ÉMI-TÜV

Add value.
Inspire trust.

Test Report No. R-200320001304

Dated 16/08/2024

Applicant:	PW Logistics Slovakia s.r.o. Vŕbová 2746/12 924 01 Galanta Slovakia
Attn:	Marek Matonog
Sample Description	
Sample Name:	Trabant
Manufacturer:	PW Logistics Slovakia s.r.o.
Country of origin:	Slovakia
Recommended age group:	3 years+
Receipt Date of Sample:	Received on 22/04/2024
Date of Testing:	From 22/04/2024 to 16/08/2024
Ref. Standard	EN 71-1:2014+A1:2018 Safety of toys – Part 1: Mechanical and physical properties EN 71-2:2021 Safety of toys – Part 2: Flammability EN 71-3:2019+A1:2021 Safety of toys – Part 3: Migration of certain elements REACH: AZO dyes, Phthalates, Organotin, PAH, Cadmium
Sample submitted:	The sample(s) was (were) submitted by applicant and identified.

ÉMI-TÜV SÜD Kft. KERMI dept.

Reviewed by:

Gizella Kókai
Expert

ÉMI-TÜV SÜD Kft.
KERMI Osztály

Authorised by:

Szilveszter Kárpáti
Expert

Zsolt Szépvölgyi
Business unit manager

Remark: The result relates only to the items tested
No extract, abridgment or abstraction from a test report may be published or used to advertise a product without the written consent of the Director of ÉMI-TÜV SÜD Kft. KERMI dept. The results contained herein apply only to the particular sample tested and to the specific test carried out and not to samples of the current production line.

NAH-1-1351/2019/K
TESTING LABORATORY

Test Report No. **R-200320001304**

Dated **16/08/2024**

ÉMI-TÜV

Sample photo:

Conclusion

Test Items		Overall	Fail Component
1.	EN 71-1:2014+A1:2018 Physical and mechanical properties	Pass	
2.	EN 71-2:2021 Flammability	Pass	
3.	EN IEC 62115:2020 Electrical toys	Pass	
4.	EN 71-3:2019+A1:2021 Migration of certain elements	Pass	

Remark: Pass = Meet Standard's Requirement # = No Comment
Fail = Below Standard's Requirement * = See Notes

Conclusion

Tests according to REACH:

Test Items		Overall	Fail Component
5.	AZO	Pass	
6.	Phthalates	Pass	
7.	PAH	Pass	
8.	Organotin compounds	Pass	
9.	Total Cadmium	Pass	

Remark: Pass = Meet Standard's Requirement # = No Comment
Fail = Below Standard's Requirement * = See Notes

Sample parts:

Sample number	Sample	Colour	Composition
001	Painted body part	Beige	Plastic
002	Painted body part	White	Plastic
003	Painted body part	Green	Plastic
004	Painted body part	Blue	Plastic
005	Painted body part	Black	Plastic
006	Painted body part	Black	Plastic
007	3D printed part	Beige	Plastic
008	3D printed part	White	Plastic
009	3D printed part	Green	Plastic
010	3D printed part	Blue	Plastic
011	3D printed part	Black	Plastic
012	Headlamp	Transparent	Plastic
013	Windshield	Transparent	Plastic
014	Rear lamp	Red/Orange	Plastic
015	Turn signal lamp	Orange	Plastic
016	Reflective prism	Red	Plastic
017	Signs	Multicolor	Plastic
018	Signals	Multicolor	Plastic
019	Trim	Black	Plastic
020	Sealing	Black	Plastic
021	Artificial leather	Black	PU
022	Artificial leather	Brown	PU
023	Artificial leather	Light brown	PU
024	Artificial leather	Burgundy	PU
025	Artificial leather	White	PU
026	Tyre	Black	Rubber
027	Switches, plastic part	Multicolor	Plastic
028	Plywood	Black	Wooden

1. EN 71-1:2014+A1:2018 Toy safety
Part 1.: Physical and mechanical properties — Recommended age group: 3-14 years

Subclause	Requirement	Result
4	General requirements	
4.1	Material cleanliness	Pass
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	Edges	Pass
4.8	Points and metallic wires	Pass
4.9	Protruding parts	Pass
4.10	Parts moving against each other	
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	Balloons	NA
4.13	Cord of toy kites and other flying toys	NA
4.14	Enclosures	
4.14.1	Toys which a child can enter	NA
4.14.2	Masks and helmets	NA
4.15	Toys intended to bear the mass of a child	
4.15.1	Toys propelled by child	Pass
4.15.2	Toy bicycles	NA
4.15.3	Rocking horses and similar toys	NA
4.15.4	Toys not propelled by child	NA
4.15.5	Toy scooters	NA
4.16	Heavy immobile toys	NA
4.17	Projectiles	
4.17.1	General	NA
4.17.2	All projectiles	NA
4.17.3	Projectile toys with stored energy	NA
4.17.4	Certain projectile toys without stored energy	NA
4.18	Aquatic toys and inflatable toys	NA
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	NA
4.20.	Acoustics	
4.20.2.1	General	NA
4.20.2.2	Close-to-the-ear toys	NA
4.20.2.3	Table-top or floor toys	NA
4.20.2.4	Hand-held toys	Pass
4.20.2.5	Toys using headphones or earphones	NA
4.20.2.6	Rattles	NA
4.20.2.7	Squeeze toys	NA
4.20.2.8	Pull-along or push toys	NA
4.20.2.9	Percussion toys & cap-firing toys	NA
4.20.2.10	Wind toys	NA
4.20.2.11	Cap-firing toys	NA
4.20.2.12	Voice toys	NA
4.21	Toys containing a non-electrical heat source	NA
4.22	Small balls	NA
4.23	Magnets	

