

Report No.: **158299077b 001**

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**Client:** ONE FOR FUN LIMITED

**Contact Information:** 3-5 Cambuslang Way, Gateway Office Park, Cambuslang, Glasgow, G32 8ND

**Manufacturer's name:** 609904

**Test item(s):** Toys

**Identification/  
Model No(s):** PICK N POP BRACELETS HEART / PICK N POP BRACELETS BEE /  
PICK N POP BRACELETS FLOWER / PICK N POP BRACELETS HAPPY  
Item no: SV22056(70448 / 87913-0) / SV22057 / SV22058(70509 / 88221-7) / SV22059

**Sample obtaining method:** Sending by customer

**Condition at delivery:** Test item complete and undamaged.

**Sample Receiving date:** 2024-10-21, 2024-10-22

**Testing Period:** 2024-10-22 to 2024-10-25

**Place of testing:** Chemical laboratory Hong Kong, Toys laboratory Hong Kong

**Test Specification:**

Please refer to "Test Result Summary List" on page 2 for details

**Other information:**

Country of Origin: China

The provided age grade of the item(s) : 8+

The appropriate age grade of the item(s) : Not Requested (by client)

As per client request, the item(s) was/ were tested for the age of over 8 years.

Packaging provided: Artwork

For and on behalf of  
TÜV Rheinland Hong Kong Ltd.



Amenda Yung/  
Senior CS Manager

2024-10-28

Date

Name/Position



Wong Yiu Tong , Tommy/  
Senior Lab Manager

2024-10-28

Date

Name/Position

Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.

This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

"Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.

**Test Result Summary :****Test Specification:**

- |   |                      |
|---|----------------------|
| 1 EN 71-1:2014+A1:2018 Mechanical and physical properties   | PASS                 |
| 2 2009/48/EC CE marking   | PASS                 |
| 3 2009/48/EC Labeling Requirement<br>(Importer/ Manufacturer Mark, Product Identification, Washing/ Cleaning instruction)                                 | Refer to result page |
| 4 EN 71-2:2020 Flammability   | PASS                 |
| 5 EN 71-3:2019+A1:2021 Migration of 19 Elements   | PASS                 |
| 6 Cadmium content according to Annex XVII Entry 23 of Regulation (EC) No 1907/2006 and its amendments   | PASS                 |
| 7 Polycyclic aromatic hydrocarbons (PAHs) - REACH regulation (EC) No. 1907/2006 with Amendment No. 552/2009· Annex XVII Item No. 50 and (EU) No.1272/2013 | PASS                 |
| 8 Short Chain Chlorinated Paraffin (SCCP) - according to Regulation (EU) 2019/1021  | PASS                 |
| 9 REACH regulation (EC) No. 1907/2006 and its amendment regulations on Annex XVII entry 51 and entry 52 : Phthalates                                      | PASS                 |

**Test result:**

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**Material List:**

Item: PICK N POP BRACELETS HEART / PICK N POP BRACELETS BEE / PICK N POP BRACELETS FLOWER / PICK N POP BRACELETS HAPPY  
Item no: SV22056(70448 / 87913-0) / SV22057 / SV22058(70509 / 88221-7) / SV22059

Material No.	Material	Color	Location
M001	Whole Product	multicolor	[#flowers]-whole product;[#honeycomb]-whole product;[#heart]-whole product;[#smile]-whole product
M002	Coating	yellow	[#flowers]-flower charm
M003	Coating	pink	[#flowers]-flower charm
M004	Coating	shiny yellow	[#honeycomb]-bead
M005	Coating	transparent orange	[#honeycomb]-honeycomb charm
M006	Coating	white	[#honeycomb]-bee charm
M007	Coating	black	[#honeycomb]-bee charm
M008	Coating	bright yellow	[#honeycomb]-bee charm
M009	Coating	light pink	[#heart]-heart charm
M010	Coating	light purple	[#heart]-heart charm
M011	Coating	bright pink	[#smile]-smile charm
M012	Coating	bright orange	[#smile]-smile charm
M013	Plastic	white	[#flowers]-string;[#honeycomb]-string;[#heart]-string;[#smile]-string
M014	Plastic + printing	pink+iridescent	[#flowers]-bead
M015	Plastic + printing	fuchsia+iridescent	[#flowers]-bead
M016	Plastic + printing	blue+iridescent	[#flowers]-bead
M017	Plastic + printing	yellow+iridescent	[#flowers]-bead
M018	Plastic + printing	orange+iridescent	[#flowers]-bead
M019	Plastic + printing	purple+iridescent	[#flowers]-bead
M020	Plastic + printing	green+iridescent	[#flowers]-bead
M021	Plastic	dim white	[#honeycomb]-bead
M022	Plastic + printing	transparent pink+iridescent	[#heart]-bead
M023	Plastic + printing	transparent purple+iridescent	[#heart]-bead
M024	Plastic + printing	dim pink+black	[#smile]-bead
M025	Plastic + printing	dim yellow+black	[#smile]-bead

