TEST REPORT

MID OCEAN BRANDS B.V.

Technical Report: (3223)269-0194 October 27, 2023
Date Received: September 26,2023 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:	NON WOVEN BAG W/5PCS MARKERS	**Sample Quantity:**	N/A
Vendor:	111041	**Style No.(s):**	MO9887
Manufacturer:		**SKN/SKU No.:**	N/A
Buyer:	N/A	**PO No.:**	N/A
Labeled Age Grade:	NOT PRESNET	**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:**	OVERSEAS
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&3
The flammability requirements of the European Standard "Safety of Toys”, EN 71: Part 2: 2020	PASS
Migration of Certain Elements - EN71-3:2019+A1:2021	PASS
Aromatic Amines Content from Azo Colorants - Regulation (EC) No. 1907/2006 Annex XVII Entry 43, Points 1 & 2	PASS
Phthalates Content – Reference to regulation (EC) No. 1907/2006 Annex XVII Entry 51 & 52	PASS
Total Cadmium Content – Reference to Regulation (EC) No. 1907/2006 Annex XVII Entry 23	PASS
Polycyclic Aromatic Hydrocarbons (PAHs) Content - AfPS GS 2019:01 PAK & As Applicant’s requirement	PASS
Benzene Content - 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 72	PASS
COLOURFASTNESS TO RUBBING	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 suitable for children under 36 months.Small parts.Chocking hazard.
4.Samples are provided by customers.
The tested part of the sample was specified by client.

Bureau Veritas Testing Technical Service (Zhejiang) Co.,Ltd
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5.The composite testing was performed as per client's request.
6.The test conclusion was given based on the results of tested part.
The above result of test item 1-13 is copied from item 1-13 of (3223)269-0191 dated on October 11, 2023.

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

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

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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	M
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&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				

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	White non-woven with black coating	-	-
2	Red plastic	-	-
3	Orange plastic	-	-
4	Yellow plastic	-	-
5	Green plastic	-	-
6	Blue plastic	-	-
7	White plastic	-	-
8	Red ink	-	-
9	Orange ink	-	-
10	Yellow ink	-	-
11	Green ink	-	-
12	Blue ink	-	-
13	White fiber	Pen head	-
14	Black rope	-	-
15	Silver metal	-	-

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

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

Analyte	Limit: (mg/kg)	Result (mg/kg)				
		Sample ID				
	Type II	8	9	10	11	12
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	2.42	1.17	1.20	2.03
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	<0.05	0.101	0.056
Conclusion		PASS	PASS	PASS	PASS	PASS

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

Analyte	Limit: (mg/kg)	Result (mg/kg)		
		Sample ID		
	Type III	6	7	13
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

Analyte	Limit: (mg/kg)	Result (mg/kg)	
		Sample ID	
	Type III	14	15
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	130
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

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.

Aromatic Amines Content from Azo Colorants - Regulation (EC) No. 1907/2006 Annex XVII Entry 43, Points 1 & 2

Test Method : I: For textile and others: EN ISO 14362-1:2017.
II: For leather: ISO 17234-1: 2020.
III: For textile and others: EN ISO 14362-3:2017 ;
For leather: ISO 17234-2: 2011

Maximum Limit:	**30mg/kg**

Tested Item(s)	Test Method	Result		Unit	Conclusion
		Detected Analyte(s)	Conc.		
1	I	ND	ND	mg/kg	PASS
14	I	ND	ND	mg/kg	PASS

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

Remark:
- 1. *Azo colorants that are able to form p-aminoazobenzene, generate aniline and 1,4-phenylenediamine under the condition of test method I. If aniline and/or 1,4-phenylenediamine is not found by test method I, test result for 4-aminoazobenzene (CAS no. 60-09-3) is considered as “Not detected”. Otherwise, the test method III will be employed to verify the presence of 4-aminoazobenzene.
- 2. The list of aromatic amines in azo dyestuff is summarized in table of Appendix.