4.24	Yo-yo balls	NA
4.25	Toys attached to food	NA
4.26	Toy disguise costumes	NA
4.27	Flying toys	
4.27.1	General	NA
4.27.2	Rotors and propellers on flying toys	NA
4.27.3	Rotors and propellers on remote controlled flying toys	NA
5	Toys intended for children under 36 months	
5.1	General requirements	NA
5.2	Soft-filled toys and soft-filled parts of a toy	NA
5.3	Plastic sheeting	NA
5.4	Cords, chains and electrical cables in toys	NA
5.5	Liquid filled toys	NA
5.6	Speed limitation of electrically-driven ride-on toys	NA
5.7	Glass and porcelain	NA
5.8	Shape and size of certain toys	NA
5.9	Toys comprising 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
6	Packaging	NA
7	Warnings, markings and instructions for use	
7	CE Mark	Pass
7	Manufacturer name and address	Pass
7	Importer name and address	Pass
7	Product Identification	Pass
7.1	General	Pass
7.2	Toys not intended for children under 36 months	NA
7.3	Latex Balloons	NA
7.4	Aquatic toys	NA
7.5	Functional toys	NA
7.6	Hazardous sharp functional edges and points	NA
7.7	Projectiles toys	NA
7.8	Imitation protective masks and helmets	NA
7.9	Toy kites	NA
7.10	Roller skates, inline skates, skateboards and certain other ride-on toys	NA
7.11	Toys intended to be strung across a cradle, cot, or perambulator	NA
7.12	Liquid-filled teethers	NA
7.13	Percussion caps specifically designed for use in toys	NA
7.14	Acoustics	NA
7.15	Toys bicycles	NA
7.16	Toys intended to bear the mass of a child	Pass
7.17	Toys comprising monofilament fibres	NA
7.18	Toy scooters	NA
7.19	Rocking horses and similar toys	NA
Method		**EN 71-1:2014+A1:2018**
Conclusion		**Pass**

Remark: Pass = Meet Standard's Requirement
Fail = Below Standard's Requirement
NA = Not applicable
# = No Comment
* = See Notes

2. EN 71-2:2021 Safety of toys Part 2: Flammability		
4	Requirement	**Result**
4.1	General requirements	Pass
4.2	Toys to be worn on the head	NA
4.3	Toy disguise costumes and toys intended to be worn by a child in play	NA
4.4	Toys intended to be entered by a child.	NA
4.5	Soft-filled toys	NA
Method		**EN 71-2:2021**
Conclusion		**Pass**

Remark: Pass = Meet Standard's Requirement # = No Comment
Fail = Below Standard's Requirement * = See Notes
NA = Not applicable

3. Electric toys – safety Test method: EN IEC 62115:2020	
Tested parameter	**Result**
Markings on electric toys (7.; 7.1; 7.2; 7.2.1; 7.2.7 sections)	Pass
Normal operation (9.3. section)	Pass
Structural specifications (13; 13.4; 13.4.1; 13.4.5; 13.4.6 sections)	Pass
Protection of cords and wires (14; 14.1 sections)	Pass
Operation of screws (16.1. section)	Pass
Radiation, toxicity and similar hazards (19.; 19.2., 19.E.2; 19.E.2.1; 19.E.2.2 sections)	Pass
Method	**EN IEC 62115:2020**
Conclusion	**Pass**

4.1. EN 71-3:2019+A1:2021 Safety of toys
Part 3. Migration of certain elements, determined by ICP-MS

No.	Tested parameter	Result [mg/kg] ± 10 rel. %			LOQ [mg/kg]	Limits [mg/kg] Category III
		001+002	003+004	005+006		
01	Aluminium (Al)	15.3	29.0	29.4	0.25	28130
02	Antimony (Sb)	<0.025	<0.025	<0.025	0.025	560
03	Arsenic (As)	0.2	<0.05	<0.05	0.05	47
04	Barium (Ba)	0.4	0.3	141.3	0.15	18750
05	Boron (B)	<0.25	<0.25	<0.25	0.25	15000
06	Cadmium (Cd)	0.03	<0.025	<0.025	0.025	17
07	Chromium (III) (Cr)	0.809	0.057	0.197	0.01	460
08	Chromium (VI) (Cr)	0.012	<0.01	<0.01	0.01	0.053
09	Cobalt (Co)	2.1	2.6	<0.025	0.025	130
10	Copper (Cu)	6.3	2.9	3.2	0.025	7700
11	Lead (Pb)	0.04	0.05	0.05	0.025	160
12	Manganese (Mn)	1.7	0.1	0.4	0.025	15000
13	Mercury (Hg)	<0.025	<0.025	<0.025	0.025	94
14	Nickel (Ni)	2.7	1.8	0.4	0.05	930
15	Selenium (Se)	<0.05	<0.05	<0.05	0.05	460
16	Strontium (Sr)	13.3	0.1	3.9	0.05	56000
17	Tin (Sn)	<0.05	0.4	0.7	0.05	180000
18	Organic tin	<0.05	<0.05	<0.05	0.05	12
19	Zinc (Zn)	4.3	5.1	6.0	0.25	46000
Method					**EN 71-3:2019+A1:2021**	
Conclusion					**Pass**	

