TEST REPORT

MID OCEAN BRANDS B.V.

Technical Report: **(3225)168-0196** July 14,2025
Date Received: June 17,2025

MID OCEAN BRANDS B.V.
UNIT 711-716,7/F.,TOWER A,83 KING LAM STREET,CHEUNG SHA WAN,KWLOON,HONG KONG

SAMPLE INFORMATION:

Sample Description:	WOODEN DECORATION PAINTING SET	**Sample Quantity:**	N/A
Vendor:	111041	**Style No(s):**	CX1573
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 Standard, “Safety of toys”, EN71: Part 1:2014+A1:2018, clauses 1-6.	PASS (SEE NOTE 2)
The flammability requirements of the European Standard "Safety of Toys”, EN 71: Part 2: 2020	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 & As Client's requirement	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
Migration of Certain Elements - EN 71-3:2019+A2:2024	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.

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Remark:The report test data with * take from report (3225)098-0456 data June 05,2025.

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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
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		

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	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	
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

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

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
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				

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	-	-

Tested Component(s) Breakdown List

Test Item	Description	Location	Style
1	Transparent plastic	Box	-
2	Red paint	-	-
3	Yellow paint	-	-
4	Blue paint	-	-
5	Green paint	-	-
6	White paint	-	-
7	Black paint	-	-
8	Black soft plastic	bristle	-
9	Red plastic	pen	-
10	Brown wood	nutcracker body	-
11	Brown wood	base	-
12	Beige bamboo	stick	-
23*	Black soft plastic	Bristle	-

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.

Parameter	**Unit**	**Result**			**Maximum Allowable Limit**
		1 + 8 + 9	2 + 3 + 4	5 + 6 + 7	
Benzo (a) anthracene	mg/kg	ND	ND	ND	0.5
Chrysene	mg/kg	ND	ND	ND	0.5
Benzo (b) fluoranthene	mg/kg	ND	ND	ND	0.5
Benzo (j) fluoranthene	mg/kg	ND	ND	ND	0.5
Benzo (k) fluoranthene	mg/kg	ND	ND	ND	0.5
Benzo (e) pyrene	mg/kg	ND	ND	ND	0.5
Benzo (a) pyrene	mg/kg	ND	ND	ND	0.5
Dibenzo (a,h) anthracene	mg/kg	ND	ND	ND	0.5
Conclusion	-	PASS	PASS	PASS	-

Note / Key :
ND = Not detected
mg/kg = milligram(s) per kilogram = ppm = part(s) per million
Detection Limit (mg/kg): For individual testing - Each of the listed PAHs(mg/kg) : 0.2
For composite testing - Each of the listed PAHs(mg/kg) : 0.1

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
10	ND	mg/kg	PASS
11	ND	mg/kg	PASS
12	ND	mg/kg	PASS

Note / Key:
ND = Not Detected mg/kg = milligram 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	Result		
	-	-	-	1 + 8 + 9	2 + 3 + 4	5 + 6 + 7
A. For toys and childcare articles						
DBP	84-74-2	%	<0.1	ND	ND	ND
BBP	85-68-7	%	<0.1	ND	ND	ND
DEHP	117-81-7	%	<0.1	ND	ND	ND
DiBP	84-69-5	%	<0.1	ND	ND	ND
B. Additional requirements for toys and childcare articles, which can be placed in mouth by the children (See remark)						
DnOP	117-84-0	%	<0.1	ND	ND	ND
DINP	28553-12-0&68515-48-0	%	<0.1	ND	ND	ND
DIDP	26761-40-0 & 68515-49-1	%	<0.1	ND	ND	ND
Sum of DBP, BBP, DEHP, DIBP		%	<0.1	ND	ND	ND
Sum of DNOP, DIDP, DINP		%	<0.1	ND	ND	ND
Conclusion	-	-	-	PASS	PASS	PASS

Note / Key: ND = Not Detected Conc. = Concentration
Detection Limit (%): Each 0.005 % = percentage

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					
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	-	-	-

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

Test Method : EN 1122: 2001, Method B

Maximum Limit:	**100 mg/kg**

Test Item(s)	Result	Unit	Conclusion
1 + 8 + 9	ND	mg/kg	PASS

Note / Key:
mg/kg = milligram per kilogram
Detection Limit (mg/kg): 10
ND = Not Detected
MDL = Method Detection Limit

Total Cd Content & As Client's requirement

Test Method : The sample is comminuted and digested with acid mixtures, then analyzed by AAS technique or ICP-OES .

