

# **TEST REPORT**

#### MID OCEAN BRANDS B.V.

 Technical Report:
 (3224)326-0335
 Dec.03,2024

 Date Received:
 Nov.21,2024
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MID OCEAN BRANDS B.V. 7/F.,KINGS TOWEER,111 KING LAM STREET,CHEUNG SHA WAN,KWLOON,HONG KONG

## **SAMPLE INFORMATION:**

Sample Description:	4PCS WOODEN EASTER EGG PAINTING SET	Sample Quantity:	N/A
Vendor:	111041	Style No(s):	MO2563
Manufacturer:	N/A	SKN/SKU No.:	N/A
Buyer:	N/A	PO No.:	N/A
Labeled Age Grade:	NOT PROVIDED	Ref #:	N/A
Appropriate Age Grade:	N/A	Country of Origin:	CHINA
Client Specified Age Grade:	OVER 3 YEARS OF AGE	Assortment No.:	N/A
Tested Age Grade:	OVER 3 YEARS OF AGE	Country of Destination:	EUROPE
UPC Code:	N/A	Color:	N/A

#### **EXECUTIVE SUMMARY:**

TEST REQUESTED	CONCLUSION
The mechanical and physical properties requirements of the tested subclauses of the European	PASS
Standard, "Safety of toys", EN71: Part 1:2014+A1:2018, clauses 1-7.	(see note 2&3)
The flammability requirements of the European Standard "Safety of Toys", EN 71: Part 2: 2020	PASS
Formaldehyde Release from Wood	PASS
Polycyclic Aromatic Hydrocarbons (PAHs) Content - Regulation (EC) No. 1907/2006 Annex XVII Entry 50, Point 5	PASS
Pentachlorophenol and its salt and ester (PCP) Content - European Parliament and Council Regulation (EU) 2019/1021 on Persistent Organic Pollutants (POPs) , Annex I, Part A	PASS
Phthalates Content - Reference to regulation (EC) No. 1907/2006 Annex XVII Entry 51 & 52	PASS
Total Cadmium Content in Plastic Material - European Parliament and Council Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) with its Latest Amendment, Entry 23	PASS
Total Cd Content	PASS
Migration of Certain Elements - EN71-3:2019+A1:2021	PASS
Benzene Content in Toys or Parts of Toys - European Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) with Amendment up to EU No. 412/2012, Annex XVII, Entry 5, Point 1	PASS

# Note:

- 1. The sample is tested as "Over 3 years of age" per the client's request.
- 2.No relevant packaging was provided with the submitted sample(s), consequently, evaluation of the labeling requirements of this European Standard, "Safety of toys", EN71: Part 1:2014+A1:2018, clauses 7, was not conducted.
- 3.The submitted sample releases small part after abuse, thus,according to EN71: Part 1:2014+A1:2018,the following small part warning is required.

"Warning! Not sultable for children under 36 months. Small parts. Chocking hazard.



This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <a href="http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/">http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/</a> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



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# **BVCPS (ZHEJIANG) GENERAL CONTACT INFORMATION FOR THIS REPORT**

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#### APPROPRIATE AGE GRADE DETERMINATION

The Appropriate Age Grade is determined with reference to the EN 71:Part 1:2014+A1:2018, European Union Guidance Documents, CEN ISO/TR 8124-8:2016 Safety of toys - Part 8: Age determination guidelines and Age Determination Guidelines: Relating Children's Ages to Toy Characteristics and Play Behavior, September, 2002

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 samples are NOT IN COMPLIANCE WITH the requirement of this Subclause
M	The samples are IN COMPLIANCE WITH the requirement of this Subclause
N/A	Not Applicable
NR	Not Requested
NE	Not Evaluated
NP	None Present
Р	Present
R	Refer to Comment Section of this report

Symbol	Language Present	Symbol	Language Present	Symbol	Language Present
В	Belgian language	G	German language	PR	Portuguese language
D	Danish language	GR	Greek language	S	Spanish language
Е	English language	Н	Dutch language	SD	Swedish language
F	Finnish language	I	Italian language	SZ	Swiss language
FR	French language	N	Norwegian language		



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

Subclause	Requirement	Result
4.1	Material cleanliness	М
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	NA
4.10.1	Folding and sliding mechanisms	NA
4.10.2	Driving mechanisms	NA
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	1
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
4.16	Heavy immobile toys	NA
4.17.2	All projectiles	NA
4.17.3 & 7.7	Projectile toys with stored energy	NA
4.17.4 & 7.26	Certain projectiles toys without stored energy	NA
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



