-GREEN	block	743
CK	POM BRIGHT YELLOW	block	77
CL	SEBS 85 BRIGHT BLUE	block	798
CM	PA 66 GF 33 NATURE	block	863
CN	HI-PA NATURE	block	865
CO	SEBS-60/2 MEDIUM AZUR	block	874
CP	PA 66 GF 33 MEDIUM AZUR	block	876
CQ	HV POM NATURE	block	906
CR	HD PE BIO DARK GREEN	block	907
CS	NB PP WHITE	block	944
CT	HI-PA WHITE	block	95
CU	MABS LH DIFFUSE WHITE	block	991



RESULTS:

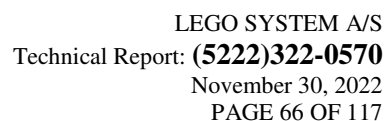
PART 1

MIGRATION OF CERTAIN ELEMENTS (Australia Trade Practices Act 1974, Consumer Protection Notice No. 1 of 2009 (AS/NZS 8124: Part 3: 2012 with Amendment No. 1: 2016))

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	
Max. Limit All except Type VIII (mg/kg)	25	1000	75	60	60	90	60	500	
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500	
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%	

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Sample	Result (mg/kg)								(g)	
M	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
N	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
O	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
P	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
Q	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
R	LT 2	LT 2	LT 2	11	LT 2	LT 2	LT 2	LT 2		PASS
S	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
T	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
U	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
V	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
W	LT 2	LT 2	LT 2	11	LT 2	LT 2	LT 2	LT 2		PASS
X	LT 2	LT 2	LT 2	6	LT 2	LT 2	LT 2	LT 2		PASS

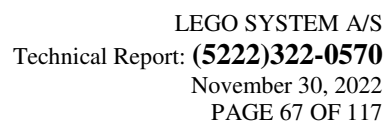


PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Max. Limit All except Type VIII (mg/kg)	25	1000	75	60	60	90	60	500
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%

[illegible]

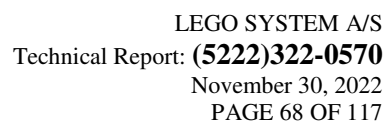


PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Max. Limit All except Type VIII (mg/kg)	25	1000	75	60	60	90	60	500
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%

[illegible]

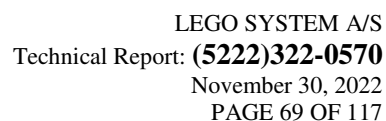


PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Max. Limit All except Type VIII (mg/kg)	25	1000	75	60	60	90	60	500
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%

[illegible]

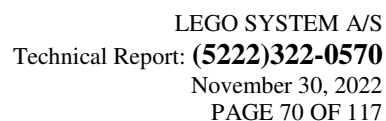


PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Max. Limit All except Type VIII (mg/kg)	25	1000	75	60	60	90	60	500
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%

[illegible]



PART 1

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Max. Limit All except Type VIII (mg/kg)	25	1000	75	60	60	90	60	500
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%

[illegible]



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MIGRATION OF CERTAIN ELEMENTS (Australia Trade Practices Act 1974, Consumer Protection Notice No. 1 of 2009 (AS/NZS 8124: Part 3: 2012 with Amendment No. 1: 2016))

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	
Max. Limit All except Type VIII (mg/kg)	25	1000	75	60	60	90	60	500	
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500	
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%	

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Sample	Result (mg/kg)								(g)	
CS	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
CT	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS
CU	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS

mg/kg = milligrams per kilogram (ppm=parts per million)

CR = adjusted analytical result

LT = Less Than

* = Average of duplicate analysis

As = Arsenic, Ba = Barium, Cd = Cadmium,

Cr = Chromium, Hg = Mercury, Pb = Lead,

Sb = Antimony, Se = Selenium



RESULTS:

PART 1

DNOP/DINP/DIDP CONTENTS IN TOYS AND CHILDCARE ARTICLES WHICH CAN BE PLACED IN MOUTH BY THE CHILDREN (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52)

Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Sample Identity	Color / Component	Location	G. ID/ Item ID
A	clear / all coating	sticker of box	
B	yellow soft plastic	6313995 - PREPACK BOX 47X47, 1 PCS V-BELT DIA. 33	4544151
C	Black coating	4614195 - DOG W. DECO	4614195
D	Dark brown coating	4614195 - DOG W. DECO	4614195
E	White coating	4614195 - DOG W. DECO	4614195
F	Black coating	6039464 - MINI HEAD NO. "752"	6039464
G	Reddish brown coating	6039464 - MINI HEAD NO. "752"	6039464
H	White coating	6039464 - MINI HEAD NO. "752"	6039464
I	Black coating	6116616 - MINI HEAD NO. 1675	6116616
J	Medium mougat coating	6116616 - MINI HEAD NO. 1675	6116616
K	Bright red coating	6116616 - MINI HEAD NO. 1675	6116616
L	White coating	6116616 - MINI HEAD NO. 1675	6116616
M	Nougat coating	6116616 - MINI HEAD NO. 1675	6116616
N	Black coating	6123714 - MINI HEAD "NO. 1762"	6123714
O	Medium mougat coating	6123714 - MINI HEAD "NO. 1762"	6123714
P	Dark azur coating	6123714 - MINI HEAD "NO. 1762"	6123714
Q	White coating	6123714 - MINI HEAD "NO. 1762"	6123714
R	Bright red coating	6123714 - MINI HEAD "NO. 1762"	6123714
S	Black coating	6123730 - MINI HEAD "NO. 1771"	6123730
T	Medium mougat coating	6123730 - MINI HEAD "NO. 1771"	6123730
U	Reddish brown coating	6123730 - MINI HEAD "NO. 1771"	6123730
V	White coating	6123730 - MINI HEAD "NO. 1771"	6123730
W	Cyan metallic coating	6252746 - FLAT TILE 2X2, ROUND, NO. 1116	6252746
X	Black coating	6252746 - FLAT TILE 2X2, ROUND, NO. 1116	6252746
Y	Lacquer coating	6284599 - FLAT TILE 1X1 - ROUND "NO. 8"	6284599
Z	Black coating	6284599 - FLAT TILE 1X1 - ROUND "NO. 8"	6284599
AA	white soft plastic	USB CABLE, NO.2	6322774
AB	off white soft plastic	USB CABLE, NO.2	6322774
AC	green soft plastic	USB CABLE, NO.2	6322774
AD	bright red soft plastic	USB CABLE, NO.2	6322774



RESULTS:

PART 1

DNOP/DINP/DIDP CONTENTS IN TOYS AND CHILDCARE ARTICLES WHICH CAN BE PLACED IN MOUTH BY THE CHILDREN (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52)

Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Sample Identity	Color / Component	Location	G. ID/ Item ID
AE	bright black soft plastic	USB CABLE, NO.2	6322774
AF	SEBS 85 NATURE	block	1118
AG	SEBS 34 BLACK	block	273
AH	HV-POM MEDIUM STONE GREY	block	3381
AI	POM SILVER METALLIC	block	357
AJ	HV-POM FLAME YELLOWISH ORANGE	block	383
AK	POM NATURE	block	403
AL	TP WHITE	block	408
AM	TP TR.MEDIUM REDDISH VIOLET	block	410
AN	SEBS 85/1 MEDIUM AZUR	block	413
AO	TP BRIGHT ORANGE	block	414
AP	HV-PC DARK STONE GREY	block	508
AQ	HV-PC MEDIUM STONE GREY	block	511
AR	PC Bright Yellow	block	535
AS	POM BLACK	block	579
AT	HV-POM BLACK	block	581
AU	POM BRIGHT RED	block	590
AV	HV-POM BRIGHT RED	block	591
AW	HI-PA BLACK	block	594
AX	PA 66 GF 33 MEDIUM STONE GREY	block	619
AY	TP TRANSPARENT	block	6242
AZ	SEBS 78 BLACK	block	626
BA	SEBS 85 BRIGHT YELLOWISH-GREEN	block	743
BB	POM BRIGHT YELLOW	block	77
BC	SEBS 85 BRIGHT BLUE	block	798
BD	PA 66 GF 33 NATURE	block	863
BE	HI-PA NATURE	block	865
BF	SEBS-60/2 MEDIUM AZUR	block	874
BG	PA 66 GF 33 MEDIUM AZUR	block	876
BH	HV POM NATURE	block	906
BI	HI-PA WHITE	block	95



RESULTS:

PART 1

DNOP/DINP/DIDP CONTENTS IN TOYS AND CHILDCARE ARTICLES WHICH CAN BE PLACED IN MOUTH BY THE CHILDREN (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52)

Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Analyte:	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP	
Limit (%):	0.1	0.1	0.1	0.1	

Analyte	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP	Conclusion
Sample	Result (%)				
A	LT 0.005	LT 0.005	LT 0.005	-	PASS
B	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
C	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
D	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
E	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
F	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
G	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
H	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
I	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
J	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
K	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
L	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
M	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
N	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
O	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
P	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
Q	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS



RESULTS:

PART 1

DNOP/DINP/DIDP CONTENTS IN TOYS AND CHILDCARE ARTICLES WHICH CAN BE PLACED IN MOUTH BY THE CHILDREN (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52)

Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Analyte:	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP	
Limit (%):	0.1	0.1	0.1	0.1	

Analyte	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP	Conclusion
Sample	Result (%)				
R	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
S	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
T	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
U	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
V	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
W	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
X	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
Y	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
Z	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AA	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AB	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AC	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AD	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AE	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AF	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AG	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AH	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS



RESULTS:

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DNOP/DINP/DIDP CONTENTS IN TOYS AND CHILDCARE ARTICLES WHICH CAN BE PLACED IN MOUTH BY THE CHILDREN (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52)

Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Analyte:	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP	
Limit (%):	0.1	0.1	0.1	0.1	

Analyte	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP	Conclusion
Sample	Result (%)				
AI	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AJ	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AK	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AL	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AM	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AN	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AO	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AP	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AQ	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AR	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AS	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AT	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AU	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AV	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AW	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AX	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
AY	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS



RESULTS:

PART 1

DNOP/DINP/DIDP CONTENTS IN TOYS AND CHILDCARE ARTICLES WHICH CAN BE PLACED IN MOUTH BY THE CHILDREN (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52)

Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Analyte:	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP	
Limit (%):	0.1	0.1	0.1	0.1	

Analyte	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP	Conclusion
Sample	Result (%)				
AZ	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
BA	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
BB	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
BC	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
BD	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
BE	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
BF	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
BG	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
BH	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
BI	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS

Detection Limit :

DNOP = Di-n-octyl phthalate (0.005%)

DINP = Di-iso-nonyl phthalate (0.005%)

DIDP = Di-iso-decyl phthalate (0.005%)

Results reported in percentage

LT = Less than

ND = None detected



RESULTS:

PART 1

BBP / DBP / DEHP / DNOP / DINP / DIDP/ DIBP CONTENTS (ISO 8124-6:2018)

Test Method: ISO 8124-6:2018

Sample Identity	Color / Component	Location	G. ID/ Item ID
A	clear / all coating	sticker of box	
B	yellow soft plastic	6313995 - PREPACK BOX 47X47, 1 PCS V-BELT DIA. 33	4544151
C	Black coating	4614195 - DOG W. DECO	4614195
D	Dark brown coating	4614195 - DOG W. DECO	4614195
E	White coating	4614195 - DOG W. DECO	4614195
F	Black coating	6039464 - MINI HEAD NO. "752"	6039464
G	Reddish brown coating	6039464 - MINI HEAD NO. "752"	6039464
H	White coating	6039464 - MINI HEAD NO. "752"	6039464
I	Black coating	6116616 - MINI HEAD NO. 1675	6116616
J	Medium mougat coating	6116616 - MINI HEAD NO. 1675	6116616
K	Bright red coating	6116616 - MINI HEAD NO. 1675	6116616
L	White coating	6116616 - MINI HEAD NO. 1675	6116616
M	Nougat coating	6116616 - MINI HEAD NO. 1675	6116616
N	Black coating	6123714 - MINI HEAD "NO. 1762"	6123714
O	Medium mougat coating	6123714 - MINI HEAD "NO. 1762"	6123714
P	Dark azur coating	6123714 - MINI HEAD "NO. 1762"	6123714
Q	White coating	6123714 - MINI HEAD "NO. 1762"	6123714
R	Bright red coating	6123714 - MINI HEAD "NO. 1762"	6123714
S	Black coating	6123730 - MINI HEAD "NO. 1771"	6123730
T	Medium mougat coating	6123730 - MINI HEAD "NO. 1771"	6123730
U	Reddish brown coating	6123730 - MINI HEAD "NO. 1771"	6123730
V	White coating	6123730 - MINI HEAD "NO. 1771"	6123730
W	Cyan metallic coating	6252746 - FLAT TILE 2X2, ROUND, NO. 1116	6252746
X	Black coating	6252746 - FLAT TILE 2X2, ROUND, NO. 1116	6252746
Y	Lacquer coating	6284599 - FLAT TILE 1X1 - ROUND "NO. 8"	6284599
Z	Black coating	6284599 - FLAT TILE 1X1 - ROUND "NO. 8"	6284599
AA	white soft plastic	USB CABLE, NO.2	6322774
AB	off white soft plastic	USB CABLE, NO.2	6322774
AC	green soft plastic	USB CABLE, NO.2	6322774



