



TEST REPORT

MID OCEAN BRANDS B.V.

Technical Report: (3224)100-0197 May 23, 2024
Date Received: April 09,2024 Page 1 of 19

MID OCEAN BRANDS B.V.
7/F., KINGS TOWER, 111 KING LAM STREET, CHEUNG SHA
WAN, KOWLOON, HONG KONG

SAMPLE INFORMATION:

Sample Description:	WOODEN PENCIL COLOURING SET	Sample Quantity:	N/A
Vendor:	111041	Style No.(s):	MO7389
Manufacturer:		SKN/SKU No.:	N/A
Buyer:	N/A	PO No.:	N/A
Labeled Age Grade:	NOT PRESENT	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:	EU
UPC Code:	N/A	Color:	N/A

Above sample information was provided and confirmed by customers, BV is not responsible for its accuracy or completeness.

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 1-7.	PASS SEE NOTE 2
The flammability requirements of the European Standard "Safety of Toys", EN 71: Part 2: 2020	PASS
Labeling requirements of "CE marking, manufacturer/ Importer name and address, and product identification" under "Directive 2009/48/EC Safety of Toy.	PASS
Migration of Certain Elements - EN71-3:2019+A1:2021	PASS
Polycyclic Aromatic Hydrocarbons (PAHs) Content – Regulation (EC) No. 1907/2006 Annex XVII Entry 50, Point 5	PASS
Phthalates Content – Reference to regulation (EC) No. 1907/2006 Annex XVII Entry 51 & 52	PASS
Total Cd Content & As Applicant's requirement	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 Amendments up to EU No. 412/2012, Annex XVII, Entry 5, Point 1	PASS
Formaldehyde Release from Wood & As Applicant's requirement	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

Note: 1.The sample is tested as "Over 3 years of age" per the client's request .
2.The submitted sample contains /releases small part as-received /after abuse, thus,according to EN71: Part 1:2014+A1:2018,the following small part warning is required.
"Warning! Not suitable for children under 36 months.Small parts.Chocking hazard."

Bureau Veritas Testing Technical Service (Zhejiang) Co.,Ltd
1F West, 8F East, 8F, Building 1
No.66 Jinhua Road, Ningbo, Zhejiang, China
Tel:86-574-87971039 Fax:86-574-87971039
website: www.bureauveritas.com

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> 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.



MID OCEAN BRANDS B.V.
Technical Report: **(3224)100-0197**
May 23, 2024
Page 2 of 19

- 3.The manufacturer / importer information was present on the packaging only. It has to be noted that, according to TSD 2009/48/EC , the manufacturers/ importer shall indicate their name, registered trade name or registered trade mark and the address at which they can be contacted on the toy, or, where that is not possible, on its packaging or in a document accompanying the toy.
- 4.The product identification is present on the packaging only. It has to be noted that, according to TSD 2009/48/EC, manufacturers shall ensure that their toys bear a type, batch, serial or model number or other element allowing their identification, or, where the size or nature of the toy does not allow it, that the required information is provided on the packaging or in a document accompanying the toy.
- 5.Samples are provided by customers.
- 6.The tested part of the sample was specified by client.
- 7.The test conclusion was given based on the results of tested part.

REMARK

If there are questions or concerns on this report, please contact the following persons:

Customer service

Ms.Lulu Zhang/Ms. Ashe Xi
(0574) 87091319/(0574) 87091115
lulu.b.zhang@bureauveritas.com
ashe.xi@bureauveritas.com

BUREAU VERITAS TESTING TECHNICAL SERVICE (ZHEJIANG) CO.,LTD

Mary Huang

PREPARED BY :

Mary Huang

Kobe Chen seb Wang

Kobe Chen
LAB SUPERVISOR
Seb Wang
OPERATION MANAGER(HARDLINE AND TOY DIVISION)



MID OCEAN BRANDS B.V.
 Technical Report: **(3224)100-0197**
 May 23, 2024
 Page 3 of 19

APPROPRIATE AGE GRADE DETERMINATION

The Appropriate Age Grade is determined with reference to the EN71: 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		



MID OCEAN BRANDS B.V.
 Technical Report: **(3224)100-0197**
 May 23, 2024
 Page 4 of 19