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M026	Plastic + printing	dim green+black	[#smile]-bead
M027	Plastic + printing	dim blue+black	[#smile]-bead
M028	Plastic	off white	[#flowers]-pad;[#honeycomb]-pad; [#heart]-pad;[#smile]-pad
M029	Plastic	transparent	[#flowers]-tray;[#honeycomb]-tray; [#heart]-tray;[#smile]-tray
M030	Metal	golden	[#flowers]-flower charm
M031	Metal	golden	[#honeycomb]-honeycomb charm
M032	Metal	golden	[#honeycomb]-bee charm
M033	Metal	golden	[#heart]-heart charm
M034	Metal	golden	[#smile]-smile charm

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**1. EN 71-1:2014+A1:2018 Mechanical and physical properties**

Test No:	T001
Material No:	M001
<b>4. General requirements</b>	
4.1 Material cleanliness	PASS
4.7 Edges	PASS
4.8 Points and metallic wires	PASS
<b>7. Warnings, markings and instructions for use</b>	
7.1 General	PASS

The clause and/or sub-clause would be indicated only in the test report whichever applicable. The comprehensive result report is available upon request.

**Remark:**

<sup>^</sup> The manufacturer/trader/applicant has provided the artwork for assessment in this test report.

<sup>\*\*</sup> Only the German & English version of the marking and instructions were assessed. According to the standard, instruction and other texts required by the standard should be written in the official language(s) of the country in which the product is to be sold.

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**2. 2009/48/EC CE Marking****Test result:**

Test No:	T001
Material No:	M001
CE-marking	PASS

**Remark:**

^ The manufacturer/trader/applicant has provided the artwork for assessment in this test report.

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**3. 2009/48/EC Labeling Requirement (Importer/ Manufacturer Mark, Product Identification, Washing/ Cleaning instruction)****Test result:**

Test No:	T001
Material No:	M001
Importer/ Manufacturer Mark (European Company name and address)+	Present
Product Identification - type, batch, serial or model number+	Present
Washing/ Cleaning instruction ^	Not Applicable

**Remark:**

- \*\* The manufacturer/trader/applicant has provided the artwork for assessment in this test report.
- + These labeling shall be indicated on the toy, or where that is not possible, on its packaging or in documents accompanying the toys.

The correct adherence to all requirements according to directive 2009/48/EC in regards to the marking (name or trademark and contact address of the manufacturer respectively the marking for identification [type, batch, model or serial no.]) of the toy can only be confirmed by the manufacturer, his delegate or the person who brings it onto the market. The marked article were assessed, however, they can not be evaluated in the frame of this test.

- ^ According to Directive 2009/48/EC, a toy intended for use by children under 36 months must be designed and manufactured in such a way that it can be cleaned. A textile toy shall, to this end, be washable, except if it contains a mechanism that may be damaged if soak washed. The toy shall fulfill the safety requirements also after having been cleaned in accordance with this point and the manufacturer's instructions.

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**4. EN 71-2:2020 Flammability****Test result:**

Test No:	T001
Material No.	M001
4.1 General requirements	PASS

The clause and/or sub-clause would be indicated only in the test report whichever applicable. The comprehensive result report is available upon request.



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**5. EN 71-3:2019+A1:2021 Migration of 19 Elements**

Test Method: with reference to EN 71-3:2019+A1:2021, analyzed by ICP-OES / ICP-MS / LC-ICP-MS/IC-UV/GC-MS.

**3) For scraped-off toy materials:**
**Test Result:**

Test No.				T001	T002	T003
Material No.				M002	M003	M004
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	28,130	33	< RL	< RL
Antimony (Sb)	mg/kg	5	560	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	47	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	18,750	< RL	< RL	7.5
Boron (B)	mg/kg	10	15,000	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	17	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	460	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.053	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	130	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	7,700	15.8	7.5	12.6
Lead (Pb)	mg/kg	2.5	23	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	15,000	< RL	< RL	4.1
Mercury (Hg)	mg/kg	2.5	94	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	930	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	460	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	56,000	< RL	< RL	< RL
Tin (Sn)	mg/kg	1.0	180,000	1.01	1.01	< RL
Organic Tin <sup>^</sup>	mg/kg	0.2	12	-	-	-
Zinc (Zn)	mg/kg	10	46,000	796	247	714
Mass of trace amount	mg	--	--	52	58	-

**Abbreviation:**

- < = less than
- RL = Reporting Limit
- mg/kg denotes milligram per kilogram
- mg denotes milligram
- <sup>^</sup> denotes Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (3.6 mg/kg) or the components were confirmed to be pure metal