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

Subclause	Requirement	Result
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
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	NA



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

Subclause	Requirement	Result
	WARNINGS, INSTRUCTIONS FOR USE	
7.1	General	SEE NOTE 2
7.2	Toys not intended for children under 36 months	SEE NOTE 2&3
7.5	Functional toys	SEE NOTE 2

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

# REQUIREMENTS & TEST METHODS CROSS REFERENCE TABLE FOR PART 1

Sub- clause	Test Method	Sub- clause	Test Method	Sub- clause	Test Method	Sub- clause	Test Method
4.3	8.25.1	4.14.2	8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.11, 8.12	4.17.3	8.24.1	5.3	8.4.2.1, 8.25
4.5	8.5, 8.7, 8.11, 8.12	4.15.1.3	8.11, 8.12, 8.21, 8.22	4.17.4	8.24.2	5.4	8.20, 8.36, 8.38, 8.39, 8.40
4.6	8.2, 8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.14	4.15.1.4	8.23.1	4.18	8.2, 8.3, 8.4.2.1	5.5	8.15
4.7	8.11	4.15.1.5	8.26.1	4.20	8.28	5.6	8.29
4.8	8.12, 8.13	4.15.1.8	8.29	4.21	8.30	5.8	8.16
4.9	8.4.2.3, 8.11, 8.12	4.15.2.4	8.26.2	4.22	8.3, 8.4.2.1, 8.5, 8.6, 8.7, 8.8, 8.32	5.10	8.3, 8.4.2.1, 8.5, 8.6, 8.7, 8.8, 8.9, 8.32
4.10.1	8.18.2, 8.18.3	4.15.3	8.21, 8.23.1	4.23	8.2, 8.3, 8.4.2.1, 8.4.2.2, 8.5, 8.6, 8.7, 8.8, 8.34, 8.35	5.11	8.33
4.10.2	8.5, 8.6, 8.7, 8.11, 8.12	4.15.4	8.21, 8.23.1	4.24	8.37	5.12	8.3, 8.4.2.1, 8.5, 8.6, 8.7, 8.8, 8.9,
4.11	8.2, 8.3, 8.4.2.1, 8.9, 8.17	4.15.5	8.11, 8.12, 8.21, 8.22, 8.26.3, 8.27	4.25	8.2, 8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.32.1	5.13	8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.32
4.13	8.19	4.16	8.23.2	5.1	8.2, 8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.9, 8.11, 8.12		
4.14.1	8.31.1, 8.31.2	4.17.1	8.4.2.3				



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# 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	N/A
4.1	Flammable gases	N/A
4.1	Extremely flammable liquids, highly flammable liquids, flammable liquids and flammable gels	N/A
4.2	Toys to be worn on the head	N/A
4.3	Toy disguise costumes and toys intended to be worn by child in play	N/A
4.3	warning on product and packaging (10 - 30 mm/s)	N/A
4.4	Toys intended to be entered by a child	N/A
4.4	warning on product and packaging (10 – 30 mm/s)	N/A
4.5	Soft-filled toys	N/A

# 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	-	-



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# Tested Component(s) Breakdown List

Test Item	Description	Location	Style
1	Brown paperboard	-	-
2	Brown wood	-	-
3	Green paint	-	-
4	Black coating	-	-
1*	Red paint	-	-
2*	Yellow paint	-	-
3*	Blue paint	-	-
4*	Green paint	-	-
7*	Transparent plastic	Paint box	-
8*	Red plastic	Brush	-
9*	Black soft plastic	Bristle	-

Remark: For component 1\*/2\*/3\*/4\*/7\*/8\*/9\*, the test data take from report (3224)299-0383 data Nov.08,2024.

# Formaldehyde Release from Wood

**Test Method** : EN 717-3: 1996

Parameter	Unit	Result 2	Maximum Allowable Limit
Trial 1	mg/kg	ND	-
Trail 2	mg/kg	ND	-
Average Formaldehyde	mg/kg	ND	80
Moisture Content	%	3.08	-
Conclusion	-	PASS	-

Note / Key:

ND = Not detected % = percent mg/kg = milligram(s) formaldehyde per kilogram

oven-dry board

Detection Limit (mg/kg): 10

# Polycyclic Aromatic Hydrocarbons (PAHs) Content – Regulation (EC) No. 1907/2006 Annex XVII Entry 50, Point 5

**Test Method**: With reference to test method mentioned in German AfPS GS 2019:01 PAK.

		Res	Maximum	
Parameter	Unit	3	4	Allowable Limit
Benzo (a) anthracene	mg/kg	ND	ND	0.5
Chrysene	mg/kg	ND	ND	0.5
Benzo (b) fluoranthene	mg/kg	ND	ND	0.5
Benzo (j) fluoranthene	mg/kg	ND	ND	0.5



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Benzo (k) fluoranthene	mg/kg	ND	ND	0.5
Benzo (e) pyrene	mg/kg	ND	ND	0.5
Benzo (a) pyrene	mg/kg	ND	ND	0.5
Dibenzo (a,h) anthracene	mg/kg	ND	ND	0.5
Conclusion	-	PASS	PASS	-

		Res	sult	Maximum	
Parameter	Unit	1* + 2* + 3* 7* + 8 *+ 9*		Allowable Limit	
Benzo (a) anthracene	mg/kg	ND	ND	0.5	
Chrysene	mg/kg	ND	ND	0.5	
Benzo (b) fluoranthene	mg/kg	ND	ND	0.5	
Benzo (j) fluoranthene	mg/kg	ND	ND	0.5	
Benzo (k) fluoranthene	mg/kg	ND	ND	0.5	
Benzo (e) pyrene	mg/kg	ND	ND	0.5	
Benzo (a) pyrene	mg/kg	ND	ND	0.5	
Dibenzo (a,h) anthracene	mg/kg	ND	ND	0.5	
Conclusion	_	PASS	PASS	-	

Note / Key: mg/kg = milligram(s) per kilogram = ppm = part(s) per ND = Not detected Detection Limit (mg/kg):

For composite testing - Each of the listed PAHs(mg/kg):

For individual testing - Each of the listed PAHs(mg/kg): 0.2

# Pentachlorophenol and its salt and ester (PCP) Content - European Parliament and Council Regulation (EU) 2019/1021 on Persistent Organic Pollutants (POPs), Annex I, Part A

**Test Method** : Solvent extraction and analysis by Gas Chromatograph Mass Spectrometer (GC-MS).

Maximum Limit:	5mg/kg

Test Item(s)	Result	Unit	Conclusion
2	ND	mg/kg	PASS

ND = Not Detected mg/kg = milligram Note / Key:

per kilogram

Detect limit (mg/kg): 0.05

## Phthalates Content - Reference to regulation (EC) No. 1907/2006 Annex XVII Entry 51 & 52

**Test Method** : Reference to EN 14372:2004.

Parameter	CAS No.	Unit	Maximum Allowable Limit	Res	sult
	-	-	-	3	4



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A. For toys and childcare a	articles				
DBP	84-74-2	mg/kg	<1000	ND	ND
BBP	85-68-7	mg/kg	<1000	ND	ND
DEHP	117-81-7	mg/kg	<1000	ND	ND
DiBP	84-69-5	mg/kg	<1000	ND	ND
B. Additional requirements	for toys and chil	dcare article:	s, which can be pla	aced in mouth by the cl	nildren (See remark)
DnOP	117-84-0	mg/kg	<1000	ND	ND
DINP	28553-12- 0&68515-48- 0	mg/kg	<1000	ND	ND
DIDP	26761-40-0 & 68515-49-1	mg/kg	<1000	ND	ND
Sum of DBP, BBP, DEHP, DIBP		mg/kg	<1000	ND	ND
Sum of DNOP, DIDP, DINP		mg/kg	<1000	ND	ND
Conclusion	-	-	-	PASS	PASS

Parameter	CAS No.	Unit	Maximum Allowable Limit	Result			
	-	-	-	1* + 2* + 3*	7* + 8* + 9*		
A. For toys and childcare articles							
DBP	84-74-2	mg/kg	<1000	ND	ND		
BBP	85-68-7	mg/kg	<1000	ND	ND		
DEHP	117-81-7	mg/kg	<1000	ND	ND		
DiBP	84-69-5	mg/kg	<1000	ND	ND		
B. Additional requirements	s for toys and chi	ldcare article	es, which can be p	laced in mouth by the c	hildren (See remark)		
DnOP	117-84-0	mg/kg	<1000	ND	ND		
DINP	28553-12- 0&68515-48- 0	mg/kg	<1000	ND	ND		
DIDP	26761-40-0 & 68515-49-1	mg/kg	<1000	ND	ND		
Sum of DBP, BBP, DEHP, DIBP		mg/kg	<1000	ND	ND		
Sum of DNOP, DIDP, DINP		mg/kg	<1000	ND	ND		
Conclusion	-	-	-	PASS	PASS		