RESULTS:

PART 1

BBP / DBP / DEHP / DNOP / DINP / DIDP/ DIBP CONTENTS (ISO 8124-6:2018)

Test Method: ISO 8124-6:2018

Sample Identity	Color / Component	Location	G. ID/ Item ID
AD	bright red soft plastic	USB CABLE, NO.2	6322774
AE	bright black soft plastic	USB CABLE, NO.2	6322774
AF	SEBS 85 NATURE	block	1118
AG	SEBS 34 BLACK	block	273
AH	HV-POM MEDIUM STONE GREY	block	3381
AI	POM SILVER METALLIC	block	357
AJ	HV-POM FLAME YELLOWISH ORANGE	block	383
AK	POM NATURE	block	403
AL	TP WHITE	block	408
AM	TP TR.MEDIUM REDDISH VIOLET	block	410
AN	SEBS 85/1 MEDIUM AZUR	block	413
AO	TP BRIGHT ORANGE	block	414
AP	HV-PC DARK STONE GREY	block	508
AQ	HV-PC MEDIUM STONE GREY	block	511
AR	PC Bright Yellow	block	535
AS	POM BLACK	block	579
AT	HV-POM BLACK	block	581
AU	POM BRIGHT RED	block	590
AV	HV-POM BRIGHT RED	block	591
AW	HI-PA BLACK	block	594
AX	PA 66 GF 33 MEDIUM STONE GREY	block	619
AY	TP TRANSPARENT	block	6242
AZ	SEBS 78 BLACK	block	626
BA	SEBS 85 BRIGHT YELLOWISH-GREEN	block	743
BB	POM BRIGHT YELLOW	block	77
BC	SEBS 85 BRIGHT BLUE	block	798
BD	PA 66 GF 33 NATURE	block	863
BE	HI-PA NATURE	block	865
BF	SEBS-60/2 MEDIUM AZUR	block	874
BG	PA 66 GF 33 MEDIUM AZUR	block	876
BH	HV POM NATURE	block	906
BI	HI-PA WHITE	block	95

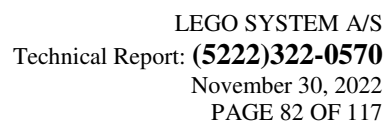
RESULTS:

PART 1

BBP / DBP / DEHP / DNOP / DINP / DIDP/ DIBP CONTENTS (ISO 8124-6:2018)

Test Method: ISO 8124-6:2018

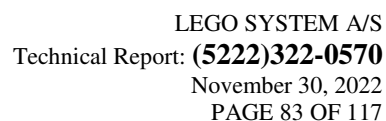
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PART 1

Test Method: ISO 8124-6:2018

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PART 1

Test Method: ISO 8124-6:2018

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RESULTS:

PART 1

BBP / DBP / DEHP / DNOP / DINP / DIDP / DIBP CONTENTS (ISO 8124-6:2018)

Test Method: ISO 8124-6:2018

Analyte:	BBP	DBP	DEHP	DNOP	DINP	DIDP	DIBP	
Limit (%):	Show Data							

Analyte	BBP	DBP	DEHP	DNOP	DINP	DIDP	DIBP	Conclusion
Sample	Result (%)							
AW	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
AX	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
AY	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
AZ	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
BA	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
BB	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
BC	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
BD	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
BE	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
BF	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
BG	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
BH	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
BI	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA

Detection Limit :

BBP = Butyl benzyl phthalate (0.005%)
 DBP = Dibutyl phthalate (0.005%)
 DEHP = Di(2-ethylhexyl) phthalate (0.005%)
 DNOP = Di-n-octyl phthalate (0.005%)
 DINP = Di-iso-nonyl phthalate (0.005%)
 DIDP = Di-iso-decyl phthalate (0.005%)
 DIBP = Di-isobutyl phthalate (0.005%)

Results reported in percentage

LT = Less than
 ND = None detected



RESULTS:

PART 1

BBP/DBP/DEHP/DIBP CONTENTS (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 51 (amended up to EU No. 2018/2005))

Test Method: With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer

Sample Identity	Color / Component	Location	G. ID/ Item ID
A	clear / all coating	sticker of box	
B	yellow soft plastic	6313995 - PREPACK BOX 47X47, 1 PCS V-BELT DIA. 33	4544151
C	white soft plastic	USB CABLE, NO.2	6322774
D	off white soft plastic	USB CABLE, NO.2	6322774
E	green soft plastic	USB CABLE, NO.2	6322774
F	bright red soft plastic	USB CABLE, NO.2	6322774
G	bright black soft plastic	USB CABLE, NO.2	6322774
H	SEBS 85 NATURE	block	1118
I	SEBS 34 BLACK	block	273
J	HV-POM MEDIUM STONE GREY	block	3381
K	POM SILVER METALLIC	block	357
L	HV-POM FLAME YELLOWISH ORANGE	block	383
M	POM NATURE	block	403
N	TP WHITE	block	408
O	TP TR.MEDIUM REDDISH VIOLET	block	410
P	SEBS 85/1 MEDIUM AZUR	block	413
Q	TP BRIGHT ORANGE	block	414
R	HV-PC DARK STONE GREY	block	508
S	HV-PC MEDIUM STONE GREY	block	511
T	PC Bright Yellow	block	535
U	POM BLACK	block	579
V	HV-POM BLACK	block	581
W	POM BRIGHT RED	block	590
X	HV-POM BRIGHT RED	block	591
Y	HI-PA BLACK	block	594
Z	PA 66 GF 33 MEDIUM STONE GREY	block	619
AA	TP TRANSPARENT	block	6242
AB	SEBS 78 BLACK	block	626
AC	SEBS 85 BRIGHT YELLOWISH-GREEN	block	743



RESULTS:

PART 1

BBP/DBP/DEHP/DIBP CONTENTS (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 51 (amended up to EU No. 2018/2005))

