TEST REPORT

MID OCEAN BRANDS B.V.

Technical Report: **(3222)160-0167** Jun 23,2022
Date Received: Jun.09,2022 Page 1 of 18

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

SAMPLE INFORMATION:

Sample Description:	COLORING MUG W/5PCS COLOR PENCILS	**Sample Quantity:**	N/A
Vendor:	111041	**Style No(s):**	MO6584
Manufacturer:	N/A	**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:**	N/A
Client Specified Age Grade:	OVER 3 YEARS OF AGE	**Assortment No.:**	N/A
Tested Age Grade:	OVER 3 YEARS OF AGE	**Country of Destination:**	N/A
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 1-7.	PASS SEE NOTE 2
The flammability requirements of the European Standard "Safety of Toys”, EN 71: Part 2: 2020	PASS
Formaldehyde Release from Wood	DATA
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 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
Migration of Certain Elements - EN71-3:2019+A1:2021	PASS
Total Cadmium Content in Paints on Painted Article - European Parliament and Council Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) with its Latest Amendment, Annex XVII, Entry 23	PASS
Overall Migration Test for Plastic Materials in Contact with Foodstuffs – Commission Regulation (EU) No. 10/2011, Commission Regulation (EU) No. 2020/1245 and Its Amendments	PASS
Specific Migration of Heavy Metals for Plastic Materials in Contact with Foodstuffs – Commission Regulation (EU) No. 10/2011, Commission Regulation (EU) No. 2020/1245 and Its Amendments	PASS
Specific Migration of Primary Aromatic Amine for plastic in Contact with Foodstuffs – Commission Regulation (EU) No. 10/2011, Commission Regulation (EU) No. 2020/1245 and Its Amendments	PASS
Bisphenol A Contents for Materials in Contact with Foodstuffs –§ 30 and 31 LFGB and BfR Recommendation,Commission Regulation (EU) No. 10/2011 and Its Amendments (EU) No 321/2011	PASS
Benzene Content & As Client’s requirement	PASS

Note:
1.The sample is tested as “Over 3 years of age” per the client’s request .

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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.

Note: The tested part of the sample was specified by client.
The test conclusion was given based on the results of tested part.
Selected test items as requested by applicants.

Remark:The report test data with “*” take from report (2421)365-8022 data May 14,2022.

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 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		

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

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

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

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

FLAMMABILITY (EN 71 PART 2: 2020)

Subclause	Requirement	Result
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(s)	Description	Location(s)	Style(s)
1	Sky blue coating	-	-
2	Light green coating	-	-
3	Yellow coating	-	-
4	Redcoating	-	-
5	Orangecoating	-	-
6	Sky bluerefill	-	-
7	Light greenrefill	-	-
8	Yellowrefill	-	-
9	Redrefill	-	-
10	Orangerefill	-	-
11	Beigewood	-	-
12	Transparent plastic	-	-
13	White plastic	-	-
14	White paper with black coating	-	-
15	White plastic	-	-

Formaldehyde Release from Wood

Test Method : EN 717-3: 1996

Parameter	Unit	Result	Maximum Allowable Limit
		11	
Moisture Content	%	6.4	-
Formaldehyde	mg/kg	ND	-
Conclusion	-	DATA	-

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.

Parameter	Unit	Result	Maximum

		1+2	3+4+5	12+13	14	**Allowable Limit**
Benzo (a) anthracene	mg/kg	ND	ND	ND	ND	1
Chrysene	mg/kg	ND	ND	ND	ND	1
Benzo (b) fluoranthene	mg/kg	ND	ND	ND	ND	1
Benzo (j) fluoranthene	mg/kg	ND	ND	ND	ND	1
Benzo (k) fluoranthene	mg/kg	ND	ND	ND	ND	1
Benzo (e) pyrene	mg/kg	ND	ND	ND	ND	1
Benzo (a) pyrene	mg/kg	ND	ND	ND	ND	1
Dibenzo (a,h) anthracene	mg/kg	ND	ND	ND	ND	1
Conclusion	-	PASS	PASS	PASS	PASS	-

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

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	12+13	14	
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	-
Sum of DBP, BBP, DEHP, DIBP	mg/kg	ND	ND	ND	ND	1000
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 DNOP, DIDP, DINP	mg/kg	ND	ND	ND	ND	1000
Conclusion	-	PASS	PASS	PASS	PASS	-

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

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
2	Butylbenzylphthalate (BBP)	85-68-7	6	Di-iso-decyl phthalate (DIDP)	26761-40-0
3	Di-2-ethylhexyl phthalate (DEHP)	117-81-7	7	Diisobutyl phthalate	84-69-5
4	Di-n-octyl phthalate (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
The sample is digested with acid, then analyzed by AAS.