Note / Key:

ND = Not Detected Conc. = Concentration Detection Limit (mg/kg): Each 50

Remark:

The list of phthalates is summarized in table of Appendix

List of Phthalates Content – Reference To Regulation (EC) No. 1907/2006 Annex XVII Entry 51 & 52



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No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	DBP	84-74-2	5	DINP	28553-12- 0&68515-48- 0
2	BBP	85-68-7	6	DIDP	26761-40-0 & 68515-49- 1
3	DEHP	117-81-7	7	DiBP	84-69-5
4	DnOP	117-84-0	-	-	-

<u>Total Cadmium Content in Plastic Material - European Parliament and Council Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) with its Latest Concerning the Registration (EC) No. 1907/2006 (EC) No. 1907/200</u> Amendment, Entry 23

EN 1122: 2001, Method B **Test Method** 

The sample is digested with acid, then analyzed by AAS.

100 mg/kg **Maximum Limit:** 

Test Item(s)	Result	Unit	Conclusion
7* + 8 *+ 9*	ND	mg/kg	PASS

Note / Key: ND = Not Detected

mg/kg = milligram per kilogram MDL = Method Detection Limit

Detection Limit (mg/kg): 10

## **Total Cd Content**

The sample is comminuted and digested with acid mixtures, then analyzed by AAS **Test Method** 

technique or ICP-OES.

Parameter Uni			Result					
	Unit	1	2	3	4	Allowable Limit		
Cadmium (Cd)	mg/kg	<10	<10	<10	<10	100		
Conclusion	-	PASS	PASS	PASS	PASS	-		

		Result	Maximum	
Parameter Unit		1* + 2* + 3*	Allowable Limit	
Cadmium (Cd)	mg/kg	<10	100	
Conclusion	-	PASS	-	

Note / Key: ND = Not Detected

# Migration of Certain Elements - EN71-3:2019+A1:2021

Test Method:European Standard EN71-3:2019+A1:2021

Analyte	Limit:	Result (mg/kg)		
Analyte	Type III	Sample ID		



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		1	2	4
Boron (B)	15000	<1500	<1500	<1500
Aluminium (Al)	28130	<2813	<2813	<2813
Chromium III (Cr III)	460	<46	<46	<46
Chromium VI (Cr VI)	0.053	<0.02	<0.02	<0.02
Manganese (Mn)	15000	<1500	<1500	<1500
Cobalt (Co)	130	<13	<13	<13
Nickel (Ni)	930	<93	<93	<93
Copper (Cu)	7700	<770	<770	<770
Zinc (Zn)	46000	<4600	<4600	<4600
Arsenic (As)	47	<4.7	<4.7	<4.7
Selenium (Se)	460	<46	<46	<46
Strontium (Sr)	56000	<5600	<5600	<5600
Cadmium (Cd)	17	<1.7	<1.7	<1.7
Tin (Sn)	180000	<18000	<18000	<18000
Organic tin	12	<1.2	<1.2	<1.2
Antimony (Sb)	560	<56	<56	<56
Barium (Ba)	18750	<1875	<1875	<1875
Mercury (Hg)	94	<9.4	<9.4	<9.4
Lead (Pb)	23	3.88	<2.3	<2.3
Conclusion		PASS	PASS	PASS

		Result (mg/kg)					
Analyte	Limit: Type II	Sample ID					
		1*	2*	3*	4*		
Boron (B)	300	<30	<30	<30	<30		
Aluminium (Al)	560	<56	<56	<56	<56		
Chromium III (Cr III)	9.4	<0.94	<0.94	<0.94	<0.94		
Chromium VI (Cr VI)	0.005	<0.005	<0.005	<0.005	<0.005		
Manganese (Mn)	300	<30	<30	<30	<30		
Cobalt (Co)	2.6	<0.26	<0.26	<0.26	<0.26		
Nickel (Ni)	18.8	<1.88	<1.88	<1.88	<1.88		
Copper (Cu)	156	<15.6	<15.6	<15.6	<15.6		
Zinc (Zn)	938	<93.8	<93.8	<93.8	<93.8		
Arsenic (As)	0.9	<0.09	<0.09	<0.09	<0.09		
Selenium (Se)	9.4	<0.94	<0.94	<0.94	<0.94		
Strontium (Sr)	1125	<112.5	<112.5	<112.5	<112.5		
Cadmium (Cd)	0.3	<0.03	<0.03	<0.03	<0.03		
Tin (Sn)	3750	<375	<375	<375	<375		
Organic tin	0.2	<0.02	<0.02	<0.02	<0.02		
Antimony (Sb)	11.3	<1.13	<1.13	<1.13	<1.13		
Barium (Ba)	375	<37.5	<37.5	<37.5	<37.5		
Mercury (Hg)	1.9	<0.19	<0.19	<0.19	<0.19		
Lead (Pb)	0.5	<0.05	<0.05	<0.05	<0.05		
Conclusion		PASS	PASS	PASS	PASS		