Parameter	Unit	MDL	Result				Maximum Allowable Limit
			2 + 3 + 4	5 + 6 + 7	10	11	
Cadmium (Cd)	mg/kg	10	ND	ND	ND	ND	100
Conclusion	-	-	PASS	PASS	PASS	PASS	-

Parameter	Unit	MDL	Result	Maximum Allowable Limit
			12	
Cadmium (Cd)	mg/kg	10	ND	100
Conclusion	-	-	PASS	-

Note / Key:
ND = Not Detected
mg/kg = milligram per kilogram
MDL = Method Detection Limit

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

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

Analyte	Limit: Type III	Result (mg/kg)				
		Sample ID				
		1	9	10	11	12
Boron (B)	15000	<1500	<1500	<1500	<1500	<1500
Aluminium (Al)	28130	<2813	<2813	<2813	<2813	<2813
Chromium III (Cr III)	460	<46	<46	<46	<46	<46

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

Analyte	Limit: Type II	Result (mg/kg)				
		Sample ID				
		2	3	4	5	6
Boron (B)	300	<30	<30	<30	<30	<30
Aluminium (Al)	560	<56	<56	<56	<56	<56
Chromium III (Cr III)	9.4	<0.94	<0.94	<0.94	<0.94	<0.94
Chromium VI (Cr VI)	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese (Mn)	300	<30	<30	<30	<30	<30
Cobalt (Co)	2.6	<0.26	<0.26	<0.26	<0.26	<0.26
Nickel (Ni)	18.8	<1.88	<1.88	<1.88	<1.88	<1.88
Copper (Cu)	156	<15.6	<15.6	<15.6	<15.6	<15.6
Zinc (Zn)	938	<93.8	<93.8	<93.8	<93.8	<93.8
Arsenic (As)	0.9	<0.09	<0.09	<0.09	<0.09	<0.09
Selenium (Se)	9.4	<0.94	<0.94	<0.94	<0.94	<0.94
Strontium (Sr)	1125	<112.5	<112.5	<112.5	<112.5	<112.5
Cadmium (Cd)	0.3	<0.03	<0.03	<0.03	<0.03	<0.03
Tin (Sn)	3750	<375	<375	<375	<375	<375
Organic tin	0.2	<0.02	<0.02	<0.02	<0.02	<0.02
Antimony (Sb)	11.3	<1.13	<1.13	<1.13	<1.13	<1.13
Barium (Ba)	375	<37.5	<37.5	<37.5	<37.5	<37.5
Mercury (Hg)	1.9	<0.19	<0.19	<0.19	<0.19	<0.19
Lead (Pb)	0.5	<0.05	0.059	0.054	0.066	<0.05
Conclusion		PASS	PASS	PASS	PASS	PASS

Analyte	Limit: Type II	Result (mg/kg)
		Sample ID
		7

Boron (B)	300	<30
Aluminium (Al)	560	<56
Chromium III (Cr III)	9.4	<0.94
Chromium VI (Cr VI)	0.005	<0.005
Manganese (Mn)	300	<30
Cobalt (Co)	2.6	<0.26
Nickel (Ni)	18.8	<1.88
Copper (Cu)	156	<15.6
Zinc (Zn)	938	<93.8
Arsenic (As)	0.9	<0.09
Selenium (Se)	9.4	<0.94
Strontium (Sr)	1125	<112.5
Cadmium (Cd)	0.3	<0.03
Tin (Sn)	3750	<375
Organic tin	0.2	<0.02
Antimony (Sb)	11.3	<1.13
Barium (Ba)	375	49.0
Mercury (Hg)	1.9	<0.19
Lead (Pb)	0.5	0.108
Conclusion		PASS

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

Note / Key:
ND = Not Detected
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 + A1: 2021 is currently harmonized under European Parliament and Council Directive 2009/48/EC and will be superseded when European Standard EN 71 Part 3: 2019 + A2: 2024 is harmonized.

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).