Maximum Limit:	**100 mg/kg**

Parameter	Result	Unit	Conclusion
6+7	ND	mg/kg	PASS
8+9+10	ND	mg/kg	PASS
11	ND	mg/kg	PASS
12+13	ND	mg/kg	PASS
14	ND	mg/kg	PASS

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

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

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

-	Unit	Req.	Result				
Test Item(s)	-	-	6*	7*	8*	9*	10*
Category	-	I	I	I	I	I	I
Parameter	-	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-	-
Boron (B)	mg/kg	1200	<120	<120	<120	<120	<120
Aluminium (Al)	mg/kg	2250	<225	<225	<225	<225	<225
Chromium III (Cr III)	mg/kg	37.5	<3.75	<3.75	<3.75	<3.75	<3.75
Chromium VI (Cr VI)	mg/kg	0.02	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese (Mn)	mg/kg	1200	<120	<120	<120	<120	<120
Cobalt (Co)	mg/kg	10.5	<1.05	<1.05	<1.05	<1.05	<1.05

Nickel (Ni)	mg/kg	75	<7.5	<7.5	<7.5	<7.5	<7.5
Copper (Cu)	mg/kg	622.5	<62.25	<62.25	<62.25	<62.25	<62.25
Zinc (Zn)	mg/kg	3750	<375	<375	<375	<375	<375
Arsenic (As)	mg/kg	3.8	<0.38	<0.38	<0.38	<0.38	<0.38
Selenium (Se)	mg/kg	37.5	<3.75	<3.75	<3.75	<3.75	<3.75
Strontium (Sr)	mg/kg	4500	<450	<450	<450	<450	<450
Cadmium (Cd)	mg/kg	1.3	<0.13	<0.13	<0.13	<0.13	<0.13
Tin (Sn)	mg/kg	15000	<1500	<1500	<1500	<1500	<1500
Organic tin	mg/kg	0.9	<0.9*	<0.9*	<0.9*	<0.9*	<0.9*
Antimony (Sb)	mg/kg	45	<4.5	<4.5	<4.5	<4.5	<4.5
Barium (Ba)	mg/kg	1500	<150	<150	<150	<150	<150
Mercury (Hg)	mg/kg	7.5	<0.75	<0.75	<0.75	<0.75	<0.75
Lead (Pb)	mg/kg	2.0	0.360	0.381	0.263	0.518	0.306
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS

-	**Unit**	**Req.**	**Result**					
Test Item(s)	-		1*	2*	3*	4*	5*	11*
Category	-	III	III	III	III	III	III	III
Parameter	-	-	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	-	-	-	-	-
Boron (B)	mg/kg	15000	<1500	<1500	<1500	<1500	<1500	<1500
Aluminium (Al)	mg/kg	28130	<2813	<2813	<2813	<2813	<2813	<2813
Chromium III (Cr III)	mg/kg	460	<46	<46	<46	<46	<46	<46
Chromium VI (Cr VI)	mg/kg	0.053	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Manganese (Mn)	mg/kg	15000	<1500	<1500	<1500	<1500	<1500	<1500
Cobalt (Co)	mg/kg	130	<13	<13	<13	<13	<13	<13
Nickel (Ni)	mg/kg	930	<93	<93	<93	<93	<93	<93
Copper (Cu)	mg/kg	7700	<770	<770	<770	<770	<770	<770
Zinc (Zn)	mg/kg	46000	<4600	<4600	<4600	<4600	<4600	<4600
Arsenic (As)	mg/kg	47	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
Selenium (Se)	mg/kg	460	<46	<46	<46	<46	<46	<46
Strontium (Sr)	mg/kg	56000	<5600	<5600	<5600	<5600	<5600	<5600
Cadmium (Cd)	mg/kg	17	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
Tin (Sn)	mg/kg	180000	<18000	<18000	<18000	<18000	<18000	<18000
Organic tin	mg/kg	12	<12*	<12*	<12*	<12*	<12*	<12*
Antimony (Sb)	mg/kg	560	<56	<56	<56	<56	<56	<56
Barium (Ba)	mg/kg	18750	<1875	<1875	<1875	<1875	<1875	<1875
Mercury (Hg)	mg/kg	94	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
Lead (Pb)	mg/kg	23	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS	PASS