Remark: LOQ: Limit of quantification

4.2. EN 71-3:2019+A1:2021 Safety of toys
Part 3. Migration of certain elements, determined by ICP-MS

No.	Tested parameter	Result [mg/kg] ± 10 rel. %			LOQ [mg/kg]	Limits [mg/kg] Category III
		007+008+009	010+011	012+013		
01	Aluminium (Al)	0.7	0.4	<0.25	0.25	28130
02	Antimony (Sb)	<0.025	<0.025	<0.025	0.025	560
03	Arsenic (As)	<0.05	<0.05	<0.05	0.05	47
04	Barium (Ba)	0.2	<0.15	<0.15	0.15	18750
05	Boron (B)	<0.25	<0.25	<0.25	0.25	15000
06	Cadmium (Cd)	<0.025	<0.025	<0.025	0.025	17
07	Chromium (III) (Cr)	0.014	<0.01	0.020	0.01	460
08	Chromium (VI) (Cr)	<0.01	<0.01	<0.01	0.01	0.053
09	Cobalt (Co)	<0.025	<0.025	<0.025	0.025	130
10	Copper (Cu)	0.5	0.5	0.2	0.025	7700
11	Lead (Pb)	<0.025	<0.025	<0.025	0.025	160
12	Manganese (Mn)	<0.025	<0.025	<0.025	0.025	15000
13	Mercury (Hg)	<0.025	<0.025	<0.025	0.025	94
14	Nickel (Ni)	0.4	0.1	0.1	0.05	930
15	Selenium (Se)	<0.05	<0.05	<0.05	0.05	460
16	Strontium (Sr)	<0.05	<0.05	<0.05	0.05	56000
17	Tin (Sn)	0.3	0.2	0.2	0.05	180000
18	Organic tin	<0.05	<0.05	<0.05	0.05	12
19	Zinc (Zn)	0.6	0.6	0.6	0.25	46000
Method					**EN 71-3:2019+A1:2021**	
Conclusion					**Pass**	

Remark: LOQ: Limit of quantification

4.3. EN 71-3:2019+A1:2021 Safety of toys
Part 3. Migration of certain elements, determined by ICP-MS

No.	Tested parameter	Result [mg/kg] ± 10 rel. %			LOQ [mg/kg]	Limits [mg/kg] Category III
		014+015+016	017+018	019+020		
01	Aluminium (Al)	0.6	1.4	1.6	0.25	28130
02	Antimony (Sb)	<0.025	<0.025	0.1	0.025	560
03	Arsenic (As)	<0.05	<0.05	<0.05	0.05	47
04	Barium (Ba)	0.6	1.1	1.4	0.15	18750
05	Boron (B)	<0.25	<0.25	<0.25	0.25	15000
06	Cadmium (Cd)	<0.025	<0.025	<0.025	0.025	17
07	Chromium (III) (Cr)	0.017	0.014	0.069	0.01	460
08	Chromium (VI) (Cr)	<0.01	<0.01	<0.01	0.01	0.053
09	Cobalt (Co)	<0.025	<0.025	<0.025	0.025	130
10	Copper (Cu)	0.2	0.2	0.1	0.025	7700
11	Lead (Pb)	<0.025	0.03	0.30	0.025	160
12	Manganese (Mn)	<0.025	0.0	0.2	0.025	15000
13	Mercury (Hg)	<0.025	<0.025	<0.025	0.025	94
14	Nickel (Ni)	0.1	0.1	0.2	0.05	930
15	Selenium (Se)	<0.05	<0.05	<0.05	0.05	460
16	Strontium (Sr)	<0.05	0.1	0.4	0.05	56000
17	Tin (Sn)	<0.05	<0.05	<0.05	0.05	180000
18	Organic tin	<0.05	<0.05	<0.05	0.05	12
19	Zinc (Zn)	0.6	0.6	52.0	0.25	46000
Method					**EN 71-3:2019+A1:2021**	
Conclusion					**Pass**	