Parameter	Unit	MDL	Result				Maximum Allowable Limit
			1 + 8 + 9	2	3	4	
Benzene	mg/kg	5	ND	ND	ND	ND	5
Conclusion	-	-	PASS	PASS	PASS	PASS	-

Parameter	Unit	MDL	Result			Maximum Allowable Limit
			5	6	7	
Benzene	mg/kg	5	ND	ND	ND	5
Conclusion	-	-	PASS	PASS	PASS	-

Note / Key:

mg/kg = milligram(s) per kilogram = ppm = part(s) per million
Detection Limit (mg/kg) :5

ND = Not detected ">" = Greater than %= percent
10000mg/kg=1%
EU No.=European Commission Regulation number

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

Test Method:EN 71-3:2019+A2:2024

Analyte	Limit: Type III	Result (mg/kg)				
		Sample ID				
		1	9	10	11	12
Boron (B)	15000	<1500	<1500	<1500	<1500	<1500
Aluminium (Al)	28130	<2813	<2813	<2813	<2813	<2813
Chromium III (Cr III)	460	<46	<46	<46	<46	<46
Chromium VI (Cr VI)	0.053	<0.02	<0.02	<0.02	<0.02	<0.02
Manganese (Mn)	15000	<1500	<1500	<1500	<1500	<1500
Cobalt (Co)	130	<13	<13	<13	<13	<13
Nickel (Ni)	930	<93	<93	<93	<93	<93

Copper (Cu)	7700	<770	<770	<770	<770	<770
Zinc (Zn)	46000	<4600	<4600	<4600	<4600	<4600
Arsenic (As)	47	<4.7	<4.7	<4.7	<4.7	<4.7
Selenium (Se)	460	<46	<46	<46	<46	<46
Strontium (Sr)	56000	<5600	<5600	<5600	<5600	<5600
Cadmium (Cd)	17	<1.7	<1.7	<1.7	<1.7	<1.7
Tin (Sn)	180000	<18000	<18000	<18000	<18000	<18000
Organic tin	12	<1.2	<1.2	<1.2	<1.2	<1.2
Antimony (Sb)	560	<56	<56	<56	<56	<56
Barium (Ba)	18750	<1875	<1875	<1875	<1875	<1875
Mercury (Hg)	94	<9.4	<9.4	<9.4	<9.4	<9.4
Lead (Pb)	23	<2.3	<2.3	<2.3	<2.3	<2.3
Conclusion		PASS	PASS	PASS	PASS	PASS

Analyte	Limit: Type II	Result (mg/kg)				
		Sample ID				
		2	3	4	5	6
Boron (B)	300	<30	<30	<30	<30	<30
Aluminium (Al)	560	<56	<56	<56	<56	<56
Chromium III (Cr III)	9.4	<0.94	<0.94	<0.94	<0.94	<0.94
Chromium VI (Cr VI)	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese (Mn)	300	<30	<30	<30	<30	<30
Cobalt (Co)	2.6	<0.26	<0.26	<0.26	<0.26	<0.26
Nickel (Ni)	18.8	<1.88	<1.88	<1.88	<1.88	<1.88
Copper (Cu)	156	<15.6	<15.6	<15.6	<15.6	<15.6
Zinc (Zn)	938	<93.8	<93.8	<93.8	<93.8	<93.8
Arsenic (As)	0.9	<0.09	<0.09	<0.09	<0.09	<0.09
Selenium (Se)	9.4	<0.94	<0.94	<0.94	<0.94	<0.94
Strontium (Sr)	1125	<112.5	<112.5	<112.5	<112.5	<112.5
Cadmium (Cd)	0.3	<0.03	<0.03	<0.03	<0.03	<0.03
Tin (Sn)	3750	<375	<375	<375	<375	<375
Organic tin	0.2	<0.02	<0.02	<0.02	<0.02	<0.02
Antimony (Sb)	11.3	<1.13	<1.13	<1.13	<1.13	<1.13
Barium (Ba)	375	<37.5	<37.5	<37.5	<37.5	<37.5
Mercury (Hg)	1.9	<0.19	<0.19	<0.19	<0.19	<0.19
Lead (Pb)	0.5	<0.05	0.059	0.054	0.066	<0.05
Conclusion		PASS	PASS	PASS	PASS	PASS

Analyte	Limit: Type II	Result (mg/kg)
		Sample ID
		7
Boron (B)	300	<30
Aluminium (Al)	560	<56
Chromium III (Cr III)	9.4	<0.94
Chromium VI (Cr VI)	0.005	<0.005