Analyte	Limit: (mg/kg)	Result (mg/kg)		
		Sample ID		
	Type III	12	13	14
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	<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.
- Test Item(s) < Example : I005 > was (were) de-waxed by isooctane before testing.
- 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.
- Cr VI is very likely to be present in Test Item(s) < Example : I003 >, client is strongly advised to review its (their) chemical formulation.
- Organic tin is very likely to be present in Test Item(s) < Example : I003 >, client is strongly advised to review its (their) chemical formulation.
- * 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.

Total Cadmium Content in Paints on Painted Article - European Parliament and Council Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) with its Latest Amendment, Annex XVII, Entry 23

Test Method : The sample is comminuted and digested with acid mixtures, then analyzed by ICP-AES technique

Maximum	**1000 mg/kg**

Limit:	

Parameter	Result	Unit	Conclusion
1+2	ND	mg/kg	PASS
3+4+5	ND	mg/kg	PASS

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

Overall Migration Test for Plastic Materials in Contact with Foodstuffs – Commission Regulation (EU) No. 10/2011, Commission Regulation (EU) No. 2020/1245 and Its Amendments

Test Condition: 2 h at 70 °C (3% Acetic acid)
2 h at 70 °C (20% Ethanol)

Simulant Used	Unit	Result			Maximum Allowable Limit(3rd)	Analytical Tolerance
		15				
		1st Migrate	2nd Migrate	3rd Migrate		
Food contact surface area	dm^2	2.14			-	-
Volume of stimulant used	mL	300			-	-
3% Acetic acid	mg/dm^2	<5	<5	<5	10	+2
20% Ethanol	mg/dm^2	<5	<5	<5	10	+3
Conclusion	-	PASS			-	-

Note: "<" = less than
mg/dm^2 = milligram per square decimeter

Method: EN 1186-1: 2002;

Remark: 1) The migration test is carried out according to EC Regulation No. 10/2011 and the corresponding regulatory statutes.

2) For article intended for repeated use, the migration tests are carried out three times on the same test sample.

3) Test condition and simulant were specified by client

Specific Migration of Heavy Metals for Plastic Materials in Contact with Foodstuffs – Commission Regulation (EU) No. 10/2011, Commission Regulation (EU) No. 2020/1245 and Its Amendments

Test Condition: 2 h at 70 °C (3% Acetic acid)

Parameter	Simulant Used	*Unit*	Result			Maximum Allowable Limit(3rd)
			15			
			1st Migrate	2nd Migrate	3rd Migrate	
Food contact surface area	-	dm^2	2.14			-
Volume of stimulant used	-	mL	300			-
Barium (Ba)	3% Acetic acid	mg/kg	<0.1	<0.1	<0.1	1
Cobalt (Co)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	0.05
Copper (Cu)	3% Acetic acid	mg/kg	<0.5	<0.5	<0.5	5
Iron (Fe)	3% Acetic acid	mg/kg	<5	<5	<5	48
Lithium (Li)	3% Acetic acid	mg/kg	<0.1	<0.1	<0.1	0.6
Manganese (Mn)	3% Acetic acid	mg/kg	<0.1	<0.1	<0.1	0.6
Zinc (Zn)	3% Acetic acid	mg/kg	<0.1	<0.1	<0.1	5
Aluminum (Al)	3% Acetic acid	mg/kg	<0.1	<0.1	<0.1	1
Nickel (Ni)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	0.02
Antimony (Sb)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	0.04
Arsenic (As)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	Not detected
Cadmium (Cd)	3% Acetic acid	mg/kg	<0.002	<0.002	<0.002	Not detected
Chromium (Cr)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	Not detected
Europium (Eu)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	0.05
Gadolinium (Gd)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	0.05
Lanthanum (La)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	0.05
Lead (Pb)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	Not detected
Mercury (Hg)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	Not detected
Terbium (Tb)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	0.05
Sum of Europium (Eu), Gadolinium (Gd), Lanthanum (La), and/or Terbium (Tb)	3% Acetic acid	mg/kg	<0.01	<0.01	<0.01	0.05
Conclusion	-	-	PASS			-

Note: "<" = less than
mg/kg = milligram per kilogram

Method: EN 13130-1: 2004 and analysis by Inductively Coupled Argon Plasma Spectrometer (ICP).