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**Test Result:**

Test No.				T004	T005	T006
Material No.				M005	M006	M007
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	28,130	< RL	-	-
Antimony (Sb)	mg/kg	5	560	< RL	-	-
Arsenic (As)	mg/kg	5	47	< RL	-	-
Barium (Ba)	mg/kg	2.5	18,750	< RL	-	-
Boron (B)	mg/kg	10	15,000	< RL	-	-
Cadmium (Cd)	mg/kg	1	17	< RL	-	-
Chromium III (Cr(III))	mg/kg	10	460	< RL	-	-
Chromium VI (Cr(VI))	mg/kg	0.045	0.053	< RL	-	-
Cobalt (Co)	mg/kg	2.5	130	< RL	-	-
Copper (Cu)	mg/kg	2.5	7,700	5.8	-	-
Lead (Pb)	mg/kg	2.5	23	< RL	-	-
Manganese (Mn)	mg/kg	2.5	15,000	< RL	-	-
Mercury (Hg)	mg/kg	2.5	94	< RL	-	-
Nickel (Ni)	mg/kg	2.5	930	< RL	-	-
Selenium (Se)	mg/kg	10	460	< RL	-	-
Strontium (Sr)	mg/kg	2.5	56,000	< RL	-	-
Tin (Sn)	mg/kg	1.0	180,000	< RL	-	-
Organic Tin <sup>^</sup>	mg/kg	0.2	12	-	-	-
Zinc (Zn)	mg/kg	10	46,000	28	-	-
Mass of trace amount	mg	--	--	44	<10mg	<10mg

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**Test Result:**

Test No.				T007	T008	T009
Material No.				M008	M009	M010
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	28,130	-	< RL	< RL
Antimony (Sb)	mg/kg	5	560	-	< RL	< RL
Arsenic (As)	mg/kg	5	47	-	< RL	< RL
Barium (Ba)	mg/kg	2.5	18,750	-	< RL	< RL
Boron (B)	mg/kg	10	15,000	-	< RL	< RL
Cadmium (Cd)	mg/kg	1	17	-	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	460	-	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.053	-	< RL	< RL
Cobalt (Co)	mg/kg	2.5	130	-	< RL	< RL
Copper (Cu)	mg/kg	2.5	7,700	-	5.2	12.9
Lead (Pb)	mg/kg	2.5	23	-	< RL	< RL
Manganese (Mn)	mg/kg	2.5	15,000	-	< RL	< RL
Mercury (Hg)	mg/kg	2.5	94	-	< RL	< RL
Nickel (Ni)	mg/kg	2.5	930	-	< RL	< RL
Selenium (Se)	mg/kg	10	460	-	< RL	< RL
Strontium (Sr)	mg/kg	2.5	56,000	-	< RL	< RL
Tin (Sn)	mg/kg	1.0	180,000	-	< RL	< RL
Organic Tin <sup>^</sup>	mg/kg	0.2	12	-	-	-
Zinc (Zn)	mg/kg	10	46,000	-	11	117
Mass of trace amount	mg	--	--	<10mg	20	28

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- mg denotes milligram
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**Test Result:**

Test Parameter	Unit	RL	Test No.	T010	T011	T012
			Material No.	M011	M012	M013
			Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	28,130	< RL	< RL	11
Antimony (Sb)	mg/kg	5	560	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	47	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	18,750	< RL	< RL	< RL
Boron (B)	mg/kg	10	15,000	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	17	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	460	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.053	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	130	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	7,700	11.8	14.4	< RL
Lead (Pb)	mg/kg	2.5	23	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	15,000	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	94	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	930	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	460	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	56,000	< RL	< RL	< RL
Tin (Sn)	mg/kg	1.0	180,000	1.69	1.69	< RL
Organic Tin <sup>^</sup>	mg/kg	0.2	12	-	-	-
Zinc (Zn)	mg/kg	10	46,000	198	225	< RL
Mass of trace amount	mg	--	--	-	76	-

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**Test Result:**

Test No.				T013	T014	T015
Material No.				M014	M015	M016
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	28,130	< RL	< RL	< RL
Antimony (Sb)	mg/kg	5	560	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	47	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	18,750	< RL	< RL	< RL
Boron (B)	mg/kg	10	15,000	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	17	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	460	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.053	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	130	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	7,700	< RL	< RL	< RL
Lead (Pb)	mg/kg	2.5	23	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	15,000	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	94	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	930	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	460	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	56,000	< RL	< RL	< RL
Tin (Sn)	mg/kg	1.0	180,000	< RL	< RL	< RL
Organic Tin <sup>^</sup>	mg/kg	0.2	12	-	-	-
Zinc (Zn)	mg/kg	10	46,000	494	284	411
Mass of trace amount	mg	--	--	-	-	-

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- mg denotes milligram
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**Test Result:**