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

Subclause	Requirement	Result
4.1	Material cleanliness	M
4.2	Assembly	N/A
4.3	Flexible plastic sheeting	N/A
4.4	Toy Bags	N/A
4.5	Glass	N/A
4.6	Expanding materials	N/A
4.7 & 7.6	Edges	M
4.8 & 7.6	Points and metallic wires	M
4.8e	Splinters	M
4.9	Protruding parts	N/A
4.10.1	Folding and sliding mechanisms	N/A
4.10.2	Driving mechanisms	N/A
4.10.3	Hinges	N/A
4.10.4	Springs	N/A
4.11	Mouth actuated toys and other toys intended to be put in the mouth	N/A
4.12 & 7.3	Balloons	N/A
4.13 & 7.9	Cord of toy kites and other flying toys	N/A
4.14.1	Toys which a child can enter	N/A
4.14.2 & 7.8	Masks and helmets	N/A
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	N/A
4.15.1.3	Toys propelled by child – Strength	N/A
4.15.1.4	Toys propelled by child – Stability	N/A
4.15.1.5	Toys propelled by child – Braking	N/A
4.15.1.6	Toys propelled by child - Transmission	N/A
4.15.1.7	Toys propelled by child – insertion mark	N/A
4.15.1.8	Electrically-driven ride-on toys	N/A
4.15.2	Toy bicycles	
4.15.2.2 & 7.15	Toy bicycles – Warnings and instructions for use	N/A
4.15.2.3	Toy bicycles – Braking	N/A
4.15.3 & 7.16 & 7.19	Rocking horses and similar toys	N/A
4.15.4 & 7.16	Toys not propelled by child	N/A
4.15.5 & 7.18	Toy scooters	N/A
4.16	Heavy immobile toys	N/A
4.17.2	All projectiles	N/A
4.17.3 & 7.7	Projectile toys with stored energy	N/A
4.17.4 & 7.26	Certain projectiles toys without stored energy	N/A
4.18 & 7.4	Aquatic toys and inflatable toys	N/A
4.19 & 7.13 & 7.14	Percussion caps	N/A
*4.20.2.1- 4.20.2.8, 4.20.2.10, 4.20.2.12	Acoustics	N/A



MID OCEAN BRANDS B.V.
 Technical Report: **(3224)100-0197**
 May 23, 2024
 Page 5 of 19

**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	N/A
4.21	Toys containing a non-electrical heat source	N/A
4.22 & 7.2	Small balls	N/A
4.23	Magnet	
4.23.2 a, b & c	Toy other than magnetic / electrical experimental sets intended for children over 8 years	N/A
4.23.3 & 7.20	Magnetic / electrical experimental sets intended for children over 8 years	N/A
4.24	Yo-yo ball	N/A
4.25	Toys attached to food	N/A
4.26	Toy Disguise Costumes	N/A
4.27.1	Flying toys – General	N/A
4.27.2 & 7.25.1	Rotors and propellers on flying toys	N/A
4.27.3 & 7.25.2	Rotors and propellers on remote controlled flying toys	N/A
FOR TOYS INTENDED FOR CHILDREN UNDER 36 MONTHS		
5.1	General	N/A
5.1a	Small parts – as received	N/A
5.1b	Small parts, sharp points, sharp edges – after tests	N/A
5.1c	Cross section <2mm metal points & wires	N/A
5.1e	Toys contain glue	N/A
5.1f	Casing of toys	N/A
5.2	Fillings, coverings and seams	N/A
5.3	Adhesion of plastic sheeting	N/A
5.4.2	Cords and chains in toys intended for children under 18 months	N/A
5.4.3 & 7.22	Cords and chains in toys intended for children of 18 months or over but under 36 months	N/A
5.4.4	Fixed loops, tangled loops and nooses	N/A
5.4.5	Cords and chains on pull along toys	N/A
5.4.6 & 7.21	Electrical cables	N/A
5.4.7	Cross-sectional dimension of certain cords	N/A
5.4.8	Self-retracting cords	N/A
5.4.9 & 7.11 & 7.23	Toys attached to or intended to be strung across a cradle, cot or perambulator	N/A
5.5 & 7.12	Liquid filled toys	N/A
5.6	Electrically driven toys	N/A
5.7	Glass and porcelain	N/A
5.8	Shape and size	N/A
5.9 & 7.17	Monofilament fibres	N/A
5.10	Small balls	N/A
5.11	Play figures	N/A
5.12	Hemispheric shaped toys	N/A
5.13	Suction cups	N/A
5.14	Straps intended to be worn fully or partially around the neck	N/A
5.15 & 7.24	Sledges with cords for pulling	N/A
6	Packaging	N/A



MID OCEAN BRANDS B.V.
Technical Report: **(3224)100-0197**

May 23, 2024
Page 6 of 19

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

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

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

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				



MID OCEAN BRANDS B.V.