Remark: LOQ: Limit of quantification

4.4. EN 71-3:2019+A1:2021 Safety of toys
Part 3. Migration of certain elements, determined by ICP-MS

No.	Tested parameter	Result [mg/kg] ± 10 rel. %			LOQ [mg/kg]	Limits [mg/kg] Category III
		021+022	023+024+025	026		
01	Aluminium (Al)	2.1	2.9	1.7	0.25	28130
02	Antimony (Sb)	14.8	8.9	0.1	0.025	560
03	Arsenic (As)	<0.05	<0.05	<0.05	0.05	47
04	Barium (Ba)	4.7	4.3	0.2	0.15	18750
05	Boron (B)	50.2	26.5	0.3	0.25	15000
06	Cadmium (Cd)	0.03	<0.025	<0.025	0.025	17
07	Chromium (III) (Cr)	0.038	0.032	0.056	0.01	460
08	Chromium (VI) (Cr)	<0.01	<0.01	<0.01	0.01	0.053
09	Cobalt (Co)	<0.025	<0.025	<0.025	0.025	130
10	Copper (Cu)	0.2	0.3	2.4	0.025	7700
11	Lead (Pb)	0.19	0.10	0.24	0.025	160
12	Manganese (Mn)	0.3	0.3	0.1	0.025	15000
13	Mercury (Hg)	<0.025	<0.025	<0.025	0.025	94
14	Nickel (Ni)	0.1	0.1	1.0	0.05	930
15	Selenium (Se)	<0.05	<0.05	<0.05	0.05	460
16	Strontium (Sr)	0.7	0.5	0.1	0.05	56000
17	Tin (Sn)	1.0	<0.05	<0.05	0.05	180000
18	Organic tin	<0.05	<0.05	<0.05	0.05	12
19	Zinc (Zn)	160.1	228.2	37.9	0.25	46000
Method					**EN 71-3:2019+A1:2021**	
Conclusion					**Pass**	

Remark: LOQ: Limit of quantification

4.5. EN 71-3:2019+A1:2021 Safety of toys
Part 3. Migration of certain elements, determined by ICP-MS

No.	Tested parameter	Result [mg/kg] ± 10 rel. %		LOQ [mg/kg]	Limits [mg/kg] Category III
		027	028		
01	Aluminium (Al)	2.0	9.0	0.25	28130
02	Antimony (Sb)	0.1	0.0	0.025	560
03	Arsenic (As)	<0.05	<0.05	0.05	47
04	Barium (Ba)	0.3	8.2	0.15	18750
05	Boron (B)	<0.25	0.8	0.25	15000
06	Cadmium (Cd)	<0.025	0.08	0.025	17
07	Chromium (III) (Cr)	0.016	0.030	0.01	460
08	Chromium (VI) (Cr)	0.015	<0.01	0.01	0.053
09	Cobalt (Co)	<0.025	0.0	0.025	130
10	Copper (Cu)	1.7	0.7	0.025	7700
11	Lead (Pb)	0.08	0.08	0.025	160
12	Manganese (Mn)	0.2	59.8	0.025	15000
13	Mercury (Hg)	<0.025	<0.025	0.025	94
14	Nickel (Ni)	1.0	0.3	0.05	930
15	Selenium (Se)	<0.05	<0.05	0.05	460
16	Strontium (Sr)	0.1	2.4	0.05	56000
17	Tin (Sn)	<0.05	0.4	0.05	180000
18	Organic tin	<0.05	<0.05	0.05	12
19	Zinc (Zn)	13.9	13.0	0.25	46000
Method				**EN 71-3:2019+A1:2021**	
Conclusion				**Pass**	

Remark: LOQ: Limit of quantification

5. REACH: Banned AZO dyes
Test method: based on EN 14362-1:2017; the presence of 4-aminoazobenzene is determined by EN ISO 14362-3:2017 (textile), tests performed by GC-MS

No.	Tested parameters	CAS No.	Results [mg/kg]	Limit [mg/kg]
			021+022+023+024+025	
01	4-aminobiphenyl	92-87-5	<LOQ	30
02	Benzidine	91-59-8	<LOQ	
03	4-chloro-o-toluidine	106-47-8	<LOQ	
04	2-naphthylamine	91-94-1	<LOQ	
05	o-aminoazotoluene	119-90-4	<LOQ	
06	2-amino-4-nitrotoluene	119-93-7	<LOQ	
07	p-chloroaniline	95-53-4	<LOQ	
08	2,4-diaminoanisole	90-04-0	<LOQ	
09	4,4'-diaminodiphenylmethane	62-53-3	<LOQ	
10	3,3'-dichlorobenzidine	91-94-1	<LOQ	
11	3,3'-dimethoxylbenzidine	119-90-4	<LOQ	
12	3,3'-dimethylbenzidine	119-93-7	<LOQ	
13	3, 3'-dimethyl-4,4'-diaminobiphenylmethane	838-88-0	<LOQ	
14	p-cresidine	120-71-8	<LOQ	
15	4,4'-methylene-bis-(2-chloro-aniline)	101-14-4	<LOQ	
16	4,4'-oxydianiline	101-80-4	<LOQ	
17	4,4'-thiodianiline	139-65-1	<LOQ	
18	o-toluidine	95-53-4	<LOQ	
19	2,4-toluylenediamine	95-80-7	<LOQ	
20	2,4,5-trimethylaniline	137-17-7	<LOQ	
21	o-anisidine	90-04-0	<LOQ	
22	2,4-xylidine	95-68-1	<LOQ	
23	2,6-xylidine	87-62-7	<LOQ	
24	4-aminoazobenzene	60-09-3	<LOQ	
25	p-phenilenediamine	106-50-3	<LOQ	
Method			**EN 14362-1:2017 and EN 14372-3:2017**	
Conclusion			**Pass**	