Test Parameter	Unit	RL	Test No.	T016	T017	T018
			Material No.	M017	M018	M019
			Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	28,130	< RL	< RL	< RL
Antimony (Sb)	mg/kg	5	560	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	47	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	18,750	< RL	< RL	< RL
Boron (B)	mg/kg	10	15,000	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	17	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	460	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.053	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	130	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	7,700	< RL	< RL	< RL
Lead (Pb)	mg/kg	2.5	23	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	15,000	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	94	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	930	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	460	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	56,000	< RL	< RL	< RL
Tin (Sn)	mg/kg	1.0	180,000	< RL	< RL	< RL
Organic Tin <sup>^</sup>	mg/kg	0.2	12	-	-	-
Zinc (Zn)	mg/kg	10	46,000	584	264	243
Mass of trace amount	mg	--	--	-	-	-

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**Test Result:**

Test No.				T019	T020	T021
Material No.				M020	M021	M022
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	28,130	< RL	< RL	< RL
Antimony (Sb)	mg/kg	5	560	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	47	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	18,750	< RL	< RL	< RL
Boron (B)	mg/kg	10	15,000	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	17	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	460	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.053	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	130	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	7,700	< RL	< RL	< RL
Lead (Pb)	mg/kg	2.5	23	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	15,000	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	94	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	930	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	460	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	56,000	< RL	< RL	< RL
Tin (Sn)	mg/kg	1.0	180,000	< RL	< RL	< RL
Organic Tin <sup>^</sup>	mg/kg	0.2	12	-	-	-
Zinc (Zn)	mg/kg	10	46,000	170	< RL	290
Mass of trace amount	mg	--	--	-	-	-

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**Test Result:**

Test No.				T022	T023	T024
Material No.				M023	M024	M025
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	28,130	< RL	< RL	< RL
Antimony (Sb)	mg/kg	5	560	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	47	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	18,750	< RL	< RL	< RL
Boron (B)	mg/kg	10	15,000	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	17	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	460	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.053	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	130	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	7,700	< RL	< RL	< RL
Lead (Pb)	mg/kg	2.5	23	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	15,000	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	94	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	930	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	460	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	56,000	< RL	< RL	< RL
Tin (Sn)	mg/kg	1.0	180,000	< RL	< RL	< RL
Organic Tin <sup>^</sup>	mg/kg	0.2	12	-	-	-
Zinc (Zn)	mg/kg	10	46,000	345	< RL	< RL
Mass of trace amount	mg	--	--	-	-	-

**Abbreviation:**

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- mg denotes milligram
- <sup>^</sup> denotes Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (3.6 mg/kg) or the components were confirmed to be pure metal



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**Test Result:**

Test No.				T025	T026	T027
Material No.				M026	M027	M028
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	28,130	< RL	< RL	< RL
Antimony (Sb)	mg/kg	5	560	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	47	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	18,750	< RL	< RL	< RL
Boron (B)	mg/kg	10	15,000	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	17	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	460	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.053	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	130	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	7,700	< RL	< RL	< RL
Lead (Pb)	mg/kg	2.5	23	< RL	2.9	< RL
Manganese (Mn)	mg/kg	2.5	15,000	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	94	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	930	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	460	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	56,000	< RL	< RL	< RL
Tin (Sn)	mg/kg	1.0	180,000	< RL	< RL	< RL
Organic Tin <sup>^</sup>	mg/kg	0.2	12	-	-	-
Zinc (Zn)	mg/kg	10	46,000	< RL	< RL	< RL
Mass of trace amount	mg	--	--	-	-	-

**Abbreviation:**

- < = less than
- RL = Reporting Limit
- mg/kg denotes milligram per kilogram
- mg denotes milligram
- <sup>^</sup> denotes Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (3.6 mg/kg) or the components were confirmed to be pure metal

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**Test Result:**

Test No.				T028	T029	T030
Material No.				M029	M030	M031
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	28,130	< RL	< RL	< RL
Antimony (Sb)	mg/kg	5	560	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	47	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	18,750	< RL	< RL	< RL
Boron (B)	mg/kg	10	15,000	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	17	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	460	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.053	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	130	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	7,700	< RL	50.1	332
Lead (Pb)	mg/kg	2.5	23	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	15,000	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	94	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	930	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	460	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	56,000	< RL	< RL	< RL
Tin (Sn)	mg/kg	1.0	180,000	1.44	2.56	14.0
Organic Tin <sup>^</sup>	mg/kg	0.2	12	-	-	< RL
Zinc (Zn)	mg/kg	10	46,000	< RL	17	22
Mass of trace amount	mg	--	--	-	-	-

**Abbreviation:**

- < = less than
- RL = Reporting Limit
- mg/kg denotes milligram per kilogram
- mg denotes milligram
- <sup>^</sup> denotes Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (3.6 mg/kg) or the components were confirmed to be pure metal