Technical Report: **(3224)100-0197**

May 23, 2024

Page 7 of 19

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	-	-



MID OCEAN BRANDS B.V.
 Technical Report: **(3224)100-0197**
 May 23, 2024
 Page 8 of 19

Tested Component(s) Breakdown List

Test Item(s)	Description	Location(s)	Style(s)
1	Red coating	On wood	-
2	Green coating	On wood	-
3	Blue coating	On wood	-
4	Orange coating	On wood	-
5	Brown coating	On wood	-
6	Yellow coating	On wood	-
7	Black coating	On wood	-
8	Deep green coating	On wood	-
9	Red pencil core	-	-
10	Green pencil core	-	-
11	Blue pencil core	-	-
12	Orange pencil core	-	-
13	Brown pencil core	-	-
14	Yellow pencil core	-	-
15	Black pencil core	-	-
16	Deep green pencil core	-	-
17	Beige wood	-	-
18	White plastic	Blister case	-
19	Transparent plastic	Lid	-
20	White paper with black printing	-	-



MID OCEAN BRANDS B.V.

Technical Report: **(3224)100-0197**

May 23, 2024

Page 9 of 19

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	2	3	4	5
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



MID OCEAN BRANDS B.V.

Technical Report: **(3224)100-0197**

May 23, 2024

Page 10 of 19

Analyte	Limit: Type III	Result (mg/kg)				
		Sample ID				
		6	7	8	17	18
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



MID OCEAN BRANDS B.V.
 Technical Report: **(3224)100-0197**
 May 23, 2024
 Page 11 of 19

Analyte	Limit: Type III	Result (mg/kg)	
		Sample ID	
		19	20
Boron (B)	15000	<1500	<1500
Aluminium (Al)	28130	<2813	<2813
Chromium III (Cr III)	460	<46	<46
Chromium VI (Cr VI)	0.053	<0.02	<0.02
Manganese (Mn)	15000	<1500	<1500
Cobalt (Co)	130	<13	<13
Nickel (Ni)	930	<93	<93
Copper (Cu)	7700	<770	<770
Zinc (Zn)	46000	<4600	<4600
Arsenic (As)	47	<4.7	<4.7
Selenium (Se)	460	<46	<46
Strontium (Sr)	56000	<5600	<5600
Cadmium (Cd)	17	<1.7	<1.7
Tin (Sn)	180000	<18000	<18000
Organic tin	12	<1.2	<1.2
Antimony (Sb)	560	<56	<56
Barium (Ba)	18750	<1875	<1875
Mercury (Hg)	94	<9.4	<9.4
Lead (Pb)	23	<2.3	<2.3
Conclusion		PASS	PASS



MID OCEAN BRANDS B.V.

Technical Report: **(3224)100-0197**

May 23, 2024

Page 12 of 19

Analyte	Limit: Type I	Result (mg/kg)				
		Sample ID				
		9	10	11	12	13
Boron (B)	1200	<120	<120	<120	<120	<120
Aluminium (Al)	2250	256	292	266	276	245
Chromium III (Cr III)	37.5	<3.75	<3.75	<3.75	<3.75	<3.75
Chromium VI (Cr VI)	0.02	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese (Mn)	1200	<120	168	<120	<120	<120
Cobalt (Co)	10.5	<1.05	<1.05	<1.05	<1.05	<1.05
Nickel (Ni)	75	<7.5	<7.5	<7.5	<7.5	<7.5
Copper (Cu)	622.5	<62.25	<62.25	<62.25	<62.25	<62.25
Zinc (Zn)	3750	<375	703	<375	1423	<375
Arsenic (As)	3.8	<0.38	<0.38	<0.38	<0.38	<0.38
Selenium (Se)	37.5	<3.75	<3.75	<3.75	<3.75	<3.75
Strontium (Sr)	4500	<450	<450	<450	<450	<450
Cadmium (Cd)	1.3	<0.13	<0.13	<0.13	<0.13	<0.13
Tin (Sn)	15000	<1500	<1500	<1500	<1500	<1500
Organic tin	0.9	<0.09	<0.09	<0.09	<0.09	<0.09
Antimony (Sb)	45	<4.5	<4.5	<4.5	<4.5	<4.5
Barium (Ba)	1500	159	<150	238	<150	<150
Mercury (Hg)	7.5	<0.75	<0.75	<0.75	<0.75	<0.75
Lead (Pb)	2	0.794	1.27	0.771	1.65	0.547
Conclusion		PASS	PASS	PASS	PASS	PASS