Remark: LOQ (Limit of quantification): 5 mg/kg

6.1. REACH: Phthalates Reference to CPSC-CH-C 1001-09.4, determined by GC-MS analysis				
Tested parameters	CAS No.	Results[w/w%]		Limit [w/w%]
		001+002+003+004	007+008+009+ 010+011	
Di-butyl phthalate (DBP) +Mono-butyl phthalate(MBP)	84-74-2 131-70-4	<LOQ	<LOQ	0.1
Di-iso-buthyl phthalate (DiBP)	84-69-5	<LOQ	<LOQ	0.1
Benzyl butyl phthalate (BBP)	85-68-7	<LOQ	<LOQ	0.1
Di-n-octyl phthalate (DnOP)	117-84-0	<LOQ	<LOQ	0.1
Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	<LOQ	<LOQ	0.1
Di-iso-nonyl phthalate (DiNP)	68515-48-0	<LOQ	<LOQ	0.1
Di-iso-decyl phthalate (DiDP)	26761-40-0	<LOQ	<LOQ	0.1
Method		**CPSC-CH-C 1001-09.4**		
Conclusion		**Pass**		

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.005 w/w%

6.2. REACH: Phthalates Reference to CPSC-CH-C 1001-09.4, determined by GC-MS analysis				
Tested parameters	CAS No.	Results[w/w%]		Limit [w/w%]
		012+013	014+015+016	
Di-butyl phthalate (DBP) +Mono-butyl phthalate(MBP)	84-74-2 131-70-4	<LOQ	<LOQ	0.1
Di-iso-buthyl phthalate (DiBP)	84-69-5	<LOQ	<LOQ	0.1
Benzyl butyl phthalate (BBP)	85-68-7	<LOQ	<LOQ	0.1
Di-n-octyl phthalate (DnOP)	117-84-0	<LOQ	<LOQ	0.1
Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	<LOQ	<LOQ	0.1
Di-iso-nonyl phthalate (DiNP)	68515-48-0	<LOQ	<LOQ	0.1
Di-iso-decyl phthalate (DiDP)	26761-40-0	<LOQ	<LOQ	0.1
Method		**CPSC-CH-C 1001-09.4**		
Conclusion		**Pass**		

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.005 w/w%

6.3. REACH: Phthalates Reference to CPSC-CH-C 1001-09.4, determined by GC-MS analysis				
Tested parameters	CAS No.	Results[w/w%]		Limit [w/w%]
		017+018	021+022+023+ 024+025	
Di-butyl phthalate (DBP) +Mono-butyl phthalate(MBP)	84-74-2 131-70-4	<LOQ	<LOQ	0.1
Di-iso-buthyl phthalate (DiBP)	84-69-5	<LOQ	<LOQ	0.1
Benzyl butyl phthalate (BBP)	85-68-7	<LOQ	<LOQ	0.1
Di-n-octyl phthalate (DnOP)	117-84-0	<LOQ	<LOQ	0.1
Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	<LOQ	<LOQ	0.1
Di-iso-nonyl phthalate (DiNP)	68515-48-0	<LOQ	<LOQ	0.1
Di-iso-decyl phthalate (DiDP)	26761-40-0	<LOQ	<LOQ	0.1
Method		**CPSC-CH-C 1001-09.4**		
Conclusion		**Pass**		

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.005 w/w%

6.4. REACH: Phthalates Reference to CPSC-CH-C 1001-09.4, determined by GC-MS analysis				
Tested parameters	CAS No.	Results[w/w%]		Limit [w/w%]
		026	027	
Di-butyl phthalate (DBP) +Mono-butyl phthalate(MBP)	84-74-2 131-70-4	<LOQ	<LOQ	0.1
Di-iso-buthyl phthalate (DiBP)	84-69-5	<LOQ	<LOQ	0.1
Benzyl butyl phthalate (BBP)	85-68-7	<LOQ	<LOQ	0.1
Di-n-octyl phthalate (DnOP)	117-84-0	<LOQ	<LOQ	0.1
Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	<LOQ	<LOQ	0.1
Di-iso-nonyl phthalate (DiNP)	68515-48-0	<LOQ	<LOQ	0.1
Di-iso-decyl phthalate (DiDP)	26761-40-0	<LOQ	<LOQ	0.1
Method		**CPSC-CH-C 1001-09.4**		
Conclusion		**Pass**		

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.005 w/w%

7.1. REACH: PAH
Reference to AfPS GS 2019:01 PAK, determined by GC-MS analysis

Tested parameters	CAS No.	Results [mg/kg]	
		001+002+003+004	007+008+009+010+011
Benzo [a] pyrene	50-32-8	<LOQ	<LOQ
Benzo[e]pyrene	192-97-2	<LOQ	<LOQ
Benzo[j]fluoranthene	205-82-3	<LOQ	<LOQ
Benzo[a]anthracene	56-55-3	<LOQ	<LOQ
Benzo [b] fluoranthene	205-99-2	<LOQ	<LOQ
Benzo [k]fluoranthene	207-08-9	<LOQ	<LOQ
Chrysene	218-01-9	<LOQ	<LOQ
Dibenzo [a,h] anthracene	53-70-3	<LOQ	<LOQ
Benzo [g,h,i]perylene	191-24-2	<LOQ	<LOQ
Indeno [1,2,3-cd] pyrene	193-39-5	<LOQ	<LOQ
Phenantrene	85-01-8	<LOQ	<LOQ
Pyrene	129-00-0	<LOQ	<LOQ
Anthracene	120-12-7	<LOQ	<LOQ
Fluoranthene	206-44-0	<LOQ	<LOQ
Naphthalane	91-20-3	<LOQ	<LOQ
Method		**AfPS GS 2019:01 PAK**	
Conclusion		**Pass**	