Test Method: With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer

Sample Identity	Color / Component	Location	G. ID/ Item ID
AD	POM BRIGHT YELLOW	block	77
AE	SEBS 85 BRIGHT BLUE	block	798
AF	PA 66 GF 33 NATURE	block	863
AG	HI-PA NATURE	block	865
AH	SEBS-60/2 MEDIUM AZUR	block	874
AI	PA 66 GF 33 MEDIUM AZUR	block	876
AJ	HV POM NATURE	block	906
AK	HI-PA WHITE	block	95

Analyte:	BBP	DBP	DEHP	DIBP	Sum of BBP, DBP, DEHP & DIBP	
Limit (%):	0.1	0.1	0.1	0.1	0.1	

Analyte	BBP	DBP	DEHP	DIBP	Sum of BBP, DBP, DEHP & DIBP	Conclusion
Sample	Result (%)					
A	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
B	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
C	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
D	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
E	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
F	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
G	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
H	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
I	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS



RESULTS:

PART 1

BBP/DBP/DEHP/DIBP CONTENTS (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 51 (amended up to EU No. 2018/2005))

Test Method: With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer

Analyte:	BBP	DBP	DEHP	DIBP	Sum of BBP, DBP, DEHP & DIBP	
Limit (%):	0.1	0.1	0.1	0.1	0.1	

Analyte	BBP	DBP	DEHP	DIBP	Sum of BBP, DBP, DEHP & DIBP	Conclusion
Sample	Result (%)					
J	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
K	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
L	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
M	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
N	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
O	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
P	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
Q	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
R	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
S	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
T	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
U	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
V	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
W	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
X	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
Y	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
Z	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS



RESULTS:

PART 1

BBP/DBP/DEHP/DIBP CONTENTS (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 51 (amended up to EU No. 2018/2005))

Test Method: With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer

Analyte:	BBP	DBP	DEHP	DIBP	Sum of BBP, DBP, DEHP & DIBP	
Limit (%):	0.1	0.1	0.1	0.1	0.1	

Analyte	BBP	DBP	DEHP	DIBP	Sum of BBP, DBP, DEHP & DIBP	Conclusion
Sample	Result (%)					
AA	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
AB	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
AC	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
AD	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
AE	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
AF	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
AG	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
AH	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
AI	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
AJ	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
AK	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS

Detection Limit : Each 0.005%

BBP = Butyl benzyl phthalate (EC number 201-622-7)

DBP = Dibutyl phthalate (EC number 201-557-4)

DEHP = Di(2-ethylhexyl) phthalate (EC number 204-211-0)

DIBP = Diisobutyl phthalate (EC number 201-553-2)

Results reported in percentage

ND = Not detected

LT = Less Than



RESULTS:

Standard EN IEC 62115:2020+A11:2020 “Electric toys - Safety”

Clause	Parameter	Result
7	Marking and Instructions	M
8	Power input	NA
9	Heating and abnormal operation	M-See Remark
10	Electric strength	M
11	Electric toys used in water, electric toys used with liquid and electric toys cleaned with liquid	NA
12	Mechanical strength	M
13	Construction	M
14	Protection of cords and wires	M
15	Components	M-See Executive Summary
16	Screws and connections	NA
17	Clearances and creepage distances	M
18	Resistance to heat and fire	M-See Executive Summary
19	Radiation and similar hazards	M-See Executive Summary
Annex D	Toys with protective electronic circuit	NA
Annex E	Electric toys incorporating lasers and or light emitting diodes (LED) or UV emitting lamps	M
Annex I	Toys generating Electromagnetic Fields (EMF)	NA

M = Meet
NA = Not applicable

NM/R = Not Meet-refer to Comment Section
NR = Not requested by the client



Remark:

Clause	Parameter									
9.3	The maximum temperature rises at normal operation were recorded as follows: Ambient Temperature (°C): <u>23.7</u> <table><tr><th><u>Location</u></th><th><u>Temperature Rise (K)</u></th><th><u>Limit (K)</u></th></tr><tr><td>Battery Enclosure</td><td>2.9</td><td>45</td></tr><tr><td>Motor</td><td>3.2</td><td>55</td></tr></table>	<u>Location</u>	<u>Temperature Rise (K)</u>	<u>Limit (K)</u>	Battery Enclosure	2.9	45	Motor	3.2	55
<u>Location</u>	<u>Temperature Rise (K)</u>	<u>Limit (K)</u>								
Battery Enclosure	2.9	45								
Motor	3.2	55								
	The maximum temperature rises at locked moving part were recorded as follows: Ambient Temperature (°C): 23.7 <table><tr><th><u>Location</u></th><th><u>Temperature Rise (K)</u></th><th><u>Limit (K)</u></th></tr><tr><td>Battery Enclosure</td><td>0.7</td><td>55</td></tr><tr><td>Motor</td><td>0.3</td><td>55</td></tr></table>	<u>Location</u>	<u>Temperature Rise (K)</u>	<u>Limit (K)</u>	Battery Enclosure	0.7	55	Motor	0.3	55
<u>Location</u>	<u>Temperature Rise (K)</u>	<u>Limit (K)</u>								
Battery Enclosure	0.7	55								
Motor	0.3	55								
	The maximum temperature rises at fault condition were recorded as follows: Ambient Temperature (°C): 23.7 <table><tr><th><u>Location</u></th><th><u>Temperature Rise (K)</u></th><th><u>Limit (K)</u></th></tr><tr><td>Battery Enclosure</td><td>8.9</td><td>55</td></tr></table>	<u>Location</u>	<u>Temperature Rise (K)</u>	<u>Limit (K)</u>	Battery Enclosure	8.9	55			
<u>Location</u>	<u>Temperature Rise (K)</u>	<u>Limit (K)</u>								
Battery Enclosure	8.9	55								



RESULTS:

Measurement Results of Emission from Electric Toys for LEDs or Lasers or UV lamps						
Source #	Color	Peak Wave Length(nm)	Spectral Range (nm)	Band Width (nm):	Measured Value	Limit Value
Led 1 (Hub)	RGB	460	400-780	18	0.007451 Wsr ⁻¹	0.04 Wsr ⁻¹
		515	400-780	35		
		630	400-780	16		
Evaluation Rang				Result		
400nm≤ λ < 780 nm				Safe		
This Lamp used in electric toys				Safe		
Source #	Color	Peak Wave Length(nm)	Spectral Range (nm)	Band Width (nm):	Measured Value	Limit Value
Led 2 (sensor colour No.2)	White	455	400-780	24	0.00636 Wsr ⁻¹	0.04 Wsr ⁻¹
		605	400-780	141		
Evaluation Rang				Result		
400nm≤ λ < 780 nm				Safe		
This Lamp used in electric toys				Safe		