Remark: 1) The migration test is carried out according to EU regulation No. 10/2011 and the corresponding regulatory statutes.

2) For article intended for repeated use, the migration tests are carried out three times on the same test sample.

3) Due to the fact that SML for As, Cr, Pb, Hg is specified as not detectable meaning < 0.01 mg/kg and SML for Cd is specified as not detectable meaning < 0.002 mg/kg analysis and assessment has to be performed using the 1st migrate in any case no matter whether article/materials is intended for single or repeated use.

Specific Migration of Primary Aromatic Amine for plastic in Contact with Foodstuffs – Commission Regulation (EU) No. 10/2011, Commission Regulation (EU) No. 2020/1245 and Its Amendments

Test Condition: 2 h at 70 °C (3% Acetic acid)

Primary Aromatic Amines (PAAs)

Parameter	Unit	Result			Maximum Allowable Limit(3rd)
		15			
		1st Migrate	2nd Migrate	3rd Migrate	
Aniline	mg/kg	<0.002	<0.002	<0.002	0.01(sum)
2,4-Dimethylaniline / 2,4-xylidine	mg/kg	<0.002	<0.002	<0.002	
2,6-Dimethylaniline / 2,6-xylidine	mg/kg	<0.002	<0.002	<0.002	
p-Phenylenediamine / 1,4-phenylenediamine	mg/kg	<0.002	<0.002	<0.002	
2,6-Toluenediamine	mg/kg	<0.002	<0.002	<0.002	
1,5-Diaminenaphthalene	mg/kg	<0.002	<0.002	<0.002	
Conclusion	-	PASS			-

Primary Aromatic Amines (PAAs)

Parameter	Unit	Result			Maximum Allowable Limit(3rd)
		15			
		1st Migrate	2nd Migrate	3rd Migrate	
4-aminobiphenyl / 4-biphenylamine	mg/kg	<0.002	<0.002	<0.002	0.002
o-anisidine / 2-methoxyaniline	mg/kg	<0.002	<0.002	<0.002	0.002
Benzidine	mg/kg	<0.002	<0.002	<0.002	0.002
4-Chloro-aniline / p-chloroaniline	mg/kg	<0.002	<0.002	<0.002	0.002
4-Chloro-o-toluidine	mg/kg	<0.002	<0.002	<0.002	0.002
4,4'-Diaminodiphenylether / 4,4'-oxydianiline	mg/kg	<0.002	<0.002	<0.002	0.002
4,4'-Methylenedianiline / 4,4'-diamino-diphenylmethane	mg/kg	<0.002	<0.002	<0.002	0.002
4,4-Methylenedi-o-toluidine / 3,3'-dimethyl-4,4'-diaminodiphenylmethane	mg/kg	<0.002	<0.002	<0.002	0.002
2-Methoxy-5-methylaniline / p-cresidine	mg/kg	<0.002	<0.002	<0.002	0.002
4-Methoxy-m-phenylenediamine / 2,4-diaminoanisole	mg/kg	<0.002	<0.002	<0.002	0.002
o-Toluidine / 2-aminotoluene	mg/kg	<0.002	<0.002	<0.002	0.002
2,4-Toluenediamine	mg/kg	<0.002	<0.002	<0.002	0.002
3,3-Dimethylbenzidine	mg/kg	<0.002	<0.002	<0.002	0.002
2,4,5-Trimethylaniline	mg/kg	<0.002	<0.002	<0.002	0.002
m-Phenylenediamine / 1,3-phenylenediamine	mg/kg	<0.002	<0.002	<0.002	0.002
2-naphthylamine	mg/kg	<0.002	<0.002	<0.002	0.002
o-aminoazotoluene/ 4-amino-2',3-dimethylazobenzene/ 4-o-tolylazo-o-toluidine	mg/kg	<0.002	<0.002	<0.002	0.002
5-nitro-o-toluidine	mg/kg	<0.002	<0.002	<0.002	0.002
3,3'-dichlorobenzidine	mg/kg	<0.002	<0.002	<0.002	0.002
3,3'-dimethoxybenzidine / o-dianisidine	mg/kg	<0.002	<0.002	<0.002	0.002