MID OCEAN BRANDS B.V.
 Technical Report: **(3224)100-0197**
 May 23, 2024
 Page 13 of 19

Analyte	Limit: Type I	Result (mg/kg)		
		Sample ID		
		14	15	16
Boron (B)	1200	<120	<120	<120
Aluminium (Al)	2250	314	276	<225
Chromium III (Cr III)	37.5	<3.75	<3.75	<3.75
Chromium VI (Cr VI)	0.02	<0.005	<0.005	<0.005
Manganese (Mn)	1200	<120	<120	<120
Cobalt (Co)	10.5	<1.05	<1.05	<1.05
Nickel (Ni)	75	<7.5	<7.5	<7.5
Copper (Cu)	622.5	<62.25	<62.25	<62.25
Zinc (Zn)	3750	<375	<375	<375
Arsenic (As)	3.8	<0.38	<0.38	<0.38
Selenium (Se)	37.5	<3.75	<3.75	<3.75
Strontium (Sr)	4500	<450	<450	<450
Cadmium (Cd)	1.3	<0.13	<0.13	<0.13
Tin (Sn)	15000	<1500	<1500	<1500
Organic tin	0.9	<0.09	<0.09	<0.09
Antimony (Sb)	45	<4.5	<4.5	<4.5
Barium (Ba)	1500	256	<150	<150
Mercury (Hg)	7.5	<0.75	<0.75	<0.75
Lead (Pb)	2	1.03	1.39	<0.2
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.



MID OCEAN BRANDS B.V.
 Technical Report: **(3224)100-0197**
 May 23, 2024
 Page 14 of 19

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 + 2 + 3	4 + 5 + 6	7 + 8	9 + 10 + 11	
Benzo (a) anthracene	mg/kg	ND	ND	ND	ND	0.5
Chrysene	mg/kg	ND	ND	ND	ND	0.5
Benzo (b) fluoranthene	mg/kg	ND	ND	ND	ND	0.5
Benzo (j) fluoranthene	mg/kg	ND	ND	ND	ND	0.5
Benzo (k) fluoranthene	mg/kg	ND	ND	ND	ND	0.5
Benzo (e) pyrene	mg/kg	ND	ND	ND	ND	0.5
Benzo (a) pyrene	mg/kg	ND	ND	ND	ND	0.5
Dibenzo (a,h) anthracene	mg/kg	ND	ND	ND	ND	0.5
Conclusion	-	PASS	PASS	PASS	PASS	-

Parameter	Unit	Result				Maximum Allowable Limit
		12 + 13 + 14	15 + 16	18 + 19	20	
Benzo (a) anthracene	mg/kg	ND	ND	ND	ND	0.5
Chrysene	mg/kg	ND	ND	ND	ND	0.5
Benzo (b) fluoranthene	mg/kg	ND	ND	ND	ND	0.5
Benzo (j) fluoranthene	mg/kg	ND	ND	ND	ND	0.5
Benzo (k) fluoranthene	mg/kg	ND	ND	ND	ND	0.5
Benzo (e) pyrene	mg/kg	ND	ND	ND	ND	0.5
Benzo (a) pyrene	mg/kg	ND	ND	ND	ND	0.5
Dibenzo (a,h) anthracene	mg/kg	ND	ND	ND	ND	0.5
Conclusion	-	PASS	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



MID OCEAN BRANDS B.V.
 Technical Report: **(3224)100-0197**
 May 23, 2024
 Page 15 of 19

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

Test Method : Reference to EN 14372:2004.

Parameter	Unit	Result				Maximum Allowable Limit
		1 + 2 + 3	4 + 5 + 6	7 + 8	9 + 10 + 11	
A. For toys and childcare articles	-	-	-	-	-	-
DBP	mg/kg	ND	ND	ND	ND	-
BBP	mg/kg	ND	ND	ND	ND	-
DEHP	mg/kg	ND	ND	ND	ND	-
DiBP	mg/kg	202	ND	ND	ND	-
B. Additional requirements for toys and childcare articles, which can be placed in mouth by the children (See remark)	-	-	-	-	-	-
DnOP	mg/kg	ND	ND	ND	ND	-
DINP	mg/kg	ND	ND	ND	ND	-
DIDP	mg/kg	ND	ND	ND	ND	-
Sum of DBP, BBP, DEHP, DiBP	mg/kg	202	ND	ND	ND	1000
Sum of DNOP, DIDP, DINP	mg/kg	ND	ND	ND	ND	1000
Conclusion	-	PASS	PASS	PASS	PASS	-