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RESULTS:

Measurement Results of Emission from Electric Toys for LEDs or Lasers or UV lamps						
Source #	Color	Peak Wave Length(nm)	Spectral Range (nm)	Band Width (nm):	Measured Value	Limit Value
Led 3 (light)	RGB	465	400-780	21	0.01669 Wsr ⁻¹	0.04 Wsr ⁻¹
		520	400-780	39		
		635	400-780	19		
Evaluation Rang				Result		
400nm≤ λ < 780 nm				Safe		
This Lamp used in electric toys				Safe		



RESULTS:

Standard IEC 62115 :2017 “Electric toys - Safety”

Clause	Parameter	Result
5	General Conditions for the tests	NA
7	Marking and Instructions	M
8	Power input	NA
9	Heating and abnormal operation	M-See Remark
10	Electric strength	M
11	Electric toys used in water, electric toys used with liquid and electric toys cleaned with liquid	NA
12	Mechanical strength	M
13	Construction	M
14	Protection of cords and wires	M
15	Components	See Executive Summary
16	Screws and connections	NA
17	Clearances and creepage distances	M
18	Resistance to heat and fire	M
19	Radiation and similar hazards	M-See Executive Summary
Annex E	Electric toys incorporating lasers and or light emitting diodes (LED) or UV emitting lamps	M
Annex D	Toys with protective electronic circuit	NA
Annex I	Toys generating Electromagnetic Fields (EMF)	NA

M = Meet

NA = Not applicable

NM/R = Not Meet-refer to Comment Section

NR = Not requested by the client



Remark:

Clause	Parameter		
9.3	The maximum temperature rises at normal operation were recorded as follows:		
	Ambient Temperature (°C): <u>23.7</u>		
	<u>Location</u>	<u>Temperature Rise (K)</u>	<u>Limit (K)</u>
	Battery Enclosure	2.9	45
	Motor	3.2	55
	The maximum temperature rises at locked moving part were recorded as follows:		
	Ambient Temperature (°C): 23.7		
	<u>Location</u>	<u>Temperature Rise (K)</u>	<u>Limit (K)</u>
	Battery Enclosure	0.7	55
	Motor	0.3	55
	The maximum temperature rises at fault condition were recorded as follows:		
	Ambient Temperature (°C): 23.7		
	<u>Location</u>	<u>Temperature Rise (K)</u>	<u>Limit (K)</u>
	Battery Enclosure	8.9	55



RESULTS:

Measurement Results of Emission from Electric Toys for LEDs or Lasers or UV lamps						
Source #	Color	Peak Wave Length(nm)	Spectral Range (nm)	Band Width (nm):	Measured Value	Limit Value
Led 1 (Hub)	RGB	460	400-780	18	0.007451 Wsr ⁻¹	0.04 Wsr ⁻¹
		515	400-780	35		
		630	400-780	16		
Evaluation Rang				Result		
400nm≤ λ < 780 nm				Safe		
This Lamp used in electric toys				Safe		
Source #	Color	Peak Wave Length(nm)	Spectral Range (nm)	Band Width (nm):	Measured Value	Limit Value
Led 2 (sensor colour No.2)	White	455	400-780	24	0.00636 Wsr ⁻¹	0.04 Wsr ⁻¹
		605	400-780	141		
Evaluation Rang				Result		
400nm≤ λ < 780 nm				Safe		
This Lamp used in electric toys				Safe		



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RESULTS:

Measurement Results of Emission from Electric Toys for LEDs or Lasers or UV lamps						
Source #	Color	Peak Wave Length(nm)	Spectral Range (nm)	Band Width (nm):	Measured Value	Limit Value
Led 3 (light)	RGB	465	400-780	21	0.01669 Wsr ⁻¹	0.04 Wsr ⁻¹
		520	400-780	39		
		635	400-780	19		
Evaluation Rang				Result		
400nm≤ λ < 780 nm				Safe		
This Lamp used in electric toys				Safe		



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RESULTS:

PART 2

The test results of the samples submitted on October 14, 2022 as reported in Technical Report No. (5222)287-0610 are as follow:

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Test Item(s)	Item / Component Description(s)	Location(s)	Style(s)
I001	white soft plastic	USB CABLE, NO.2	1

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I001	-	-	-
Type	-	III	III	-	-	-
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	57	-	-	-
Arsenic (As)	mg/kg	47	LT 2	-	-	-
Boron (B)	mg/kg	15000	LT 2	-	-	-
Barium (Ba)	mg/kg	18750	LT 2	-	-	-
Cadmium (Cd)	mg/kg	17	LT 2	-	-	-
Cobalt (Co)	mg/kg	130	LT 2	-	-	-
Chromium III (Cr III)	mg/kg	460	0.099	-	-	-
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	-	-	-
Copper (Cu)	mg/kg	7700	10	-	-	-
Mercury (Hg)	mg/kg	94	LT 2	-	-	-
Manganese (Mn)	mg/kg	15000	4	-	-	-
Nickel (Ni)	mg/kg	930	LT 2	-	-	-
Lead (Pb)	mg/kg	23	LT 2	-	-	-
Antimony (Sb)	mg/kg	560	LT 2	-	-	-
Selenium (Se)	mg/kg	460	LT 2	-	-	-
Tin (Sn)	mg/kg	180000	8	-	-	-
Organic Tin	mg/kg	12	LT 2	-	-	-
Strontium (Sr)	mg/kg	56000	4	-	-	-
Zinc (Zn)	mg/kg	46000	2	-	-	-
Conclusion	-	-	PASS	-	-	-



RESULTS:

PART 2

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

mg/kg = milligrams per kilogram (ppm=parts per million)

LT = Less Than

** = Average of duplicate analysis*

FR = Failed Result

Organic tin = migration of total organic tin is expressed as tributyl tin cation content in mg/kg

= Verified results (see note)

Remark: - Results of Cr III and Cr VI were reported as sum of soluble Chromium content unless specified.
 - Result(s) of organic tin was (were) calculated while assuming the tin content wholly contributed from tributyltin cation unless specified.

Note: If soluble chromium content or soluble tin content exceeded the screening limits of soluble chromium (VI) or organic tin content, the results were verified by below method
 - Chromium VI: EN71 part 3:2019+A1:2021, Annex F
 - Organic tin: EN71 part 3:2019+A1:2021, Annex G by Gas Chromatography – Mass Spectroscopy analysis.