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**Test Result:**

Test No.				T031	T032	T033
Material No.				M032	M033	M034
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	28,130	< RL	< RL	< RL
Antimony (Sb)	mg/kg	5	560	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	47	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	18,750	< RL	< RL	< RL
Boron (B)	mg/kg	10	15,000	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	17	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	460	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.053	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	130	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	7,700	133	86.9	55.2
Lead (Pb)	mg/kg	2.5	23	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	15,000	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	94	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	930	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	460	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	56,000	< RL	< RL	< RL
Tin (Sn)	mg/kg	1.0	180,000	6.52	7.90	3.98
Organic Tin <sup>^</sup>	mg/kg	0.2	12	< RL	< RL	< RL
Zinc (Zn)	mg/kg	10	46,000	< RL	< RL	< RL
Mass of trace amount	mg	--	--	-	-	-

**Abbreviation:**

- < = less than
- RL = Reporting Limit
- mg/kg denotes milligram per kilogram
- mg denotes milligram
- <sup>^</sup> denotes Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (3.6 mg/kg) or the components were confirmed to be pure metal

**Remark:**

- \* Categorization of toys materials is based on the material texture. According to point H.11 of Annex H to EN 71-3:2019+A1:2021 / BS EN 71-3:2019+A1:2021, cosmetic materials with dry, brittle, powder like or pliable texture such as lipstick and eyeshadow are considered as category I materials. However, as a reminder, it cannot preclude the possibility that some national enforcement authorities might take a more stringent action to treat cosmetic materials as sticky and evaluate according to category II requirement as they are intended to be applied on skin and retained for long time.
- \*\* For any test portion containing grease, oil, wax or similar material, such materials would have been removed with isooctane by using Soxhlet extraction.
- \*\*\*\* The highlighted result was found to be more than the maximum permissible limit.
- \*\*\*\*\* According to EN 71-3:2019+A1:2021, if the weight of a test portion of toy material is less than 10mg, the analysis of migration of certain elements would not be required. If the weight of a test portion of toy material is between 10mg and 100mg, the analytical results would be calculated as though 100mg of the test portion had been used.

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**Organic tin content**
**Test Method:** EN 71-3:2019+A1:2021, analyzed by GC-MS

Test No.			T030	T031	T032
Material No.			M031	M032	M033
Test Parameter	Unit	RL	Result	Result	Result
MeT (Methyltin cation)	mg/kg	0.2	< RL	< RL	< RL
DMT (Dimethyltin Cation)	mg/kg	0.2	< RL	< RL	< RL
BuT (Butyltin cation)	mg/kg	0.2	< RL	< RL	< RL
DBT (Dibutyltin cation)	mg/kg	0.2	< RL	< RL	< RL
TBT (Tributyltin cation)	mg/kg	0.2	< RL	< RL	< RL
TeBT (Tetrabutyltin cation)	mg/kg	0.2	< RL	< RL	< RL
MOT (Monooctyltin cation)	mg/kg	0.2	< RL	< RL	< RL
DOT (Dioctyltin cation)	mg/kg	0.2	< RL	< RL	< RL
DProT (Dipropyltin cation)	mg/kg	0.2	< RL	< RL	< RL
TcyT (Tricyclohexyltin cation)	mg/kg	0.2	< RL	< RL	< RL
DPhT (Diphenyltin cation)	mg/kg	0.2	< RL	< RL	< RL
TPhT (Triphenyltin cation)	mg/kg	0.2	< RL	< RL	< RL
Sum of Organic tin cations	mg/kg	NA	< RL	< RL	< RL
Category	NA	NA	3	3	3
Limit	mg/kg	NA	12	12	12

  

Test No.			T033
Material No.			M034
Test Parameter	Unit	RL	Result
MeT (Methyltin cation)	mg/kg	0.2	< RL
DMT (Dimethyltin Cation)	mg/kg	0.2	< RL
BuT (Butyltin cation)	mg/kg	0.2	< RL
DBT (Dibutyltin cation)	mg/kg	0.2	< RL
TBT (Tributyltin cation)	mg/kg	0.2	< RL
TeBT (Tetrabutyltin cation)	mg/kg	0.2	< RL
MOT (Monooctyltin cation)	mg/kg	0.2	< RL
DOT (Dioctyltin cation)	mg/kg	0.2	< RL
DProT (Dipropyltin cation)	mg/kg	0.2	< RL
TcyT (Tricyclohexyltin cation)	mg/kg	0.2	< RL
DPhT (Diphenyltin cation)	mg/kg	0.2	< RL
TPhT (Triphenyltin cation)	mg/kg	0.2	< RL
Sum of Organic tin cations	mg/kg	NA	< RL
Category	NA	NA	3
Limit	mg/kg	NA	12

**Remark:**

- \* According to Annex G of EN 71-3:2019+A1:2021, the sum of migration of organic tin shall not exceed the migration limits as below:

Category	Category I	Category II	Category III
Scope	Dry, brittle, powder-like or pliable toy materials	Liquid or sticky toy materials	Scraped-off toy materials
Limit	0.9mg/kg	0.2mg/kg	12mg/kg

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**6.Total Cadmium Content**

Test Method: EN 1122:2001 (method B)