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	1		Result (mg/kg)					
Analyte	Limit: Type III	Sample ID						
	Type III	7*	8*	9*				
Boron (B)	15000	<1500	<1500	<1500				
Aluminium (AI)	28130	<2813	<2813	<2813				
Chromium III (Cr III)	460	<46	<46	<46				
Chromium VI (Cr VI)	0.053	<0.02	<0.02	<0.02				
Manganese (Mn)	15000	<1500	<1500	<1500				
Cobalt (Co)	130	<13	<13	<13				
Nickel (Ni)	930	<93	<93	<93				
Copper (Cu)	7700	<770	<770	<770				
Zinc (Zn)	46000	<4600	<4600	<4600				
Arsenic (As)	47	<4.7	<4.7	<4.7				
Selenium (Se)	460	<46	<46	<46				
Strontium (Sr)	56000	<5600	<5600	<5600				
Cadmium (Cd)	17	<1.7	<1.7	<1.7				
Tin (Sn)	180000	<18000	<18000	<18000				
Organic tin	12	<1.2	<1.2	<1.2				
Antimony (Sb)	560	<56	<56	<56				
Barium (Ba)	18750	<1875	<1875	<1875				
Mercury (Hg)	94	<9.4	<9.4	<9.4				
Lead (Pb)	23	<2.3	<2.3	<2.3				
Conclusion		PASS	PASS	PASS				

Note / Key: Req. = Requirement mg/kg = milligram per kilogram

#### Remark:

- Test Item(s) was (were) tested according to European Standard EN 71-3: 2019 + A1: 2021, Section 8.
- Results of Cr III and Cr VI were reported as sum of soluble chromium content unless further verified.
- \*Result(s) of organic tin was (were) calculated by assuming the soluble tin content was wholly contributed from tributyltin (TBT) cation unless further specified.
- -The pH measured shall be reported after migration if it was outside the range of 1.1 to 1.3.
- European Standard EN 71 Part 3: 2019 is currently harmonized under European Parliament and Council Directive 2009/48/EC and will be superseded when European Standard EN 71 Part 3: 2019 + A1: 2021 is harmonized.
- The received sample(s) contained accessible component(s) of less than 10 milligrams by weight on one single sample, therefore such component(s) was (were) not subject to migration of certain elements of European Standard, "Safety of Toys, EN 71 Part 3: 2019 + A1: 2021", as specified in Section 7.1 Selection of test portions.
- \* denotes as result(s) was (were) verified by :

For organic tin content - Test method with reference to European Standard EN 71-3: 2019 + A1: 2021 and reported as tributyltin (TBT) cation.

For Cr VI content - In house ion chromatography analysis.



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Benzene Content in Toys or Parts of Toys - European Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) with Amendment up to EU No. 412/2012, Annex XVII, Entry 5, Point 1

**Test Method** : Analysis by Headspace Gas Chromatograph Mass Spectrometer (HS-GC-MS).

_			Result	Maximum Allowable Limit
Parameter	Unit	MDL	4	
Benzene	mg/kg	5	ND	5
Conclusion	-	-	PASS	-

Parameter	Unit	MDL	Result				Maximum
			1*	2*	3*	4*	Allowable Limit
Benzene	mg/kg	5	ND	ND	ND	ND	5
Conclusion	-	-	PASS	PASS	PASS	PASS	-

_			Result	Maximum
Parameter	Unit	Unit MDL	7* + 8* + 9*	Allowable Limit
Benzene	mg/kg	5	ND	5
Conclusion	-	-	PASS	-

Note / Key:

ND = Not detected ">" = Greater than %= percent 10000mg/kg=1%

mg/kg = milligram(s) per kilogram = ppm = part(s) per million

Detection Limit (mg/kg):5

EU No.=European Commission Regulation number



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SAMPLE REFERENCE PHOTO:









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