MID OCEAN BRANDS B.V.
 Technical Report: **(3224)100-0197**
 May 23, 2024
 Page 16 of 19

Parameter	Unit	Result				Maximum Allowable Limit
		12 + 13 + 14	15 + 16	18 + 19	20	
A. For toys and childcare articles	-	-	-	-	-	-
DBP	mg/kg	ND	ND	ND	ND	-
BBP	mg/kg	ND	ND	ND	ND	-
DEHP	mg/kg	ND	ND	ND	ND	-
DiBP	mg/kg	ND	ND	ND	ND	-
B. Additional requirements for toys and childcare articles, which can be placed in mouth by the children (See remark)	-	-	-	-	-	-
DnOP	mg/kg	ND	ND	ND	ND	-
DINP	mg/kg	ND	ND	ND	ND	-
DIDP	mg/kg	ND	ND	ND	ND	-
Sum of DBP, BBP, DEHP, DiBP	mg/kg	ND	ND	ND	ND	1000
Sum of DNOP, DIDP, DINP	mg/kg	ND	ND	ND	ND	1000
Conclusion	-	PASS	PASS	PASS	PASS	-

Note / Key:

ND = Not Detected

Conc. = Concentration

Detection Limit (mg/kg): Each 50

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	Dibutyl phthalate (DBP)	84-74-2	5	Di-iso-nonyl phthalate (DINP)	28553-12-0 & 68515-48-0
2	Butylbenzylphthalate (BBP)	85-68-7	6	Di-iso-decyl phthalate (DIDP)	26761-40-0 & 68515-49-1
3	Di-2-ethylhexyl phthalate (DEHP)	117-81-7	7	Diisobutyl phthalate	84-69-5
4	Di-n-octyl phthalate (DNOP)	117-84-0	-	-	-



MID OCEAN BRANDS B.V.
 Technical Report: **(3224)100-0197**
 May 23, 2024
 Page 17 of 19

Total Cd Content & As Applicant's requirement

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

Parameter	Unit	Result				Maximum Allowable Limit
		1 + 2 + 3	4 + 5 + 6	7 + 8	9 + 10 + 11	
Cadmium (Cd)	mg/kg	<10	<10	<10	<10	100
Conclusion	-	PASS	PASS	PASS	PASS	-

Parameter	Unit	Result				Maximum Allowable Limit
		12 + 13 + 14	15 + 16	17	18 + 19	
Cadmium (Cd)	mg/kg	<10	<10	<10	<10	100
Conclusion	-	PASS	PASS	PASS	PASS	-

Parameter	Unit	Result	Maximum Allowable Limit
		20	
Cadmium (Cd)	mg/kg	<10	100
Conclusion	-	PASS	-

Note / Key:

ND = Not Detected

Detection Limit (mg/kg) : 10

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 Amendments up to EU No. 412/2012, Annex XVII, Entry 5, Point 1

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

Parameter	Unit	Result				Maximum Allowable Limit
		1 + 2 + 3	4 + 5 + 6	7 + 8	9 + 10 + 11	
Benzene	mg/kg	ND	ND	ND	ND	5
Conclusion	-	PASS	PASS	PASS	PASS	-

Parameter	Unit	Result				Maximum Allowable Limit
		12 + 13 + 14	15 + 16	18 + 19	20	
Benzene	mg/kg	ND	ND	ND	ND	5
Conclusion	-	PASS	PASS	PASS	PASS	-

Note / Key:

ND = Not Detected

Detection Limit (mg/kg) : 5



MID OCEAN BRANDS B.V.
Technical Report: **(3224)100-0197**
May 23, 2024
Page 18 of 19

Formaldehyde Release from Wood & As Applicant's requirement

Test Method : EN 717-3: 1996

Parameter	Unit	Result	Maximum Allowable Limit
		17	
Average Formaldehyde	mg/kg	ND	10
Moisture Content	%	5.96	-
Conclusion	-	PASS	-

Note / Key:
ND = Not detected % = percent mg/kg = milligram(s) formaldehyde per kilogram oven-dry board
Detection Limit (mg/kg) : 10

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
17	ND	mg/kg	PASS

Note / Key:
ND = Not Detected mg/kg = milligram per kilogram Detect limit (mg/kg) : 0.05



MID OCEAN BRANDS B.V.
Technical Report: **(3224)100-0197**
May 23, 2024
Page 19 of 19

SAMPLE REFERENCE PHOTO:



-- END OF REPORT --