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.2 mg/kg

Requirement: 1272/2013/EU: max. 0.5 mg/kg for **bold** labeled components

7.2. REACH: PAH
Reference to AfPS GS 2019:01 PAK, determined by GC-MS analysis

Tested parameters	CAS No.	Results [mg/kg]	
		012+013	014
Benzo [a] pyrene	50-32-8	<LOQ	<LOQ
Benzo[e]pyrene	192-97-2	<LOQ	<LOQ
Benzo[j]fluoranthene	205-82-3	<LOQ	<LOQ
Benzo[a]anthracene	56-55-3	<LOQ	<LOQ
Benzo [b] fluoranthene	205-99-2	<LOQ	<LOQ
Benzo [k]fluoranthene	207-08-9	<LOQ	<LOQ
Chrysene	218-01-9	<LOQ	<LOQ
Dibenzo [a,h] anthracene	53-70-3	<LOQ	<LOQ
Benzo [g,h,i]perylene	191-24-2	<LOQ	<LOQ
Indeno [1,2,3-cd] pyrene	193-39-5	<LOQ	<LOQ
Phenantrene	85-01-8	<LOQ	<LOQ
Pyrene	129-00-0	<LOQ	<LOQ
Anthracene	120-12-7	<LOQ	<LOQ
Fluoranthene	206-44-0	<LOQ	<LOQ
Naphthalane	91-20-3	<LOQ	<LOQ
Method		**AfPS GS 2019:01 PAK**	
Conclusion		**Pass**	

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.2 mg/kg

Requirement: 1272/2013/EU: max. 0.5 mg/kg for **bold** labeled components

7.3. REACH: PAH
Reference to AfPS GS 2019:01 PAK, determined by GC-MS analysis

Tested parameters	CAS No.	Results [mg/kg]	
		015	016
Benzo [a] pyrene	50-32-8	<LOQ	<LOQ
Benzo[e]pyrene	192-97-2	<LOQ	<LOQ
Benzo[j]fluoranthene	205-82-3	<LOQ	<LOQ
Benzo[a]anthracene	56-55-3	<LOQ	<LOQ
Benzo [b] fluoranthene	205-99-2	<LOQ	<LOQ
Benzo [k]fluoranthene	207-08-9	<LOQ	<LOQ
Chrysene	218-01-9	<LOQ	<LOQ
Dibenzo [a,h] anthracene	53-70-3	<LOQ	<LOQ
Benzo [g,h,i]perylene	191-24-2	<LOQ	<LOQ
Indeno [1,2,3-cd] pyrene	193-39-5	<LOQ	<LOQ
Phenantrene	85-01-8	<LOQ	<LOQ
Pyrene	129-00-0	<LOQ	<LOQ
Anthracene	120-12-7	<LOQ	<LOQ
Fluoranthene	206-44-0	<LOQ	<LOQ
Naphthalane	91-20-3	<LOQ	<LOQ
Method		**AfPS GS 2019:01 PAK**	
Conclusion		**Pass**	

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.2 mg/kg

Requirement: 1272/2013/EU: max. 0.5 mg/kg for **bold** labeled components

7.4. REACH: PAH
Reference to AfPS GS 2019:01 PAK, determined by GC-MS analysis

Tested parameters	CAS No.	Results [mg/kg]	
		017+018	019
Benzo [a] pyrene	50-32-8	<LOQ	<LOQ
Benzo[e]pyrene	192-97-2	<LOQ	<LOQ
Benzo[j]fluoranthene	205-82-3	<LOQ	<LOQ
Benzo[a]anthracene	56-55-3	<LOQ	<LOQ
Benzo [b] fluoranthene	205-99-2	<LOQ	<LOQ
Benzo [k]fluoranthene	207-08-9	<LOQ	<LOQ
Chrysene	218-01-9	<LOQ	<LOQ
Dibenzo [a,h] anthracene	53-70-3	<LOQ	<LOQ
Benzo [g,h,i]perylene	191-24-2	<LOQ	<LOQ
Indeno [1,2,3-cd] pyrene	193-39-5	<LOQ	<LOQ
Phenantrene	85-01-8	<LOQ	0.25
Pyrene	129-00-0	<LOQ	1.62
Anthracene	120-12-7	<LOQ	<LOQ
Fluoranthene	206-44-0	<LOQ	<LOQ
Naphthalane	91-20-3	<LOQ	<LOQ
Method		**AfPS GS 2019:01 PAK**	
Conclusion		**Pass**	