4,4'-methylene-bis-(2-chloro-aniline) / 2,2'-dichloro-4,4'-methylene-dianiline	mg/kg	<0.002	<0.002	<0.002	0.002
4,4'-thiodianiline	mg/kg	<0.002	<0.002	<0.002	0.002
4-amino azobenzene	mg/kg	<0.002	<0.002	<0.002	0.002
Conclusion	-	PASS			-

Note: "<" = less than
mg/kg = milligram per kilogram

Method: EN 13130-1: 2004, LC-MS/ LC-MS/MS analysis.

Remark: 1) The migration test is carried out according to EU regulation No. 10/2011 and the corresponding regulatory statutes.

2) PAA listed in entry 43 to Appendix 8 of Annex XVII to Regulation (EC) No 1907/2006 and1,3-phenylenediamine are specified as not detectable meaning < 0.002 mg/kg, assessment has to be performed using the 1st migrate in any case no matter whether article/materials is intended for single or repeated use.

Bisphenol A Contents for Materials in Contact with Foodstuffs –§ 30 and 31 LFGB and BfR Recommendation,Commission Regulation (EU) No. 10/2011 and Its Amendments (EU) No 321/2011

Parameter	Unit	Result	Maximum Allowable Limit
		15	
Bisphenol A	mg/kg	<0.1	Not Detected (<0.1)
Conclusion	-	PASS	-

Note: "<" = less than
mg/kg = milligram per kilogram

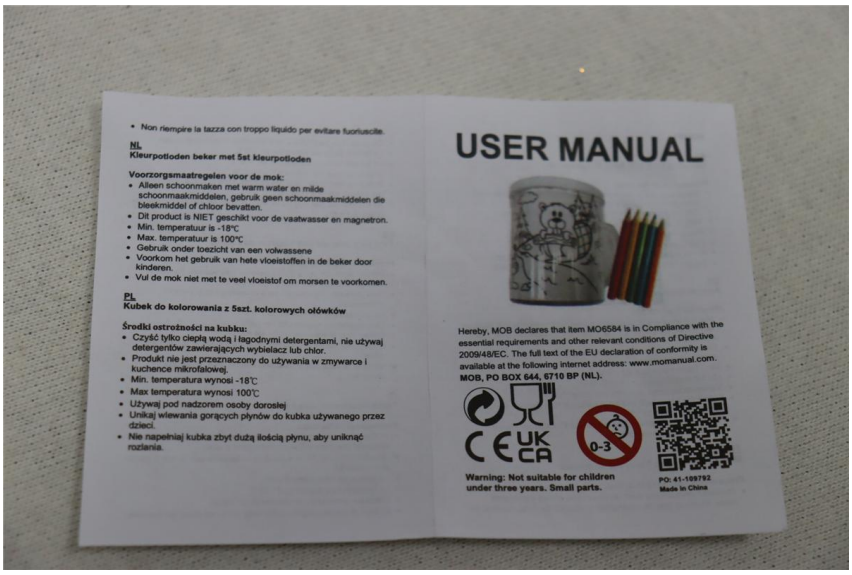
Method: Solvent extraction and analysis by Liquid Chromatograph Mass Spectrometer (LC-MS).