List of Aromatic Amines in Azo Dyestuff:

No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	4-Aminodiphenyl	92-67-1	12	3,3’-Dimethyl-4,4’-diaminodiphenylmethane	838-88-0
2	Benzidine	92-87-5	13	p-Chloroaniline	106-47-8
3	4-Chloro-o-Toluidine	95-69-2	14	p-Cresidine	120-71-8
4	2-Naphthylamine	91-59-8	15	4,4’-Methylene-bis-(2-chloraniline)	101-14-4
5	o-Aminoazotoluene	97-56-3	16	4,4’-Oxydianiline	101-80-4
6	2-Amino-4-nitrotoluene	99-55-8	17	4,4’-Thiodianiline	139-65-1
7	2,4-Diaminoanisole	615-05-4	18	2,4-Toluenediamine	95-80-7
8	4,4’-Diaminodiphenylmethane	101-77-9	19	o-Toluidine	95-53-4
9	3,3’-Dichlorobenzidine	91-94-1	20	2,4,5-Trimethylaniline	137-17-7
10	3,3’-Dimethoxybenzidine (o-Dianisidine)	119-90-4	21	o-Anisidine	90-04-0
11	3,3’-Dimethylbenzidine (o-Tolidine)	119-93-7	22	*p-Aminoazobenzene (4-Amino-azobenzene)	60-09-3

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	13	
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&68515-49-1
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	-	-	-

Total Cadmium Content – Reference to Regulation (EC) No. 1907/2006 Annex XVII Entry 23

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	
Cadmium (Cd)	mg/kg	<10	<10	<10	<10	100
Conclusion	-	PASS	PASS	PASS	PASS	-

Parameter	Unit	Result				Maximum Allowable Limit
		11 + 12	13	14	15	
Cadmium (Cd)	mg/kg	<10	<10	<10	<10	100
Conclusion	-	PASS	PASS	PASS	PASS	-

Note / Key:
ND = Not Detected

Detection Limit (mg/kg) : 10

Polycyclic Aromatic Hydrocarbons (PAHs) Content - AfPS GS 2019:01 PAK & As Applicant's requirement

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

Type (See Comment for the List of Types)	**I**	**IIa**	**IIb**	**IIIa**	**IIIb**
Test Parameter(s)	**Limit[a] (mg/kg)**				
Each of Benzo (a) pyrene, Benzo (e) pyrene, Benzo (a) anthracene, Benzo (b) fluoranthene, Benzo (j) fluoranthene, Benzo (k) fluoranthene, Chrysene, Dibenzo (a,h) anthracene, Benzo (g,h,i) perylene and Indeno (1,2,3-cd) pyrene	**< 0.2**	**< 0.2**	**< 0.5**	**< 0.5**	**< 1**
Sum of Phenanthrene, Pyrene, Anthracene and Fluoranthene	**< 1**	**< 5**	**< 10**	**< 20**	**< 50**
Naphthalene	**< 1**	**< 2**	**< 2**	**< 10**	**< 10**
Sum of all listed PAHs	**< 1**	**< 5**	**< 10**	**< 20**	**< 50**

Test Item(s)	(mg/kg)	Result (mg/kg)		
		Sample ID		
	Cat III B	1	2 + 3 + 4	5 + 6 + 7
Naphthalene	10	ND	ND	ND
Phenanthrene	50	ND	ND	ND
Anthracene	50	ND	ND	ND
Fluoranthene	50	ND	ND	ND
Pyrene	50	ND	ND	ND
Benzo (a) anthracene	1	ND	ND	ND
Chrysene	1	ND	ND	ND
Benzo (b) fluoranthene	1	ND	ND	ND
Benzo (j) fluoranthene	1	ND	ND	ND
Benzo (k) fluoranthene	1	ND	ND	ND
Benzo (e) pyrene	1	ND	ND	ND
Benzo (a) pyrene	1	ND	ND	ND
Dibenzo (a,h) anthracene	1	ND	ND	ND
Indeno (1,2,3-c,d) pyrene	1	ND	ND	ND
Benzo (g,h,i) perylene	1	ND	ND	ND
Sum of Phenanthrene, Pyrene, Anthracene and Fluoranthene	50	ND	ND	ND
Sum	50	ND	ND	ND
Conclusion		PASS	PASS	PASS