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.2 mg/kg

Requirement: 1272/2013/EU: max. 0.5 mg/kg for **bold** labeled components

7.5. REACH: PAH
Reference to AfPS GS 2019:01 PAK, determined by GC-MS analysis

Tested parameters	CAS No.	Results [mg/kg]	
		020	021
Benzo [a] pyrene	50-32-8	<LOQ	<LOQ
Benzo[e]pyrene	192-97-2	<LOQ	<LOQ
Benzo[j]fluoranthene	205-82-3	<LOQ	<LOQ
Benzo[a]anthracene	56-55-3	<LOQ	<LOQ
Benzo [b] fluoranthene	205-99-2	<LOQ	<LOQ
Benzo [k]fluoranthene	207-08-9	<LOQ	<LOQ
Chrysene	218-01-9	<LOQ	<LOQ
Dibenzo [a,h] anthracene	53-70-3	<LOQ	<LOQ
Benzo [g,h,i]perylene	191-24-2	<LOQ	<LOQ
Indeno [1,2,3-cd] pyrene	193-39-5	<LOQ	<LOQ
Phenantrene	85-01-8	0.86	<LOQ
Pyrene	129-00-0	1.39	<LOQ
Anthracene	120-12-7	<LOQ	0.22
Fluoranthene	206-44-0	0.31	<LOQ
Naphthalane	91-20-3	0.35	<LOQ
Method		**AfPS GS 2019:01 PAK**	
Conclusion		**Pass**	

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.2 mg/kg

Requirement: 1272/2013/EU: max. 0.5 mg/kg for **bold** labeled components

7.6. REACH: PAH
Reference to AfPS GS 2019:01 PAK, determined by GC-MS analysis

Tested parameters	CAS No.	Results [mg/kg]	
		022	023
Benzo [a] pyrene	50-32-8	<LOQ	<LOQ
Benzo[e]pyrene	192-97-2	<LOQ	<LOQ
Benzo[j]fluoranthene	205-82-3	<LOQ	<LOQ
Benzo[a]anthracene	56-55-3	<LOQ	<LOQ
Benzo [b] fluoranthene	205-99-2	<LOQ	<LOQ
Benzo [k]fluoranthene	207-08-9	<LOQ	<LOQ
Chrysene	218-01-9	<LOQ	<LOQ
Dibenzo [a,h] anthracene	53-70-3	<LOQ	<LOQ
Benzo [g,h,i]perylene	191-24-2	<LOQ	<LOQ
Indeno [1,2,3-cd] pyrene	193-39-5	<LOQ	<LOQ
Phenantrene	85-01-8	0.24	<LOQ
Pyrene	129-00-0	<LOQ	<LOQ
Anthracene	120-12-7	0.21	0.22
Fluoranthene	206-44-0	<LOQ	<LOQ
Naphthalane	91-20-3	0.27	0.45
Method		**AfPS GS 2019:01 PAK**	
Conclusion		**Pass**	

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.2 mg/kg

Requirement: 1272/2013/EU: max. 0.5 mg/kg for **bold** labeled components

7.7. REACH: PAH
Reference to AfPS GS 2019:01 PAK, determined by GC-MS analysis

Tested parameters	CAS No.	Results [mg/kg]	
		024	025
Benzo [a] pyrene	50-32-8	<LOQ	<LOQ
Benzo[e]pyrene	192-97-2	<LOQ	<LOQ
Benzo[j]fluoranthene	205-82-3	<LOQ	<LOQ
Benzo[a]anthracene	56-55-3	<LOQ	<LOQ
Benzo [b] fluoranthene	205-99-2	<LOQ	<LOQ
Benzo [k]fluoranthene	207-08-9	<LOQ	<LOQ
Chrysene	218-01-9	<LOQ	<LOQ
Dibenzo [a,h] anthracene	53-70-3	<LOQ	<LOQ
Benzo [g,h,i]perylene	191-24-2	<LOQ	<LOQ
Indeno [1,2,3-cd] pyrene	193-39-5	<LOQ	<LOQ
Phenantrene	85-01-8	0.20	<LOQ
Pyrene	129-00-0	<LOQ	<LOQ
Anthracene	120-12-7	0.21	<LOQ
Fluoranthene	206-44-0	<LOQ	<LOQ
Naphthalane	91-20-3	0.44	0.45
Method		**AfPS GS 2019:01 PAK**	
Conclusion		**Pass**	

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.2 mg/kg

Requirement: 1272/2013/EU: max. 0.5 mg/kg for **bold** labeled components

7.8. REACH: PAH Reference to AfPS GS 2019:01 PAK, determined by GC-MS analysis		
Tested parameters	CAS No.	Results [mg/kg]
		027
Benzo [a] pyrene	50-32-8	<LOQ
Benzo[e]pyrene	192-97-2	<LOQ
Benzo[j]fluoranthene	205-82-3	<LOQ
Benzo[a]anthracene	56-55-3	<LOQ
Benzo [b] fluoranthene	205-99-2	<LOQ
Benzo [k]fluoranthene	207-08-9	<LOQ
Chrysene	218-01-9	<LOQ
Dibenzo [a,h] anthracene	53-70-3	<LOQ
Benzo [g,h,i]perylene	191-24-2	<LOQ
Indeno [1,2,3-cd] pyrene	193-39-5	<LOQ
Phenantrene	85-01-8	<LOQ
Pyrene	129-00-0	<LOQ
Anthracene	120-12-7	<LOQ
Fluoranthene	206-44-0	<LOQ
Naphthalane	91-20-3	0.20
Method		**AfPS GS 2019:01 PAK**
Conclusion		**Pass**