**Test Result:**

Test No.	Material No.	Test Parameter	Unit	RL	Test Result
T001	M002 + M003 + M005	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T002	M004	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T003	M006 + M007 + M008	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T004	M009 + M010	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T005	M011 + M012	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T006	M013 + M028	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T007	M014 + M015	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T008	M016 + M017	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T009	M018 + M019	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T010	M020 + M022	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T011	M021 + M029	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T012	M023	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-

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Test No.	Material No.	Test Parameter	Unit	RL	Test Result
T013	M024 + M025	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T014	M026 + M027	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	-
		Average	mg/kg	10	-
T015	M030	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	
		Average	mg/kg	10	
T016	M031	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	
		Average	mg/kg	10	
T017	M032	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	
		Average	mg/kg	10	
T018	M033	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	
		Average	mg/kg	10	
T019	M034	Trial 1	mg/kg	10	< RL
		Trial 2	mg/kg	10	
		Average	mg/kg	10	

**Abbreviation:** < = less than  
 RL = Reporting Limit  
 mg/kg = milligram per kilogram

**Remark:**

- \* Requirements for Cadmium content according to Annex XVII Entry 23 of Regulation (EC) No 1907/2006 (REACH) and its amendments
  - Mixtures and articles produced from plastic material < 0.01 % (100 mg/kg)
  - Coated / painted articles < 0.1 % (1000 mg/kg)
  - Jewellery components < 0.01 % (100 mg/kg)
  - Paints and varnishes (excluding the applicable exemptions) < 0.01 % (100 mg/kg)
- \*\* Swiss requirements for cadmium content according to the Switzerland Chemikalien-Risikoreduktions-Verordnung- ChemRRV, 814.81
  - Mixtures and articles produced from plastic material < 0.01 % (100 mg/kg)
  - Articles / objects treated with paints / coating with cadmium is prohibited
  - Paints and varnishes < 0.01 % (100 mg/kg)

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**7. Polycyclic aromatic hydrocarbons (PAHs)**

Test Method: Organic solvent extraction, GCMS

Test No.				T002	T005	T006
Material No.				M004	M011 + M012	M013 + M028
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.2	< RL	< RL	< RL
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.2	< RL	< RL	< RL
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.2	< RL	< RL	< RL
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.2	< RL	< RL	< RL
Chrysene (CHR)	218-01-9	mg/kg	0.2	< RL	< RL	< RL
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.2	< RL	< RL	< RL

Test No.				T007	T008	T009
Material No.				M014 + M015	M016 + M017	M018 + M019
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.2	< RL	< RL	< RL
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.2	< RL	< RL	< RL
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.2	< RL	< RL	< RL
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.2	< RL	< RL	< RL
Chrysene (CHR)	218-01-9	mg/kg	0.2	< RL	< RL	< RL
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.2	< RL	< RL	< RL

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Test No.				T010	T011	T012
Material No.				M020 + M022	M021 + M029	M023
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.2	< RL	< RL	< RL
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.2	< RL	< RL	< RL
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.2	< RL	< RL	< RL
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.2	< RL	< RL	< RL
Chrysene (CHR)	218-01-9	mg/kg	0.2	< RL	< RL	< RL
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.2	< RL	< RL	< RL

Test No.				T001	T013	T014
Material No.				M002 + M003	M024 + M025	M026 + M027
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.2	< RL	< RL	< RL
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.2	< RL	< RL	< RL
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.2	< RL	< RL	< RL
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.2	< RL	< RL	< RL
Chrysene (CHR)	218-01-9	mg/kg	0.2	< RL	< RL	< RL
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.2	< RL	< RL	< RL

Test No.				T003(*1)	T004(*1)	T015(*1)
Material No.				M006	M009	M005
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.2	-	-	-
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.2	-	-	-
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.2	-	-	-
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.2	-	-	-
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.2	-	-	-
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.2	-	-	-
Chrysene (CHR)	218-01-9	mg/kg	0.2	-	-	-
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.2	-	-	-



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Test No.				T016(*1)	T017(*1)	T018(*1)
Material No.				M007	M008	M010
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.2	-	-	-
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.2	-	-	-
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.2	-	-	-
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.2	-	-	-
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.2	-	-	-
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.2	-	-	-
Chrysene (CHR)	218-01-9	mg/kg	0.2	-	-	-
Dibenzo[a,h]anthracene (DBA <sub>h</sub> A)	53-70-3	mg/kg	0.2	-	-	-

**Abbreviation:** < = less than  
 RL = Reporting Limit  
 NA = Not Applicable  
 mg/kg = milligram per kilogram

**Remark:**

\* Requirement according to REACH regulation (EC) No. 1907/2006 with Amendment No. 552/2009 Annex XVII Item No. 50 and (EU) No.1272/2013, are summarized as below:

Scope	Parameter	Unit	Maximum permissible limit
Articles with direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, made of plastic and rubber shall follow below limit:			
Such articles include amongst others: ---sport equipment such as bicycles, golf clubs, racquets ---household utensils, trolleys, walking frames --- tools for domestic use --- clothing, footwear, gloves and sportswear ---watch-straps, wrist-bands, masks, head-bands	Each of 8 listed PAHs	mg/kg	1
Toys, including activity toys, and childcare articles	Each of 8 listed PAHs	mg/kg	0.5

\*1 The weight of test portion was less than 50mg, so the test was not performed.