RESULTS:

PART 2

MIGRATION OF CERTAIN ELEMENTS (ISO 8124 Part 3: 2020)

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	Style
Type II: Polymeric Materials			
A	white soft plastic	USB CABLE, NO.2	1

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	
Max. Limit All except Type VIII and Type XI (mg/kg)	25	1000	75	60	60	90	60	500	
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500	
Max. Limit Type XI (mg/kg)	10	350	15	25	10	25	10	50	
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%	

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Sample	Result (mg/kg)								(g)	
A	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS

mg/kg = milligrams per kilogram (ppm=parts per million)

CR = adjusted analytical result

LT = Less Than

* = Average of duplicate analysis

As = Arsenic, Ba = Barium, Cd = Cadmium,

Cr = Chromium, Hg = Mercury, Pb = Lead,

Sb = Antimony, Se = Selenium



RESULTS:

PART 2

DNOP/DINP/DIDP CONTENTS IN TOYS AND CHILDCARE ARTICLES WHICH CAN BE PLACED IN MOUTH BY THE CHILDREN (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52)

Test Method: With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer

Sample Identity	Test Component	Location	Style
A.	white soft plastic	USB CABLE, NO.2	1
B.	off white soft plastic	USB CABLE, NO.2	1
C.	green soft plastic	USB CABLE, NO.2	1
D.	bright red soft plastic	USB CABLE, NO.2	1
E.	bright black soft plastic	USB CABLE, NO.2	1

Test Parameter:	DNOP	DINP	DIDP	Sum of three phthalates	
Limit (%):	0.1	0.1	0.1	0.1	
Sample	Result (%)				Conclusion
A.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
B.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
C.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
D.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
E.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS

Detection Limit :

DNOP = Di-n-octyl phthalate (0.005%)
 DINP = Di-iso-nonyl phthalate (0.005%)
 DIDP = Di-iso-decyl phthalate (0.005%)

Results reported in percentage

LT = Less than
 GT = Greater than
 ND = None detected



RESULTS:

PART 2

BBP/DBP/DEHP/DIBP CONTENTS (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 51 (amended up to EU No. 2018/2005))

Test Method: With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer

Sample Identity	Test Component	Location	Style
A.	white soft plastic	USB CABLE, NO.2	1
B.	off white soft plastic	USB CABLE, NO.2	1
C.	green soft plastic	USB CABLE, NO.2	1
D.	bright red soft plastic	USB CABLE, NO.2	1
E.	bright black soft plastic	USB CABLE, NO.2	1

Test Parameter:	BBP	DBP	DEHP	DIBP	Sum of four phthalates	
Limit (%):	0.1	0.1	0.1	0.1	0.1	
Sample	Result (%)					Conclusion
A.	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
B.	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
C.	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
D.	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
E.	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS

Detection Limit :

BBP = Butyl benzyl phthalate (0.005%)
 DBP = Dibutyl phthalate (0.005%)
 DEHP = Di(2-ethylhexyl) phthalate (0.005%)
 DIBP = Diisobutyl phthalate (0.005%)

Results reported in percentage

LT = Less than
 ND = None detected



RESULTS:

PART 2

BBP / DBP / DEHP / DNOP / DINP / DIDP / DIBP CONTENTS (ISO 8124-6:2018)

Test Method: ISO 8124-6:2018

Sample Identity	Color / Component	Location	Style
A	white soft plastic	USB CABLE, NO.2	1
B	off white soft plastic	USB CABLE, NO.2	1
C	green soft plastic	USB CABLE, NO.2	1
D	bright red soft plastic	USB CABLE, NO.2	1
E	bright black soft plastic	USB CABLE, NO.2	1

Analyte:	BBP	DBP	DEHP	DNOP	DINP	DIDP	DIBP	
Limit (%):	Show Data							

Analyte	BBP	DBP	DEHP	DNOP	DINP	DIDP	DIBP	Conclusion
Sample	Result (%)							
A	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
B	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
C	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
D	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA
E	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA

Detection Limit :

BBP = Butyl benzyl phthalate (0.005%)
DBP = Dibutyl phthalate (0.005%)
DEHP = Di(2-ethylhexyl) phthalate (0.005%)
DNOP = Di-n-octyl phthalate (0.005%)
DINP = Di-iso-nonyl phthalate (0.005%)
DIDP = Di-iso-decyl phthalate (0.005%)
DIBP = Di-isobutyl phthalate (0.005%)

Results reported in percentage

LT = Less than
ND = None detected



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RESULTS:

PART 3

The test results of the samples submitted on August 05, 2022 as reported in Technical Report No. (5222)217-1024 are as follow:

BBP / DBP / DEHP / DNOP / DINP / DIDP/ DIBP CONTENTS (ISO 8124-6:2018)

Test Method: ISO 8124-6:2018

Sample Identity	Color / Component	Location	Style
A	greyish white soft plastic	GREY/ WHITE WIRE FOR ELECTRICAL COMPONENT	1

Analyte:	BBP	DBP	DEHP	DNOP	DINP	DIDP	DIBP
Limit (%):	Show Data						

Analyte	BBP	DBP	DEHP	DNOP	DINP	DIDP	DIBP	Conclusion
Sample	Result (%)							
A	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA

Detection Limit :

BBP = Butyl benzyl phthalate (0.005%)
DBP = Dibutyl phthalate (0.005%)
DEHP = Di(2-ethylhexyl) phthalate (0.005%)
DNOP = Di-n-octyl phthalate (0.005%)
DINP = Di-iso-nonyl phthalate (0.005%)
DIDP = Di-iso-decyl phthalate (0.005%)
DIBP = Di-isobutyl phthalate (0.005%)

Results reported in percentage

LT = Less than
ND = None detected



RESULTS:

PART 3

BBP/DBP/DEHP/DIBP CONTENTS (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 51 (amended up to EU No. 2018/2005))

Test Method: With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer

Sample Identity	Color / Component	Location	Style
A	greyish white soft plastic	GREY/ WHITE WIRE FOR ELECTRICAL COMPONENT	1

Analyte:	BBP	DBP	DEHP	DIBP	Sum of BBP, DBP, DEHP & DIBP	
Limit (%):	0.1	0.1	0.1	0.1	0.1	

Analyte	BBP	DBP	DEHP	DIBP	Sum of BBP, DBP, DEHP & DIBP	Conclusion
Sample	Result (%)					
A	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS

Detection Limit : Each 0.005%

BBP = Butyl benzyl phthalate (EC number 201-622-7)

DBP = Dibutyl phthalate (EC number 201-557-4)

DEHP = Di(2-ethylhexyl) phthalate (EC number 204-211-0)