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.2 mg/kg

Requirement: 1272/2013/EU: max. 0.5 mg/kg for **bold** labeled components

Requirements: AfPS GS 2019:01 PAK

Parameter	Category 1	Category 2		Category 3	
	Materials intended to be put in the mouth, or materials in toys according to Directive 2009/48/EC or materials in articles for used by children up to three years with long-term skin contact (longer than 30 second) under intended use (mg/kg)	Materials not covered by category 1, with long-term skin contact (longer than 30 seconds) or repeated short-term skin contact under intended or foreseeable use		Materials not covered by category 1 or 2, with short-term skin contact (up to 30 seconds) under intended or foreseeable use	
		a. Used by children (mg/kg)	b.Other consumer products (mg/kg)	a. Used by children (mg/kg)	b.Other consumer products (mg/kg)
Benzo [a] pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[e]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[a]anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo [b] fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[j]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo [k]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Chrysene	<0.2	<0.2	<0.5	<0.5	<1
Dibenzo [a,h] anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo [g,h,i]perylene	<0.2	<0.2	<0.5	<0.5	<1
Indeno [1,2,3-cd] pyrene	<0.2	<0.2	<0.5	<0.5	<1
Phenantrene Pyrene Anthracene Fluoranthene	sum<1	sum<5	sum<10	sum<20	sum<50
Naphthalane	<1	<2		<10	
Sum of 15 PAHs, mg/kg	<1	<5	<10	<20	<50

The substances in bold (EU-PAH) are already legal bans for articles according to REACH 1907/2006/EG Annex XVII entry no. 50.

8. REACH: Organotin compounds
Extraction with solvents, detection and quantification following CEN ISO/TS 16179, determined by GC-MS

Tested parameters	Result [w/w%]		Limit [w/w%]
	019	020	
Monobutyltin, MBT	<LOQ	<LOQ	-
Dibuthyltin, DBT	<LOQ	<LOQ	0.1
Tributhyltin, TBT	<LOQ	<LOQ	0.1
Tetrabuthyltin, TTB	<LOQ	<LOQ	-
Monooctyltin, MOT	<LOQ	<LOQ	-
Diocyltin, DOT	<LOQ	<LOQ	0.1
Triphenyltin, TPhT	<LOQ	<LOQ	0.1
Tri cyclohexyltin, TCyT	<LOQ	<LOQ	-
Method	**CEN ISO/TS 16179**		
Conclusion	**Pass**		

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 0.05 mg/kg

9.1. REACH: Cadmium
Reference EN 1122, EN ISO 17294-2:2017, determined by ICP-OES

Tested parameter	Results [mg/kg]		Limit [mg/kg]
	001+002+ 003+004	005+006	
Cadmium	<LOQ	<LOQ	100
Method	**EN ISO 17294-2:2017**		
Conclusion	**Pass**		

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 10 mg/kg

9.2. REACH: Cadmium
Reference EN 1122, EN ISO 17294-2:2017, determined by ICP-OES

Tested parameter	Results [mg/kg]		Limit [mg/kg]
	007+008+009+ 010+011	012+013	
Cadmium	<LOQ	<LOQ	100
Method	**EN ISO 17294-2:2017**		
Conclusion	**Pass**		

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 10 mg/kg

9.3. REACH: Cadmium Reference EN 1122, EN ISO 17294-2:2017, determined by ICP-OES			
Tested parameter	Results [mg/kg]		Limit [mg/kg]
	014+015+016	017+018	
Cadmium	<LOQ	<LOQ	100
Method	**EN ISO 17294-2:2017**		
Conclusion	**Pass**		

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 10 mg/kg

9.4. REACH: Cadmium Reference EN 1122, EN ISO 17294-2:2017, determined by ICP-OES			
Tested parameter	Results [mg/kg]		Limit [mg/kg]
	019+020	021+022+023+ 024+025	
Cadmium	<LOQ	<LOQ	100
Method	**EN ISO 17294-2:2017**		
Conclusion	**Pass**		

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 10 mg/kg

9.5. REACH: Cadmium Reference EN 1122, EN ISO 17294-2:2017, determined by ICP-OES			
Tested parameter	Results [mg/kg]		Limit [mg/kg]
	026	027	
Cadmium	<LOQ	21.5	100
Method	**EN ISO 17294-2:2017**		
Conclusion	**Pass**		

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 10 mg/kg

9.6. REACH: Cadmium Reference EN 1122, EN ISO 17294-2:2017, determined by ICP-OES		
Tested parameter	Results [mg/kg]	Limit [mg/kg]
	028	
Cadmium	<LOQ	100
Method	**EN ISO 17294-2:2017**	
Conclusion	**Pass**	

Remark: 1. “mg/kg” denotes milligram per kilogram
2. LOQ (Limit of quantification): 10 mg/kg

-End of The Report-