Test Item(s)	(mg/kg)	Result (mg/kg)
		Sample ID
	Cat III B	13
Naphthalene	10	ND
Phenanthrene	50	ND
Anthracene	50	ND
Fluoranthene	50	ND
Pyrene	50	ND
Benzo (a) anthracene	1	ND
Chrysene	1	ND
Benzo (b) fluoranthene	1	ND
Benzo (j) fluoranthene	1	ND
Benzo (k) fluoranthene	1	ND
Benzo (e) pyrene	1	ND
Benzo (a) pyrene	1	ND
Dibenzo (a,h) anthracene	1	ND
Indeno (1,2,3-c,d) pyrene	1	ND
Benzo (g,h,i) perylene	1	ND
Sum of Phenanthrene, Pyrene, Anthracene and Fluoranthene	50	ND
Sum	50	ND
Conclusion		PASS

Note / Key:
ND = Not detected

GS = GS-Spezifikation = GS Specification

AfPS = Ausschuss für Produktsicherheit = Product Safety Commission PAK = PAHs
Detection Limit (mg/kg) - Each 0.2 ;

Remark:
- The list of polycyclic aromatic hydrocarbons is summarized in table of Appendix.
- Plasticized and rubberized prints, coatings and plastic materials of product are applicable to be tested.
- [a] denotes as this (these) limit(s) applies to product(s) with GS-Mark dated on or after July 01, 2020.
- Comment :
- List of Types [Categories defined in German AfPS GS 2019:01 PAK] :
- Category 1: Materials intended to be put in the mouth or materials in toys according to the toy directive 2009/48/EC, or materials in products for use of children up to three years with long-term intended skin contact (Longer than 30 seconds) according intended use I
- Category 2: Materials not covered by Category 1, with long-term skin contact (Longer than 30 seconds) or repeated short-term skin contact according intended use or foreseeable use IIa[b] or IIb[c]
- Category 3: Materials not covered by Category 1 or 2 with short term skin contact (Up to 30 seconds) according intended use or foreseeable use IIIa[b] or IIIb[c]
- [b] denotes as use by children before the age 14 with active and passive direct contact
- [c] denotes as other consumer products

List of Polycyclic Aromatic Hydrocarbons (PAHs) Content - AfPS GS 2019:01 PAK & As Applicant's Requirement					
No.	**Name of Analytes**	**CAS-No.**	**No.**	**Name of Analytes**	**CAS-No.**
1	Naphthalene	91-20-3	9	Benzo (j) fluoranthene	205-82-3
2	Phenanthrene	85-01-8	10	Benzo (k) fluoranthene	207-08-9
3	Anthracene	120-12-7	11	Benzo (e) pyrene	192-97-2
4	Fluoranthene	206-44-0	12	Benzo (a) pyrene	50-32-8
5	Pyrene	129-00-0	13	Dibenzo (a,h) anthracene	53-70-3
6	Benzo (a) anthracene	56-55-3	14	Indeno (1,2,3-cd) pyrene	193-39-5
7	Chrysene	218-01-9	15	1,12-Benzoperylene	191-24-2
8	Benzo (b) fluoranthene	205-99-2	-	-	-

Benzene Content - 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 72

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	
Benzene	mg/kg	ND	ND	ND	ND	3000
Conclusion	-	PASS	PASS	PASS	PASS	-

Parameter	**Unit**	**Result**				**Maximum Allowable Limit**
		9	10	11	12	
Benzene	mg/kg	ND	ND	ND	ND	3000
Conclusion	-	PASS	PASS	PASS	PASS	-

Parameter	**Unit**	**Result**	**Maximum Allowable Limit**
		13	
Benzene	mg/kg	ND	3000
Conclusion	-	PASS	-

Note / Key:
ND = Not Detected

Detection Limit (mg/kg) : 5

	Test Result	Requirement
COLOURFASTNESS TO RUBBING(EN ISO 105-X12:2016)		
	1	
LENGTH		
DRY	4-5	MIN. GRADE 3
WET	4-5	MIN. GRADE 3
WIDTH		
DRY	4-5	MIN. GRADE 3
WET	4-5	MIN. GRADE 3
COLOURFASTNESS TO RUBBING(EN ISO 105-X12:2016)		
	14	
DRY	4-5	MIN. GRADE 2-3
WET	4-5	MIN. GRADE 2-3

SAMPLE REFERENCE PHOTO:

-- END OF REPORT --