Manganese (Mn)	300	<30
Cobalt (Co)	2.6	<0.26
Nickel (Ni)	18.8	<1.88
Copper (Cu)	156	<15.6
Zinc (Zn)	938	<93.8
Arsenic (As)	0.9	<0.09
Selenium (Se)	9.4	<0.94
Strontium (Sr)	1125	<112.5
Cadmium (Cd)	0.3	<0.03
Tin (Sn)	3750	<375
Organic tin	0.2	<0.02
Antimony (Sb)	11.3	<1.13
Barium (Ba)	375	49.0
Mercury (Hg)	1.9	<0.19
Lead (Pb)	0.5	0.108
Conclusion		PASS

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

Key(s):

Type I = Dry, brittle, powder-like or pliable toy material(s)

Type II = Liquid or sticky toy material(s)

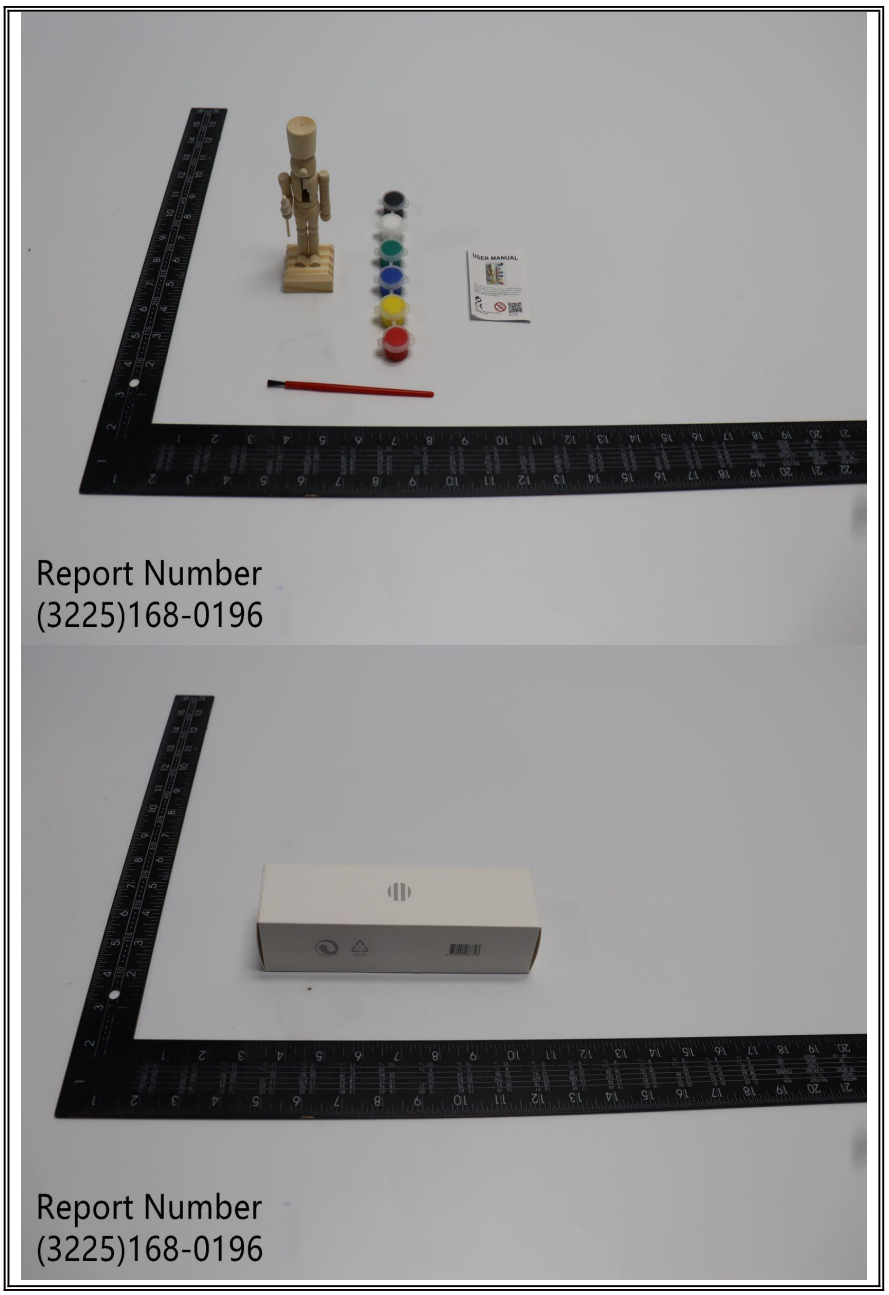
Type III = Scraped-off toy material(s)