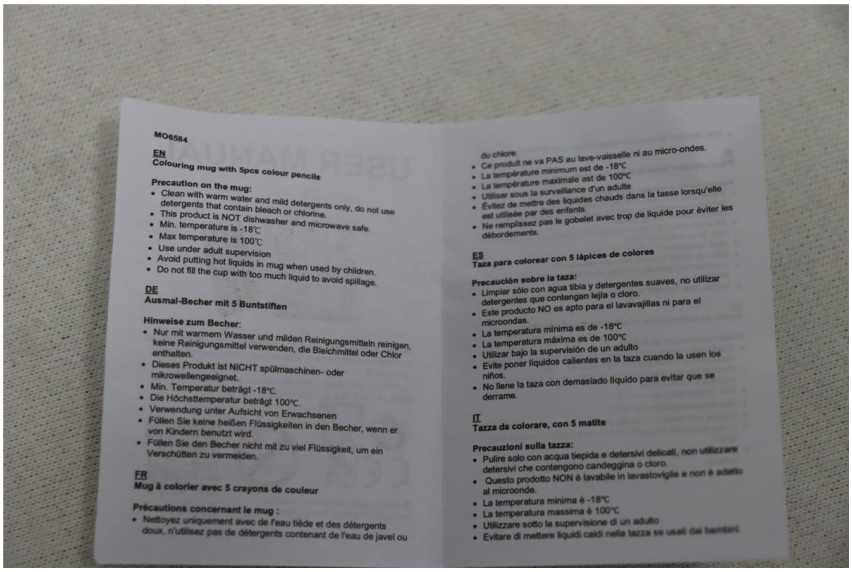
Benzene Content & As Client's requirement

Test Method: Samples wereheated in the headspace vials and analyzed with Gas Chromatography Mass Spectrometer (HS-GC-MS).

Parameter	Unit	MDL	Result						Client's Limit
			1+2	3+4+5	6+7	8+9+10	12+13	14	
Benzene	mg/kg	1	ND	ND	ND	3.09	ND	ND	5
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS	PASS	-

SAMPLE REFERENCE PHOTO:





MO6584

EN
Colouring mug with 5pcs colour pencils

Precaution on the mug:
- Clean with warm water and mild detergents only, do not use detergents that contain bleach or chlorine.
- This product is NOT dishwasher and microwave safe.
- Min. temperature is -18℃.
- Max temperature is 100℃.
- Use under adult supervision.
- Avoid putting hot liquids in mug when used by children.
- Do not fill the cup with too much liquid to avoid spillage.

DE
Ausmal-Becher mit 5 Buntstiften

Hinweise zum Becher:
- Nur mit warmem Wasser und milden Reinigungsmitteln reinigen, keine Reinigungsmittel verwenden, die Bleichmittel oder Chlor enthalten.
- Dieses Produkt ist NICHT spülmaschinen- oder mikrowellengeeignet.
- Min. Temperatur beträgt -18℃.
- Die Höchsttemperatur beträgt 100℃.
- Verwendung unter Aufsicht von Erwachsenen
- Füllen Sie keine heißen Flüssigkeiten in den Becher, wenn er von Kindern benutzt wird.
- Füllen Sie den Becher nicht mit zu viel Flüssigkeit, um ein Verschütten zu vermeiden.

FR
Mug à colorier avec 5 crayons de couleur

Précautions concernant le mug :
- Nettoyez uniquement avec de l'eau tiède et des détergents doux, n'utilisez pas de détergents contenant de l'eau de javel ou du chlore.
- Ce produit ne va PAS au lave-vaisselle ni au micro-ondes.
- La température minimum est de -18℃.
- La température maximale est de 100℃.
- Utiliser sous la surveillance d'un adulte
- Évitez de mettre des liquides chauds dans la tasse lorsqu'elle est utilisée par des enfants.
- Ne remplissez pas le gobelet avec trop de liquide pour éviter les débordements.

ES
Taza para colorear con 5 lápices de colores

Precaución sobre la taza:
- Limpiar sólo con agua tibia y detergentes suaves, no utilizar detergentes que contengan lejía o cloro.
- Este producto NO es apto para el lavavajillas ni para el microondas.
- La temperatura mínima es de -18℃
- La temperatura máxima es de 100℃
- Utilizar bajo la supervisión de un adulto
- Evite poner líquidos calientes en la taza cuando la usen los niños.
- No llene la taza con demasiado líquido para evitar que se derrame.

IT
Tazza da colorare, con 5 matite

Precauzioni sulla tazza:
- Pulire solo con acqua tiepida e detersivi delicati, non utilizzare detersivi che contengono candeggina o cloro.
- Questo prodotto NON è lavabile in lavastoviglie e non è adatto al microonde.
- La temperatura minima è -18℃
- La temperatura massima è 100℃
- Utilizzare sotto la supervisione di un adulto
- Evitare di mettere liquidi caldi nella tazza se usati dai bambini.

-- END OF REPORT --