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**8.Short Chain Chlorinated Paraffin (C10-C13) (SCCP)**

Test Method: ref. to EN ISO 18219-1:2021/ ISO 18219-2:2021

**Test result:**

Test No.	Material No.	Test Parameter	Unit	RL	Result
T001	M002 + M003 + M005	SCCP	%	0.01	< RL
T002	M004	SCCP	%	0.01	< RL
T003	M006 + M007 + M008	SCCP	%	0.01	< RL
T004	M009 + M010	SCCP	%	0.01	< RL
T005	M011 + M012	SCCP	%	0.01	< RL
T006	M013 + M028	SCCP	%	0.01	< RL
T007	M014 + M015	SCCP	%	0.01	< RL
T008	M016 + M017	SCCP	%	0.01	< RL
T009	M018 + M019	SCCP	%	0.01	< RL
T010	M020 + M022	SCCP	%	0.01	< RL
T011	M021 + M029	SCCP	%	0.01	< RL
T012	M023	SCCP	%	0.01	< RL
T013	M024 + M025	SCCP	%	0.01	< RL
T014	M026 + M027	SCCP	%	0.01	< RL

**Abbreviation:** < = less than  
 RL = Report Limit  
 SCCP = Short Chain Chlorinated Paraffin (C<sub>10</sub>-C<sub>13</sub>)  
 % = percentage

**Remark:**

\* According to Regulation (EU) 2019/1021 as regards Annex I:

Alkanes C <sub>10</sub> -C <sub>13</sub> , chloro (short-chain chlorinated paraffins) (SCCPs)	Maximum Permissible Limit
The production , placing on the market and use of articles containing SCCPs	< 0.15% by weight
The production , placing on the market and use of substances or preparations containing SCCPs	< 1% by weight

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**9. Phthalates content**

Test Method: Ref. to CPSC-CH-C1001-09.4

**Test Result:**

Test No. Material No.				T001 M002 + M003 + M005	T002 M004	T003 M006 + M007 + M008
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Diethylhexyl phthalate (DEHP)	117-81-7	%	0.01	< RL	< RL	< RL
Dibutyl phthalate (DBP)	84-74-2	%	0.01	< RL	< RL	< RL
Benzylbutyl phthalate (BBP)	85-68-7	%	0.01	< RL	< RL	< RL
Diisobutyl phthalate (DIBP)	84-69-5	%	0.01	< RL	< RL	< RL
Sum (DEHP+DBP+BBP+DIBP)	-	%	0.01	<RL	<RL	<RL
Diisononyl phthalate (DINP)	28553-12-0, 68515-48-0	%	0.01	< RL	< RL	< RL
Diisodecyl phthalate (DIDP)	26761-40-0, 68515-49-1	%	0.01	< RL	< RL	< RL
Di-n-octyl phthalate (DNOP)	117-84-0	%	0.01	< RL	< RL	< RL
Sum (DINP+ DIDP+ DNOP)	--	%	0.01	<RL	<RL	<RL
Conclusion: REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51 and 52				Pass	Pass	Pass

Test No. Material No.				T004 M009 + M010	T005 M011 + M012	T006 M013 + M028
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Diethylhexyl phthalate (DEHP)	117-81-7	%	0.01	< RL	< RL	< RL
Dibutyl phthalate (DBP)	84-74-2	%	0.01	< RL	< RL	< RL
Benzylbutyl phthalate (BBP)	85-68-7	%	0.01	< RL	< RL	< RL
Diisobutyl phthalate (DIBP)	84-69-5	%	0.01	< RL	< RL	< RL
Sum (DEHP+DBP+BBP+DIBP)	-	%	0.01	<RL	<RL	<RL
Diisononyl phthalate (DINP)	28553-12-0, 68515-48-0	%	0.01	< RL	< RL	< RL
Diisodecyl phthalate (DIDP)	26761-40-0, 68515-49-1	%	0.01	< RL	< RL	< RL
Di-n-octyl phthalate (DNOP)	117-84-0	%	0.01	< RL	< RL	< RL
Sum (DINP+ DIDP+ DNOP)	--	%	0.01	<RL	<RL	<RL
Conclusion: REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51 and 52				Pass	Pass	Pass