DIBP = Diisobutyl phthalate (EC number 201-553-2)

Results reported in percentage

ND = Not detected

LT = Less Than



RESULTS:

PART 3

MIGRATION OF CERTAIN ELEMENTS (Australia Trade Practices Act 1974, Consumer Protection Notice No. 1 of 2009 (AS/NZS 8124: Part 3: 2012 with Amendment No. 1: 2016))

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	Style
Type II: Polymeric Materials			
A	greyish white soft plastic	GREY/ WHITE WIRE FOR ELECTRICAL COMPONENT	1

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Max. Limit All except Type VIII (mg/kg)	25	1000	75	60	60	90	60	500
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Sample	Result (mg/kg)								(g)	
A	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	6	LT 2		PASS

mg/kg = milligrams per kilogram (ppm=parts per million)

CR = adjusted analytical result

LT = Less Than

* = Average of duplicate analysis

As = Arsenic, Ba = Barium, Cd = Cadmium,

Cr = Chromium, Hg = Mercury, Pb = Lead,

Sb = Antimony, Se = Selenium



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RESULTS:

PART 3

DNOP/DINP/DIDP CONTENTS IN TOYS AND CHILDCARE ARTICLES WHICH CAN BE PLACED IN MOUTH BY THE CHILDREN (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52)

Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Sample Identity	Color / Component	Location	Style
A	greyish white soft plastic	GREY/ WHITE WIRE FOR ELECTRICAL COMPONENT	1

Analyte:	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP	
Limit (%):	0.1	0.1	0.1	0.1	

Analyte	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP	Conclusion
Sample	Result (%)				
A	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS

Detection Limit :

DNOP = Di-n-octyl phthalate (0.005%)
 DINP = Di-iso-nonyl phthalate (0.005%)
 DIDP = Di-iso-decyl phthalate (0.005%)

Results reported in percentage
 LT = Less than
 ND = None detected



RESULTS:

PART 3

MIGRATION OF CERTAIN ELEMENTS (ISO 8124 Part 3: 2020)

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	Style
Type II: Polymeric Materials			
A	greyish white soft plastic	GREY/ WHITE WIRE FOR ELECTRICAL COMPONENT	1

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	
Max. Limit All except Type VIII and Type XI (mg/kg)	25	1000	75	60	60	90	60	500	
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500	
Max. Limit Type XI (mg/kg)	10	350	15	25	10	25	10	50	
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%	

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Sample	Result (mg/kg)								(g)	
A	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	6	LT 2		PASS

mg/kg = milligrams per kilogram (ppm=parts per million)

CR = adjusted analytical result

LT = Less Than

* = Average of duplicate analysis

As = Arsenic, Ba = Barium, Cd = Cadmium,

Cr = Chromium, Hg = Mercury, Pb = Lead,

Sb = Antimony, Se = Selenium



RESULTS:

PART 3

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Test Item(s)	Item / Component Description(s)	Location(s)	Style(s)
I001	greyish white soft plastic	GREY/ WHITE WIRE FOR ELECTRICAL COMPONENT	1

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I001	-	-	-
Type	-	III	III	-	-	-
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	62	-	-	-
Arsenic (As)	mg/kg	47	LT 2	-	-	-
Boron (B)	mg/kg	15000	LT 2	-	-	-
Barium (Ba)	mg/kg	18750	LT 2	-	-	-
Cadmium (Cd)	mg/kg	17	LT 2	-	-	-
Cobalt (Co)	mg/kg	130	LT 2	-	-	-
Chromium III (Cr III)	mg/kg	460	LT 0.05	-	-	-
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	-	-	-
Copper (Cu)	mg/kg	7700	3	-	-	-
Mercury (Hg)	mg/kg	94	LT 2	-	-	-
Manganese (Mn)	mg/kg	15000	LT 2	-	-	-
Nickel (Ni)	mg/kg	930	LT 2	-	-	-
Lead (Pb)	mg/kg	23	LT 2	-	-	-
Antimony (Sb)	mg/kg	560	6	-	-	-
Selenium (Se)	mg/kg	460	LT 2	-	-	-
Tin (Sn)	mg/kg	180000	3	-	-	-
Organic Tin	mg/kg	12	7.3	-	-	-
Strontium (Sr)	mg/kg	56000	LT 2	-	-	-
Zinc (Zn)	mg/kg	46000	LT 2	-	-	-
Conclusion	-	-	PASS	-	-	-



RESULTS:

PART 3

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

mg/kg = milligrams per kilogram (ppm=parts per million) LT = Less Than
** = Average of duplicate analysis FR = Failed Result*
Organic tin = migration of total organic tin is expressed as tributyl tin cation content in mg/kg
= Verified results (see note)

Remark: - Results of Cr III and Cr VI were reported as sum of soluble Chromium content unless specified.
 - Result(s) of organic tin was (were) calculated while assuming the tin content wholly contributed from tributyltin cation unless specified.

Note: If soluble chromium content or soluble tin content exceeded the screening limits of soluble chromium (VI) or organic tin content, the results were verified by below method
 - Chromium VI: EN71 part 3:2019+A1:2021, Annex F
 - Organic tin: EN71 part 3:2019+A1:2021, Annex G by Gas Chromatography – Mass Spectroscopy analysis.



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RESULTS:

PART 4

The test results of the samples submitted on July 29, 2022 as reported in Technical Report No. (5222)210-0789 are as follow:

DNOP/DINP/DIDP CONTENTS IN TOYS AND CHILDCARE ARTICLES WHICH CAN BE PLACED IN MOUTH BY THE CHILDREN (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52)

Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Sample Identity	Color / Component	Location	Style
A	clear laminated multicolor printed white plastic sticker	sticker	1

Analyte:	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP
Limit (%):	0.1	0.1	0.1	0.1

Analyte	DNOP	DINP	DIDP	Sum of DNOP, DINP & DIDP	Conclusion
Sample	Result (%)				
A	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS

Detection Limit :

DNOP = Di-n-octyl phthalate (0.005%)
 DINP = Di-iso-nonyl phthalate (0.005%)
 DIDP = Di-iso-decyl phthalate (0.005%)

Results reported in percentage
 LT = Less than
 ND = None detected



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RESULTS:

PART 4

BBP/DBP/DEHP/DIBP CONTENTS (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 51 (amended up to EU No. 2018/2005))

Test Method: With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer

Sample Identity	Color / Component	Location	Style
A	clear laminated multicolor printed white plastic sticker	sticker	1