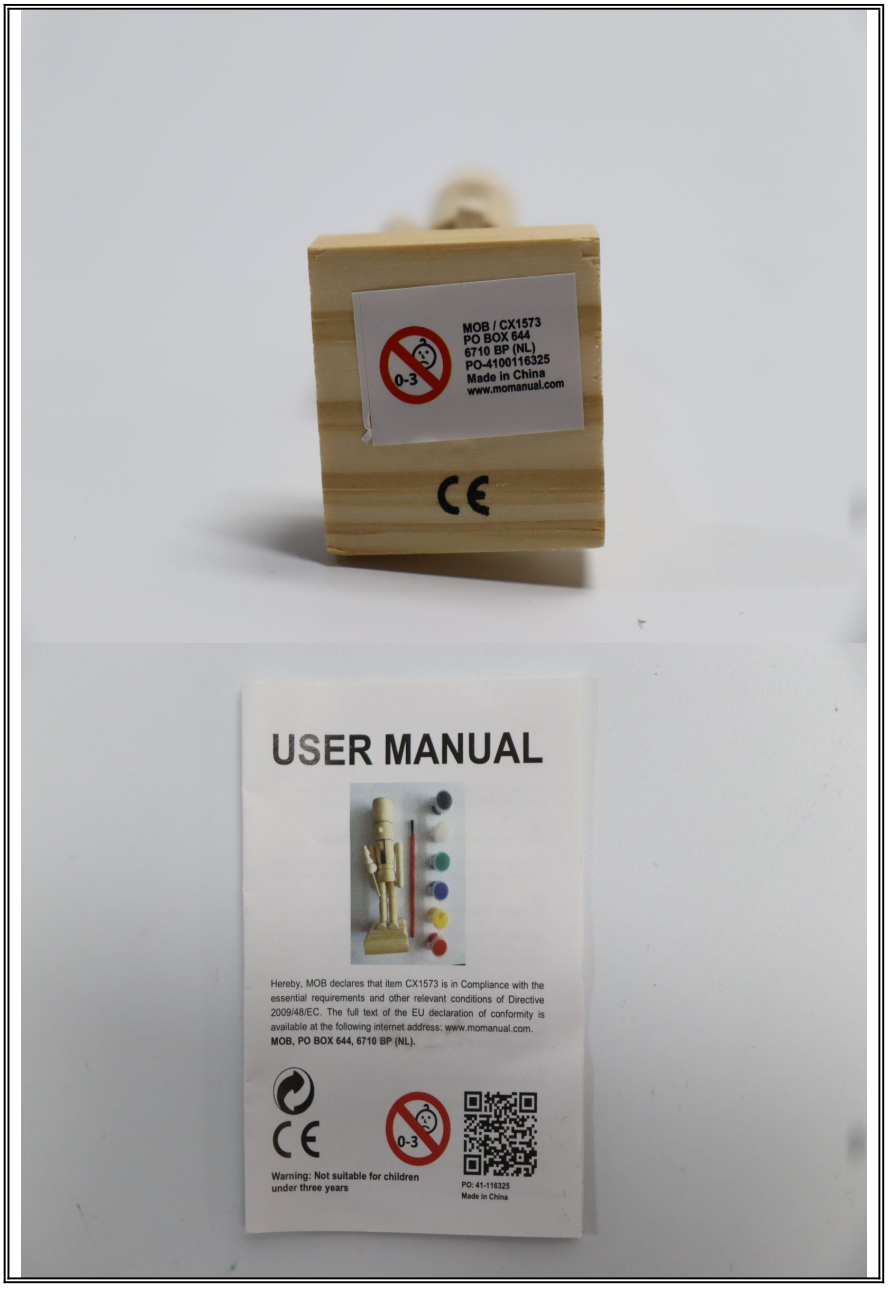
Remark(s) :
- Results of Cr III and Cr VI were reported as sum of soluble chromium content unless further verified.
- Result(s) of organic tin was (were) calculated by assuming the soluble tin content was wholly contributed

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 + A1: 2021 is currently harmonized under European Parliament and Council Directive 2009/48/EC and will be superseded when European Standard EN 71-3: 2019 + A2: 2024 is harmonized.

SAMPLE REFERENCE PHOTO:





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