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Test No.				T007	T008	T009
Material No.				M014 + M015	M016 + M017	M018 + M019
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Diethylhexyl phthalate (DEHP)	117-81-7	%	0.01	< RL	< RL	< RL
Dibutyl phthalate (DBP)	84-74-2	%	0.01	< RL	< RL	< RL
Benzylbutyl phthalate (BBP)	85-68-7	%	0.01	< RL	< RL	< RL
Diisobutyl phthalate (DIBP)	84-69-5	%	0.01	< RL	< RL	< RL
Sum (DEHP+DBP+BBP+DIBP)	-	%	0.01	<RL	<RL	<RL
Diisononyl phthalate (DINP)	28553-12-0, 68515-48-0	%	0.01	< RL	< RL	< RL
Diisodecyl phthalate (DIDP)	26761-40-0, 68515-49-1	%	0.01	< RL	< RL	< RL
Di-n-octyl phthalate (DNOP)	117-84-0	%	0.01	< RL	< RL	< RL
Sum (DINP+ DIDP+ DNOP)	--	%	0.01	<RL	<RL	<RL
Conclusion: REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51 and 52				Pass	Pass	Pass

Test No.				T010	T011	T012
Material No.				M020 + M022	M021 + M029	M023
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Diethylhexyl phthalate (DEHP)	117-81-7	%	0.01	< RL	< RL	< RL
Dibutyl phthalate (DBP)	84-74-2	%	0.01	< RL	< RL	< RL
Benzylbutyl phthalate (BBP)	85-68-7	%	0.01	< RL	< RL	< RL
Diisobutyl phthalate (DIBP)	84-69-5	%	0.01	< RL	< RL	< RL
Sum (DEHP+DBP+BBP+DIBP)	-	%	0.01	<RL	<RL	<RL
Diisononyl phthalate (DINP)	28553-12-0, 68515-48-0	%	0.01	< RL	< RL	< RL
Diisodecyl phthalate (DIDP)	26761-40-0, 68515-49-1	%	0.01	< RL	< RL	< RL
Di-n-octyl phthalate (DNOP)	117-84-0	%	0.01	< RL	< RL	< RL
Sum (DINP+ DIDP+ DNOP)	--	%	0.01	<RL	<RL	<RL
Conclusion: REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51 and 52				Pass	Pass	Pass

Test No.				T013	T014
Material No.				M024 + M025	M026 + M027
Test Parameter	CAS NO	Unit	RL	Result	Result
Diethylhexyl phthalate (DEHP)	117-81-7	%	0.01	< RL	< RL
Dibutyl phthalate (DBP)	84-74-2	%	0.01	< RL	< RL
Benzylbutyl phthalate (BBP)	85-68-7	%	0.01	< RL	< RL
Diisobutyl phthalate (DIBP)	84-69-5	%	0.01	< RL	< RL
Sum (DEHP+DBP+BBP+DIBP)	-	%	0.01	<RL	<RL
Diisononyl phthalate (DINP)	28553-12-0, 68515-48-0	%	0.01	< RL	< RL
Diisodecyl phthalate (DIDP)	26761-40-0, 68515-49-1	%	0.01	< RL	< RL
Di-n-octyl phthalate (DNOP)	117-84-0	%	0.01	< RL	< RL
Sum (DINP+ DIDP+ DNOP)	--	%	0.01	<RL	<RL
Conclusion: REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51 and 52				Pass	Pass

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**Abbreviation:** < = less than  
 RL = Reporting Limit  
 % = percentage

**Remark:**

- Requirement of REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51 and 52:

Parameter	Unit	Maximum Permissible Limit
Plasticised materials in toys and childcare articles, or other articles# place on the market;		
Diethylhexyl phthalate (DEHP) Dibutyl phthalate (DBP) Benzylbutyl phthalate (BBP) Diisobutyl phthalate (DIBP)	%	0.1 (individually or sum of the four phthalates) Effective after 7 July 2020.
Plasticised materials in children's toy and childcare articles which can be placed in the mouth by children:		
Di-n-octyl phthalate (DNOP) Diisodecyl phthalate (DIDP) Diisononyl phthalate (DINP)	%	0.1 (sum of the three phthalates)

Denote:

# Examples of articles that are excluded from the restriction

- Articles exclusively for industrial / agricultural use / use in open air, provided that no plasticised material comes into contact with human mucous membranes or into prolonged contact with human skin (i.e. Continuous contact of more than 10 minutes duration or intermittent contact over a period of 30 minutes, per day.)
  - Aircraft and motor vehicles (Directive 2007/46/EC) placed on the market before 7 January 2024, or articles for use exclusively in the maintenance or repair of them
  - Measuring devices for laboratory use;
  - Food contact material and articles within the scope of Regulation (EC) No 1935/2004 or Commission Regulation (EU) No 10/2011
  - Medical devices (Directive 90/385/EEC, 93/42/EEC or 98/79/EC)
  - Electrical and electronic equipment within the scope of Directive 2011/65/EU
  - Immediate packaging of medicinal products (Regulation (EC) No 726/2004, Directive 2001/82/EC or Directive 2001/83/EC)
- Single component with an amount below reporting limit was not considered by the calculation of the sum. In the case of all phthalates were not detected, the result is stated <RL.

Sample Photos



- END -