Analyte:	BBP	DBP	DEHP	DIBP	Sum of BBP, DBP, DEHP & DIBP	
Limit (%):	0.1	0.1	0.1	0.1	0.1	

Analyte	BBP	DBP	DEHP	DIBP	Sum of BBP, DBP, DEHP & DIBP	Conclusion
Sample	Result (%)					
A	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS

Detection Limit : Each 0.005%

BBP = Butyl benzyl phthalate (EC number 201-622-7)

DBP = Dibutyl phthalate (EC number 201-557-4)

DEHP = Di(2-ethylhexyl) phthalate (EC number 204-211-0)

DIBP = Diisobutyl phthalate (EC number 201-553-2)

Results reported in percentage

ND = Not detected

LT = Less Than



RESULTS:

PART 4

BBP/DBP/DEHP/DNOP/DINP/DIDP/DIBP CONTENT (ISO 8124 Part 6)

Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Sample Identity	Color / Component	Location	Style
A	clear laminated multicolor printed white plastic sticker	sticker	1

Analyte:	BBP	DBP	DEHP	DNOP	DINP	DIDP	DIBP	
Limit (%):	Show Data							

Analyte	BBP	DBP	DEHP	DNOP	DINP	DIDP	DIBP	Conclusion
Sample	Result (%)							
A	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	DATA

Detection Limit :

BBP = Butyl benzyl phthalate (0.005%)
 DBP = Dibutyl phthalate (0.005%)
 DEHP = Di(2-ethylhexyl) phthalate (0.005%)
 DNOP = Di-n-octyl phthalate (0.005%)
 DINP = Di-iso-nonyl phthalate (0.005%)
 DIDP = Di-iso-decyl phthalate (0.005%)
 DIBP = Di-isobutyl phthalate (0.005%)

Results reported in percentage

LT = Less than
 ND = None detected



RESULTS:

PART 4

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

Test Method : European Standard EN 71 Part 3: 2019+A1:2021, Section 9.

Test Item(s)	Item / Component Description(s)	Location(s)	Style(s)
I001	clear laminated multicolor printed white plastic sticker	sticker	1

Material Category (Type) :	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

-	Unit	Req.	Result			
Test Item(s)	-	-	I001	-	-	-
Type	-	III	III	-	-	-
Parameter	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-
Aluminium (Al)	mg/kg	28130	LT 2	-	-	-
Arsenic (As)	mg/kg	47	LT 2	-	-	-
Boron (B)	mg/kg	15000	LT 2	-	-	-
Barium (Ba)	mg/kg	18750	LT 2	-	-	-
Cadmium (Cd)	mg/kg	17	LT 2	-	-	-
Cobalt (Co)	mg/kg	130	LT 2	-	-	-
Chromium III (Cr III)	mg/kg	460	LT 0.05	-	-	-
Chromium VI (Cr VI)	mg/kg	0.053	LT 0.05	-	-	-
Copper (Cu)	mg/kg	7700	LT 2	-	-	-
Mercury (Hg)	mg/kg	94	LT 2	-	-	-
Manganese (Mn)	mg/kg	15000	LT 2	-	-	-
Nickel (Ni)	mg/kg	930	LT 2	-	-	-
Lead (Pb)	mg/kg	23	LT 2	-	-	-
Antimony (Sb)	mg/kg	560	LT 2	-	-	-
Selenium (Se)	mg/kg	460	LT 2	-	-	-
Tin (Sn)	mg/kg	180000	2	-	-	-
Organic Tin	mg/kg	12	3.9	-	-	-
Strontium (Sr)	mg/kg	56000	LT 2	-	-	-
Zinc (Zn)	mg/kg	46000	LT 2	-	-	-
Conclusion	-	-	PASS	-	-	-



RESULTS:

PART 4

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019+A1:2021)

mg/kg = milligrams per kilogram (ppm=parts per million) LT = Less Than
** = Average of duplicate analysis FR = Failed Result*
Organic tin = migration of total organic tin is expressed as tributyl tin cation content in mg/kg
= Verified results (see note)

Remark: - Results of Cr III and Cr VI were reported as sum of soluble Chromium content unless specified.
 - Result(s) of organic tin was (were) calculated while assuming the tin content wholly contributed from tributyltin cation unless specified.

Note: If soluble chromium content or soluble tin content exceeded the screening limits of soluble chromium (VI) or organic tin content, the results were verified by below method
 - Chromium VI: EN71 part 3:2019+A1:2021, Annex F
 - Organic tin: EN71 part 3:2019+A1:2021, Annex G by Gas Chromatography – Mass Spectroscopy analysis.



RESULTS:

PART 4

MIGRATION OF CERTAIN ELEMENTS (ISO 8124 Part 3: 2020)

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	Style
Type II: Polymeric Materials			
A	clear laminated multicolor printed white plastic sticker	sticker	1

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	
Max. Limit All except Type VIII and Type XI (mg/kg)	25	1000	75	60	60	90	60	500	
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500	
Max. Limit Type XI (mg/kg)	10	350	15	25	10	25	10	50	
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%	

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Sample	Result (mg/kg)								(g)	
A	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS

mg/kg = milligrams per kilogram (ppm=parts per million)

CR = adjusted analytical result

LT = Less Than

* = Average of duplicate analysis

As = Arsenic, Ba = Barium, Cd = Cadmium,

Cr = Chromium, Hg = Mercury, Pb = Lead,

Sb = Antimony, Se = Selenium



RESULTS:

PART 4

MIGRATION OF CERTAIN ELEMENTS (Australia Trade Practices Act 1974, Consumer Protection Notice No. 1 of 2009 (AS/NZS 8124: Part 3: 2012 with Amendment No. 1: 2016))

Test Method: Soluble heavy metals content analysis was determined by Inductively Coupled Plasma Spectrometry.

Sample Identity	Color / Component	Location	Style
Type II: Polymeric Materials			
A	clear laminated multicolor printed white plastic sticker	sticker	1

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Max. Limit All except Type VIII (mg/kg)	25	1000	75	60	60	90	60	500
Max. Limit Type VIII (mg/kg)	25	250	50	25	25	90	60	500
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount (g)	Conclusion
Sample	Result (mg/kg)								(g)	
A.	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2	LT 2		PASS

mg/kg = milligrams per kilogram (ppm=parts per million)

CR = adjusted analytical result

LT = Less Than

* = Average of duplicate analysis

As = Arsenic, Ba = Barium, Cd = Cadmium,

Cr = Chromium, Hg = Mercury, Pb = Lead,

Sb = Antimony, Se = Selenium



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RESULTS:

