AB-0716-T
TURT210096176
07-21

TEST REPORT

REPORT NUMBER : **TURT210096176**

APPLICANT NAME **BALATOYZ EĞİTİM MATERYALLERİ MOBİLYA SAN. VE DIŞ. TİC. LTD. ŞTİ.**

ADDRESS Derbent Mah.A.Lütfü Arat Bulv.No:32/A Kartepe/Kocaeli
Tel: 0506 514 21 45
Attention : Orhan Demircan (info@balatoyz.com)

SAMPLE DESCRIPTION :

Sample 1: One sample of Rainbow 7 pieces / BLTYZ - WLDRF002
Sample 2: One sample of 11 Semircircles Set / BLTYZ - WLDRF003
Sample 3: One sample of Rainbow 12 pieces / BLTYZ - MTDLR013
Sample 4: One sample of 7 Semircircles Set / BLTYZ - WLDRF004
Sample 5: One sample of Three piece circle puzzle / BLTYZ-MTDLR0032
Sample 6: One sample of Constructive triangles set 4 / BLTYZ-MMAT082
Sample 7: One sample of Red rods / BLTYZ-MDUYU007
Sample 8: One sample of Montessori number rods / BLTYZ-MMAT037
Sample 9: One sample of Single puzzle set / BLTYZ-MTDLR
Sample 10: One sample of Rainbow wooden peg dolls / BLTYZ-WLDRF001
Sample 11: One sample of Contructive triangles set of 1 / BLTYZ-MMAT079
Sample 12: One sample of Three shape size sequence puzzle / BLTYZ-MTDLR0034
Sample 13: One sample of Brown stairs / BLTY-MDUYU005
Sample 14: One sample of Geometric solids complate set / BLTYZ-MMAT0130
Sample 15: One sample of Constructive triangles blue triangles set of 6 / BLTYZ-MDUYU0160
Sample 16: One sample of Constructive triangles set 2 / BLTYZ-MMAT080
Sample 17: One sample of Constructive triangles 5 / BLTYZ-MMAT083
Sample 18: One sample of Constructive triangles set 3 / BLTYZ-MMAT081
Sample 19: One sample of Five colorful circles puzzle / BLTYZ-MTDRL0037
Sample 20: One sample of Three shape puzzle / BLTYZ-MTDLR0033
Sample 21: One sample of Number boards with red pegs / BLTYZ-MMAT0400
Sample 22: One sample of Pink tower / BLTYZ-MDUYU003
Sample 23: One sample of Small numerical rods / BLTYZ-MMAT0150

DATE IN: **09 July, 2021 (13:31)**

DATE OUT : **16 July, 2021**

REFERENCE/STYLE NO : BLTYZ-WLDRF004-BLTYZ-WLDRF002-BLTYZ-WLDRF003-BLTYZ-MTDLR013

Ezgi Aleyna Arı
Customer Care Executive

Zeynep Akın
Chemical Laboratory Manager

Intertek Test Hizmetleri A.S.
Merkez Mahallesi Sanayi Cad. No: 23 Altındağ Plaza Yenibosna 34197 - ISTANBUL / TURKEY
Phone : +90.212. 496 46 46 Fax : +90.212. 452 80 55
e-mail : intertekcg.turkiye@intertek.com
www.intertek-turkey.com

TEST	Sample 1	Sample 2	Sample 3	Sample 4
SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS	P	P	P	P

TEST	Sample 5	Sample 6	Sample 7	Sample 8
SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS	P	P	P	P

TEST	Sample 9	Sample 10	Sample 11	Sample 12
SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS	P	P	P	P

TEST	Sample 13	Sample 14	Sample 15	Sample 16
SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS	P	P	P	P

TEST	Sample 17	Sample 18	Sample 19	Sample 20
SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS	P	P	P	P

TEST	Sample 21	Sample 22	Sample 23
SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS	P	P	P

P = MEETS BUYER' S REQUIREMENT / F = DOES NOT MEET BUYER' S REQUIREMENT / NR = NO REQUIREMENT / SC=STILL CONTINUES / X=NOT PERFORMED / NA = NOT APPLICABLE/ LS : LACK OF SAMPLE

PARTS	
1	Red coating (Sample 1)
2	Orange coating (Sample 1)
3	Pink coating (Sample 1)
4	Yellow coating (Sample 1)
5	Green coating (Sample 1)
6	Blue coating (Sample 1)
7	Purple coating (Sample 1)
8	Wood (Sample 1)
9	Red coating (Sample 2)
10	Orange coating (Sample 2)
11	Pink coating (Sample 2)
12	Yellow coating (Sample 2)
13	Green coating (Sample 2)
14	Blue coating (Sample 2)
15	Brown coating (Sample 2)
16	Light orange coating (Sample 2)
17	Light green coating (Sample 2)
18	Baby blue coating (Sample 2)
19	Light blue coating (Sample 2)
20	Wood (Sample 2)
21	Red coating (Sample 3)
22	Orange coating (Sample 3)
23	Pink coating (Sample 3)
24	Yellow coating (Sample 3)
25	Green coating (Sample 3)
26	Blue coating (Sample 3)
27	Purple coating (Sample 3)
28	Brown coating (Sample 3)
29	Light orange coating (Sample 3)
30	Light green coating (Sample 3)
31	Baby blue coating (Sample 3)
32	Light blue coating (Sample 3)
33	Wood (Sample 3)
34	Red coating (Sample 4)
35	Orange coating (Sample 4)
36	Pink coating (Sample 4)
37	Yellow coating (Sample 4)
38	Green coating (Sample 4)
39	Blue coating (Sample 4)
40	Purple coating (Sample 4)
41	Wood (Sample 4)
42	Blue coating (Sample 5)
43	Wood (Sample 5)
44	Red coating (Sample 6)
45	Yellow coating (Sample 6)
46	Grey coating (Sample 6)
47	Red coating (Sample 7)
48	Red coating (Sample 8)

PARTS	
49	Blue coating (Sample 8)
50	Blue coating (Sample 9)
51	Red coating (Sample 9)
52	Yellow coating (Sample 9)
53	Wood (Sample 9)
54	Red coating (Sample 10)
55	Orange coating (Sample 10)
56	Pink coating (Sample 10)
57	Yellow coating (Sample 10)
58	Green coating (Sample 10)
59	Blue coating (Sample 10)
60	Brown coating (Sample 10)
61	Light orange coating (Sample 10)
62	Light green coating (Sample 10)
63	Light blue coating (Sample 10)
64	Baby blue coating (Sample 10)
65	Purple coating (Sample 10)
66	Wood (Sample 10)
67	Green coating (Sample 11)
68	Yellow coating (Sample 11)
69	Red coating (Sample 11)
70	Grey coating (Sample 11)
71	Green coating (Sample 12)
72	Yellow coating (Sample 12)
73	Blue coating (Sample 12)
74	Wood (Sample 12)
75	Brown coating (Sample 13)
76	Blue coating (Sample 14)
77	Blue coating (Sample 15)
78	Blue coating (Sample 16)
79	Red coating (Sample 17)
80	Yellow coating (Sample 17)
81	Green coating (Sample 17)
81	Grey coating (Sample 17)
83	Red coating (Sample 18)
84	Yellow coating (Sample 18)
85	Green coating (Sample 18)
86	Grey coating (Sample 18)
87	Red coating (Sample 19)
88	Yellow coating (Sample 19)
89	Green coating (Sample 19)
90	Blue coating (Sample 19)

PARTS	
91	Orange coating (Sample 19)
92	Red coating (Sample 20)
93	Yellow coating (Sample 20)
94	Blue coating (Sample 20)
95	Number boards (Sample 21)
96	Red pegs (Sample 21)
97	Pink coating (Sample 22)
98	Red coating (Sample 23)
99	Blue coating (Sample 23)

Remark: Only suitable parts tested for the related tests.

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 1	Part 2	Part 3	Part 4		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	11.6	2.2	2	1	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	34.9	118.2	140.3	44.4	0,125	28130
Boron (B)	4.3	4.2	ND	ND	0,125	15000
Cobalt (Co)	1.6	0.4	ND	ND	0,125	130
Copper (Cu)	4.3	2.8	1.4	ND	0,125	7700
Manganese (Mn)	1.2	0.7	1.7	1	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	3.9	1.6	1.5	0.8	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tinΔ	ND	ND	ND	ND	0,125	12
Zinc (Zn)	21	183	67	38.4	0,125	46000

Δ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 5	Part 6	Part 7			
Antimony (Sb)	ND	ND	ND		0,125	560
Arsenic (As)	ND	ND	ND		0,125	47
Barium (Ba)	1.5	3	0.9		0,125	18750
Cadmium (Cd)	ND	ND	ND		0,125	17
Chromium (III)	ND	ND	ND		0,125	460
Chromium (VI)	ND	ND	ND		0,025	0,053
Lead (Pb)	ND	ND	ND		0,125	23
Mercury (Hg)	ND	ND	ND		0,0125	94
Selenium (Se)	ND	ND	ND		0,125	460
Aluminium (Al)	29	44.6	5.7		0,125	28130
Boron (B)	ND	ND	ND		0,125	15000
Cobalt (Co)	ND	ND	ND		0,125	130
Copper (Cu)	1.7	2.2	ND		0,125	7700
Manganese (Mn)	1.7	2.1	0.5		0,125	15000
Nickel (Ni)	ND	ND	ND		0,125	930
Strontium (Sr)	1.9	2.1	1.1		0,125	56000
Tin (Sn)	ND	ND	ND		0,125	180000
Organic tin∆	ND	ND	ND		0,125	12
Zinc (Zn)	40	3.5	4.7		0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category I
	Part 8					
Antimony (Sb)	ND				0,125	45
Arsenic (As)	ND				0,125	3,8
Barium (Ba)	1.2				0,125	1500
Cadmium (Cd)	ND				0,125	1,3
Chromium (III)	ND				0,125	37,5
Chromium (VI)	ND				0,0025	0,02
Lead (Pb)	ND				0,125	2.0
Mercury (Hg)	ND				0,0125	7,5
Selenium (Se)	ND				0,125	37,5
Aluminium (Al)	1				0,125	2250
Boron (B)	1.4				0,125	1200
Cobalt (Co)	ND				0,125	10,5
Copper (Cu)	ND				0,125	622,5
Manganese (Mn)	3.5				0,125	1200
Nickel (Ni)	ND				0,125	75
Strontium (Sr)	1.7				0,125	4500
Tin (Sn)	ND				0,125	15000
Organic tin∆	ND				0,125	0,9
Zinc (Zn)	2.2				0,125	3750

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 9	Part 10	Part 11	Part 12		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	13	2.6	3	1.5	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	41	105	129	56	0,125	28130
Boron (B)	3.9	4.1	ND	ND	0,125	15000
Cobalt (Co)	1	0.8	ND	ND	0,125	130
Copper (Cu)	5	3.2	0.9	ND	0,125	7700
Manganese (Mn)	0.9	1	1.2	1	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	2.9	1.8	0.9	1.5	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	17	155	71	40.1	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 13	Part 14	Part 15	Part 16		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	2.1	3.1	1.2	17.2	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	1.2	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	0.5	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	32	44.5	43	566	0,125	28130
Boron (B)	ND	ND	ND	6.4	0,125	15000
Cobalt (Co)	ND	ND	ND	ND	0,125	130
Copper (Cu)	1.5	2	0.5	2.6	0,125	7700
Manganese (Mn)	1.9	3	2.5	29	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	2	2.2	1.8	21.4	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tinΔ	ND	ND	ND	ND	0,125	12
Zinc (Zn)	45	17.8	7.6	140	0,125	46000

Δ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 17	Part 18	Part 19			
Antimony (Sb)	ND	ND	ND		0,125	560
Arsenic (As)	ND	ND	ND		0,125	47
Barium (Ba)	1.4	1.5	1.6		0,125	18750
Cadmium (Cd)	ND	ND	ND		0,125	17
Chromium (III)	ND	ND	ND		0,125	460
Chromium (VI)	ND	ND	ND		0,025	0,053
Lead (Pb)	ND	ND	ND		0,125	23
Mercury (Hg)	ND	ND	ND		0,0125	94
Selenium (Se)	ND	ND	ND		0,125	460
Aluminium (Al)	63	134	71.5		0,125	28130
Boron (B)	ND	ND	ND		0,125	15000
Cobalt (Co)	ND	ND	ND		0,125	130
Copper (Cu)	ND	ND	ND		0,125	7700
Manganese (Mn)	2.3	2.9	2.4		0,125	15000
Nickel (Ni)	ND	ND	ND		0,125	930
Strontium (Sr)	2.1	1.6	1.4		0,125	56000
Tin (Sn)	ND	ND	ND		0,125	180000
Organic tin∆	ND	ND	ND		0,125	12
Zinc (Zn)	6.8	8.1	10.3		0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category I
	Part 20					
Antimony (Sb)	ND				0,125	45
Arsenic (As)	ND				0,125	3,8
Barium (Ba)	1				0,125	1500
Cadmium (Cd)	ND				0,125	1,3
Chromium (III)	ND				0,125	37,5
Chromium (VI)	ND				0,0025	0,02
Lead (Pb)	ND				0,125	2.0
Mercury (Hg)	ND				0,0125	7,5
Selenium (Se)	ND				0,125	37,5
Aluminium (Al)	1.1				0,125	2250
Boron (B)	1.6				0,125	1200
Cobalt (Co)	ND				0,125	10,5
Copper (Cu)	ND				0,125	622,5
Manganese (Mn)	4				0,125	1200
Nickel (Ni)	ND				0,125	75
Strontium (Sr)	2				0,125	4500
Tin (Sn)	ND				0,125	15000
Organic tin∆	ND				0,125	0,9
Zinc (Zn)	3				0,125	3750

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 21	Part 22	Part 23	Part 24		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	14	2.5	1.9	1.1	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	31.1	111	950	61	0,125	28130
Boron (B)	3.8	5	ND	ND	0,125	15000
Cobalt (Co)	2	0.5	ND	ND	0,125	130
Copper (Cu)	4.4	4	1.8	ND	0,125	7700
Manganese (Mn)	1.9	1.1	2.5	1.3	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	1.8	2	1	1.8	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	18	170	70	41.2	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 25	Part 26	Part 27	Part 28		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	2	1.3	1.3	2.6	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	33	39	6.6	55	0,125	28130
Boron (B)	ND	ND	ND	ND	0,125	15000
Cobalt (Co)	ND	ND	ND	ND	0,125	130
Copper (Cu)	2.2	1.8	ND	2.1	0,125	7700
Manganese (Mn)	2.5	2.2	0.8	4.5	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	1.5	3.2	1.6	3.1	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	50.2	99.1	6.5	10.5	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 29	Part 30	Part 31	Part 32		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	20	2.8	3.2	2.5	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	3	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	0.3	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	491	74	170	90	0,125	28130
Boron (B)	6.1	ND	ND	ND	0,125	15000
Cobalt (Co)	ND	ND	ND	ND	0,125	130
Copper (Cu)	3.1	ND	ND	ND	0,125	7700
Manganese (Mn)	45	4.3	5.1	4.9	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	30.4	3.9	2.9	2.3	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	151	8.9	10.4	11.5	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category I
	Part 33					
Antimony (Sb)	ND				0,125	45
Arsenic (As)	ND				0,125	3,8
Barium (Ba)	1.4				0,125	1500
Cadmium (Cd)	ND				0,125	1,3
Chromium (III)	ND				0,125	37,5
Chromium (VI)	ND				0,0025	0,02
Lead (Pb)	ND				0,125	2.0
Mercury (Hg)	ND				0,0125	7,5
Selenium (Se)	ND				0,125	37,5
Aluminium (Al)	2.3				0,125	2250
Boron (B)	2				0,125	1200
Cobalt (Co)	ND				0,125	10,5
Copper (Cu)	ND				0,125	622,5
Manganese (Mn)	5.5				0,125	1200
Nickel (Ni)	ND				0,125	75
Strontium (Sr)	1.8				0,125	4500
Tin (Sn)	ND				0,125	15000
Organic tin∆	ND				0,125	0,9
Zinc (Zn)	4				0,125	3750

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 34	Part 35	Part 36	Part 37		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	10.5	3.3	3	1.7	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	51.2	99.5	125	60.4	0,125	28130
Boron (B)	5.5	5	ND	ND	0,125	15000
Cobalt (Co)	2	0.9	ND	ND	0,125	130
Copper (Cu)	5.7	2.9	ND	ND	0,125	7700
Manganese (Mn)	1.8	0.6	2.7	0.7	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	5.3	1.9	2.8	1.1	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	21	135	77	41.9	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 38	Part 39	Part 40			
Antimony (Sb)	ND	ND	ND		0,125	560
Arsenic (As)	ND	ND	ND		0,125	47
Barium (Ba)	2	3.1	1		0,125	18750
Cadmium (Cd)	ND	ND	ND		0,125	17
Chromium (III)	ND	ND	ND		0,125	460
Chromium (VI)	ND	ND	ND		0,025	0,053
Lead (Pb)	ND	ND	ND		0,125	23
Mercury (Hg)	ND	ND	ND		0,0125	94
Selenium (Se)	ND	ND	ND		0,125	460
Aluminium (Al)	33.7	51.3	6		0,125	28130
Boron (B)	ND	ND	ND		0,125	15000
Cobalt (Co)	ND	ND	ND		0,125	130
Copper (Cu)	2.5	2	ND		0,125	7700
Manganese (Mn)	2.5	2.5	0.8		0,125	15000
Nickel (Ni)	ND	ND	ND		0,125	930
Strontium (Sr)	2.2	2.3	1		0,125	56000
Tin (Sn)	ND	ND	ND		0,125	180000
Organic tin∆	ND	ND	ND		0,125	12
Zinc (Zn)	53.3	92.8	5		0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category I
	Part 41					
Antimony (Sb)	ND				0,125	45
Arsenic (As)	ND				0,125	3,8
Barium (Ba)	1.5				0,125	1500
Cadmium (Cd)	ND				0,125	1,3
Chromium (III)	ND				0,125	37,5
Chromium (VI)	ND				0,0025	0,02
Lead (Pb)	ND				0,125	2.0
Mercury (Hg)	ND				0,0125	7,5
Selenium (Se)	ND				0,125	37,5
Aluminium (Al)	2				0,125	2250
Boron (B)	2.5				0,125	1200
Cobalt (Co)	ND				0,125	10,5
Copper (Cu)	ND				0,125	622,5
Manganese (Mn)	6.3				0,125	1200
Nickel (Ni)	ND				0,125	75
Strontium (Sr)	2.2				0,125	4500
Tin (Sn)	ND				0,125	15000
Organic tin∆	ND				0,125	0,9
Zinc (Zn)	2.5				0,125	3750

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 42					
Antimony (Sb)	ND				0,125	560
Arsenic (As)	ND				0,125	47
Barium (Ba)	3.1				0,125	18750
Cadmium (Cd)	ND				0,125	17
Chromium (III)	ND				0,125	460
Chromium (VI)	ND				0,025	0,053
Lead (Pb)	ND				0,125	23
Mercury (Hg)	ND				0,0125	94
Selenium (Se)	ND				0,125	460
Aluminium (Al)	115.7				0,125	28130
Boron (B)	0.9				0,125	15000
Cobalt (Co)	ND				0,125	130
Copper (Cu)	0.4				0,125	7700
Manganese (Mn)	0.6				0,125	15000
Nickel (Ni)	ND				0,125	930
Strontium (Sr)	3.2				0,125	56000
Tin (Sn)	ND				0,125	180000
Organic tin∆	ND				0,125	12
Zinc (Zn)	28				0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category I
	Part 43					
Antimony (Sb)	ND				0,125	45
Arsenic (As)	ND				0,125	3,8
Barium (Ba)	3.5				0,125	1500
Cadmium (Cd)	ND				0,125	1,3
Chromium (III)	ND				0,125	37,5
Chromium (VI)	ND				0,0025	0,02
Lead (Pb)	ND				0,125	2.0
Mercury (Hg)	ND				0,0125	7,5
Selenium (Se)	ND				0,125	37,5
Aluminium (Al)	1				0,125	2250
Boron (B)	1.1				0,125	1200
Cobalt (Co)	ND				0,125	10,5
Copper (Cu)	0.5				0,125	622,5
Manganese (Mn)	11.6				0,125	1200
Nickel (Ni)	ND				0,125	75
Strontium (Sr)	3.3				0,125	4500
Tin (Sn)	ND				0,125	15000
Organic tin∆	ND				0,125	0,9
Zinc (Zn)	3				0,125	3750

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 44	Part 45	Part 46	Part 47		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	11	1.1	3.7	11.8	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	51	56	375.1	60.8	0,125	28130
Boron (B)	4	ND	0.5	7.3	0,125	15000
Cobalt (Co)	2.2	ND	ND	2.5	0,125	130
Copper (Cu)	5.4	ND	ND	5.7	0,125	7700
Manganese (Mn)	0.9	0.7	0.3	0.9	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	4.4	0.7	1	6.5	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	14	55.1	4.2	11.7	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 48	Part 49	Part 50	Part 51		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	12.6	4.3	4.4	ND	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	41	50.5	69.1	55.1	0,125	28130
Boron (B)	4.2	ND	ND	4.4	0,125	15000
Cobalt (Co)	1.5	ND	ND	0.8	0,125	130
Copper (Cu)	5.3	2	3	6.1	0,125	7700
Manganese (Mn)	1.7	3.1	2.8	0.9	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	4.4	2.9	2	4	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	19	18.1	30.1	ND	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 52					
Antimony (Sb)	ND				0,125	560
Arsenic (As)	ND				0,125	47
Barium (Ba)	2.1				0,125	18750
Cadmium (Cd)	ND				0,125	17
Chromium (III)	ND				0,125	460
Chromium (VI)	ND				0,025	0,053
Lead (Pb)	ND				0,125	23
Mercury (Hg)	ND				0,0125	94
Selenium (Se)	ND				0,125	460
Aluminium (Al)	54.6				0,125	28130
Boron (B)	ND				0,125	15000
Cobalt (Co)	ND				0,125	130
Copper (Cu)	ND				0,125	7700
Manganese (Mn)	0.8				0,125	15000
Nickel (Ni)	ND				0,125	930
Strontium (Sr)	1				0,125	56000
Tin (Sn)	ND				0,125	180000
Organic tin∆	ND				0,125	12
Zinc (Zn)	4.1				0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category I
	Part 53					
Antimony (Sb)	ND				0,125	45
Arsenic (As)	ND				0,125	3,8
Barium (Ba)	1				0,125	1500
Cadmium (Cd)	ND				0,125	1,3
Chromium (III)	ND				0,125	37,5
Chromium (VI)	ND				0,0025	0,02
Lead (Pb)	ND				0,125	2.0
Mercury (Hg)	ND				0,0125	7,5
Selenium (Se)	ND				0,125	37,5
Aluminium (Al)	2.2				0,125	2250
Boron (B)	1.5				0,125	1200
Cobalt (Co)	ND				0,125	10,5
Copper (Cu)	ND				0,125	622,5
Manganese (Mn)	4.6				0,125	1200
Nickel (Ni)	ND				0,125	75
Strontium (Sr)	2.2				0,125	4500
Tin (Sn)	ND				0,125	15000
Organic tin∆	ND				0,125	0,9
Zinc (Zn)	3.5				0,125	3750

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 54	Part 55	Part 56	Part 57		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	19	3.1	3.5	1	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	50.2	120	130	55.1	0,125	28130
Boron (B)	5.1	5.5	ND	ND	0,125	15000
Cobalt (Co)	2	1	ND	ND	0,125	130
Copper (Cu)	4.1	4	1.4	ND	0,125	7700
Manganese (Mn)	1.5	2	1.7	2	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	5.9	3	2.1	0.5	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	26	190	75	39	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 58	Part 59	Part 60	Part 61		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	1.4	2	1.3	11	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	2	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	0.4	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	30	44.6	55	477	0,125	28130
Boron (B)	ND	ND	ND	4.1	0,125	15000
Cobalt (Co)	ND	ND	ND	ND	0,125	130
Copper (Cu)	2	1.9	0.3	3	0,125	7700
Manganese (Mn)	2.1	2.1	3.2	31	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	2.2	2	1.7	19	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	50	24	8	105	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 62	Part 63	Part 64	Part 65		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	1	2.3	1.7	0.5	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	66	80	120	6.1	0,125	28130
Boron (B)	ND	ND	ND	ND	0,125	15000
Cobalt (Co)	ND	ND	ND	ND	0,125	130
Copper (Cu)	ND	ND	ND	ND	0,125	7700
Manganese (Mn)	1.2	2.1	3	1	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	1.1	1	2	2.9	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	9	12	10.3	5.2	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category I
	Part 66					
Antimony (Sb)	ND				0,125	45
Arsenic (As)	ND				0,125	3,8
Barium (Ba)	2				0,125	1500
Cadmium (Cd)	ND				0,125	1,3
Chromium (III)	ND				0,125	37,5
Chromium (VI)	ND				0,0025	0,02
Lead (Pb)	ND				0,125	2.0
Mercury (Hg)	ND				0,0125	7,5
Selenium (Se)	ND				0,125	37,5
Aluminium (Al)	0.6				0,125	2250
Boron (B)	0.8				0,125	1200
Cobalt (Co)	ND				0,125	10,5
Copper (Cu)	ND				0,125	622,5
Manganese (Mn)	2.9				0,125	1200
Nickel (Ni)	ND				0,125	75
Strontium (Sr)	1.5				0,125	4500
Tin (Sn)	ND				0,125	15000
Organic tin∆	ND				0,125	0,9
Zinc (Zn)	3				0,125	3750

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 67	Part 68	Part 69	Part 70		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	2	2.2	ND	4.1	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	35	50	41	229	0,125	28130
Boron (B)	ND	ND	4.4	ND	0,125	15000
Cobalt (Co)	ND	ND	1.4	ND	0,125	130
Copper (Cu)	1.7	ND	5.1	ND	0,125	7700
Manganese (Mn)	1.9	1.1	1	7.8	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	2.1	0.5	3.3	2.3	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	50	48.1	ND	5.6	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 71	Part 72	Part 73			
Antimony (Sb)	ND	ND	ND		0,125	560
Arsenic (As)	ND	ND	ND		0,125	47
Barium (Ba)	2.2	1.1	2.9		0,125	18750
Cadmium (Cd)	ND	ND	ND		0,125	17
Chromium (III)	ND	ND	ND		0,125	460
Chromium (VI)	ND	ND	ND		0,025	0,053
Lead (Pb)	ND	ND	ND		0,125	23
Mercury (Hg)	ND	ND	ND		0,0125	94
Selenium (Se)	ND	ND	ND		0,125	460
Aluminium (Al)	33	45.6	55.1		0,125	28130
Boron (B)	ND	ND	ND		0,125	15000
Cobalt (Co)	ND	ND	ND		0,125	130
Copper (Cu)	2.3	ND	2.8		0,125	7700
Manganese (Mn)	2.5	0.8	2.6		0,125	15000
Nickel (Ni)	ND	ND	ND		0,125	930
Strontium (Sr)	2.3	0.9	2.8		0,125	56000
Tin (Sn)	ND	ND	ND		0,125	180000
Organic tin∆	ND	ND	ND		0,125	12
Zinc (Zn)	51.5	50.6	26.3		0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category I
	Part 74					
Antimony (Sb)	ND				0,125	45
Arsenic (As)	ND				0,125	3,8
Barium (Ba)	1.1				0,125	1500
Cadmium (Cd)	ND				0,125	1,3
Chromium (III)	ND				0,125	37,5
Chromium (VI)	ND				0,0025	0,02
Lead (Pb)	ND				0,125	2.0
Mercury (Hg)	ND				0,0125	7,5
Selenium (Se)	ND				0,125	37,5
Aluminium (Al)	0.8				0,125	2250
Boron (B)	0.9				0,125	1200
Cobalt (Co)	ND				0,125	10,5
Copper (Cu)	ND				0,125	622,5
Manganese (Mn)	3.2				0,125	1200
Nickel (Ni)	ND				0,125	75
Strontium (Sr)	1.5				0,125	4500
Tin (Sn)	ND				0,125	15000
Organic tin∆	ND				0,125	0,9
Zinc (Zn)	2				0,125	3750

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 75	Part 76	Part 77	Part 78		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	1.1	3.1	4	3.2	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	44	45	61	66.1	0,125	28130
Boron (B)	ND	ND	ND	ND	0,125	15000
Cobalt (Co)	ND	ND	ND	ND	0,125	130
Copper (Cu)	0.6	2	3.1	2.8	0,125	7700
Manganese (Mn)	2.1	2.3	2.9	2.7	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	1.9	3	2.7	2.6	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	9	30	31.2	33.2	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 79	Part 80	Part 81	Part 82		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	18	2.1	2.2	4.5	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	44	70.5	31.3	298.5	0,125	28130
Boron (B)	4	ND	ND	0.4	0,125	15000
Cobalt (Co)	2	ND	ND	ND	0,125	130
Copper (Cu)	5	ND	2.2	ND	0,125	7700
Manganese (Mn)	1.5	0.8	2.8	8.5	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	6.1	0.7	2.9	0.9	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	22	45.3	55.7	6.6	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 83	Part 84	Part 85	Part 86		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	17	2	2.5	5.5	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	60.8	50	31	330.1	0,125	28130
Boron (B)	3.8	ND	ND	0.7	0,125	15000
Cobalt (Co)	2.1	ND	ND	ND	0,125	130
Copper (Cu)	5.6	ND	2.1	ND	0,125	7700
Manganese (Mn)	0.8	0.5	2.2	7.6	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	4.4	0.7	2.1	1.2	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	13	40	55.4	3.9	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 87	Part 88	Part 89	Part 90		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	15	1.1	1.7	2.8	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	65.3	47.1	28	45.1	0,125	28130
Boron (B)	4.3	ND	ND	ND	0,125	15000
Cobalt (Co)	1.5	ND	ND	ND	0,125	130
Copper (Cu)	4.1	ND	1.6	2.4	0,125	7700
Manganese (Mn)	0.9	1.6	1.6	2.3	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	4.4	0.9	1.8	2.1	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	27	48.5	41	26	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 91	Part 92	Part 93	Part 94		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	2.8	10.7	1.1	3.1	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	114	58.5	46.5	44.6	0,125	28130
Boron (B)	4.8	4.5	ND	ND	0,125	15000
Cobalt (Co)	0.8	2.6	ND	ND	0,125	130
Copper (Cu)	4.1	5.7	ND	2.5	0,125	7700
Manganese (Mn)	2.1	2.2	0.9	2.4	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	3.1	5.9	0.9	2.1	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	177	22.3	48	26.1	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 95	Part 96	Part 97	Part 98		
Antimony (Sb)	ND	ND	ND	ND	0,125	560
Arsenic (As)	ND	ND	ND	ND	0,125	47
Barium (Ba)	3.5	123	2.1	10.1	0,125	18750
Cadmium (Cd)	ND	ND	ND	ND	0,125	17
Chromium (III)	ND	ND	ND	ND	0,125	460
Chromium (VI)	ND	ND	ND	ND	0,025	0,053
Lead (Pb)	ND	ND	ND	ND	0,125	23
Mercury (Hg)	ND	ND	ND	ND	0,0125	94
Selenium (Se)	ND	ND	ND	ND	0,125	460
Aluminium (Al)	1	5.5	130	55	0,125	28130
Boron (B)	1.1	0.5	ND	4	0,125	15000
Cobalt (Co)	ND	ND	ND	2	0,125	130
Copper (Cu)	0.5	3.3	1.4	5	0,125	7700
Manganese (Mn)	11.6	7.9	1.7	21	0,125	15000
Nickel (Ni)	ND	ND	ND	ND	0,125	930
Strontium (Sr)	3.3	2.6	2.5	4.4	0,125	56000
Tin (Sn)	ND	ND	ND	ND	0,125	180000
Organic tin∆	ND	ND	ND	ND	0,125	12
Zinc (Zn)	3	7.7	64	21.2	0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

SAFETY OF TOYS – PART 3: MIGRATION OF CERTAIN ELEMENTS

BS EN 71 3:2019+A1:2021
Acid extraction method was used and migration elements content were determined by Inductively Coupled Plasma-ICP_MS.

	Results (mg/kg)				Detection Limit (mg/kg)	Requirements (mg/kg) Category III
	Part 99					
Antimony (Sb)	ND				0,125	560
Arsenic (As)	ND				0,125	47
Barium (Ba)	3.1				0,125	18750
Cadmium (Cd)	ND				0,125	17
Chromium (III)	ND				0,125	460
Chromium (VI)	ND				0,025	0,053
Lead (Pb)	ND				0,125	23
Mercury (Hg)	ND				0,0125	94
Selenium (Se)	ND				0,125	460
Aluminium (Al)	44				0,125	28130
Boron (B)	ND				0,125	15000
Cobalt (Co)	ND				0,125	130
Copper (Cu)	2.1				0,125	7700
Manganese (Mn)	21				0,125	15000
Nickel (Ni)	ND				0,125	930
Strontium (Sr)	2.3				0,125	56000
Tin (Sn)	ND				0,125	180000
Organic tin∆	ND				0,125	12
Zinc (Zn)	25				0,125	46000

∆ = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Dimethyl tin, Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n- Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

ppm (Part per million) =mg / kg
ND =Not Detected
(Estimated Total Uncertainty) =Liquid Paint: ±17% ; Scrapable coating: ±17% ; Paper: ±17% ; Plastic: ±17% ; Textile: ±17% ; Metal: ±17% ; Dewax: ±17%

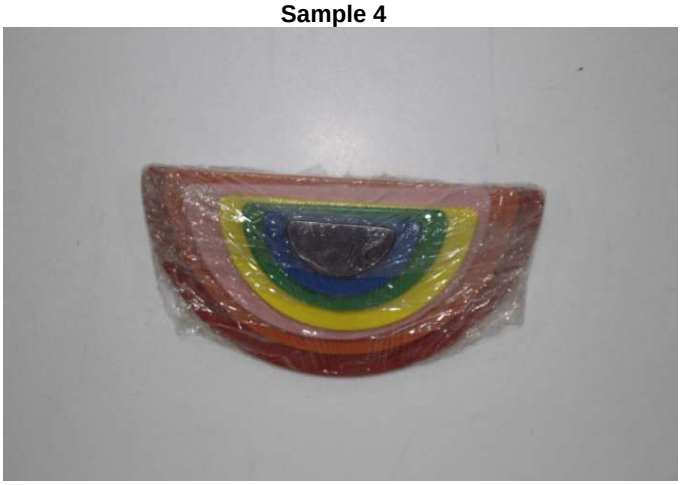
SAMPLE PHOTOS

Sample 1

Sample 2

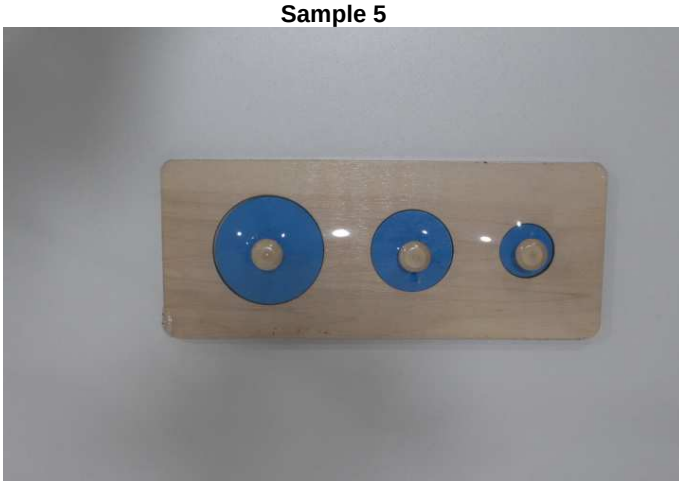
Sample 3

Sample 4

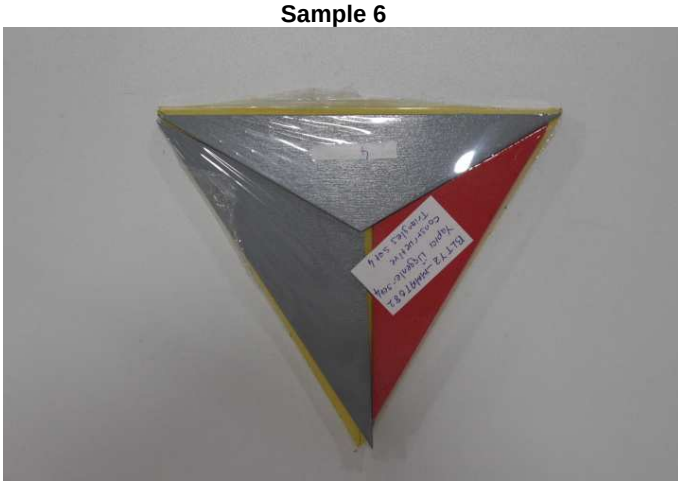


Intertek Test Hizmetleri A.S.
Merkez Mahallesi Sanayi Cad. No: 23 Altındağ Plaza Yenibosna 34197 - ISTANBUL / TURKEY
Phone : +90.212. 496 46 46 Fax : +90.212. 452 80 55
e-mail : intertekcg.turkiye@intertek.com
www.intertek-turkey.com

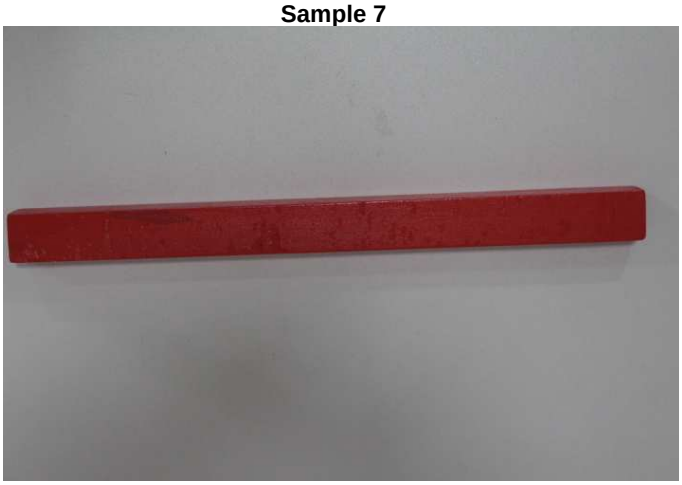
Sample 5



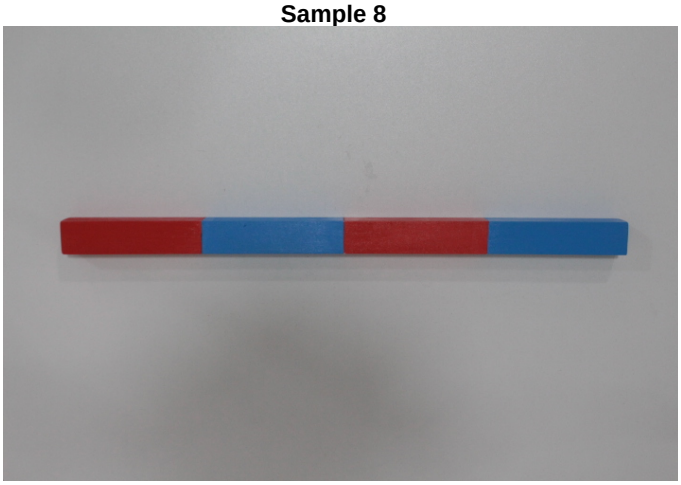
Sample 6



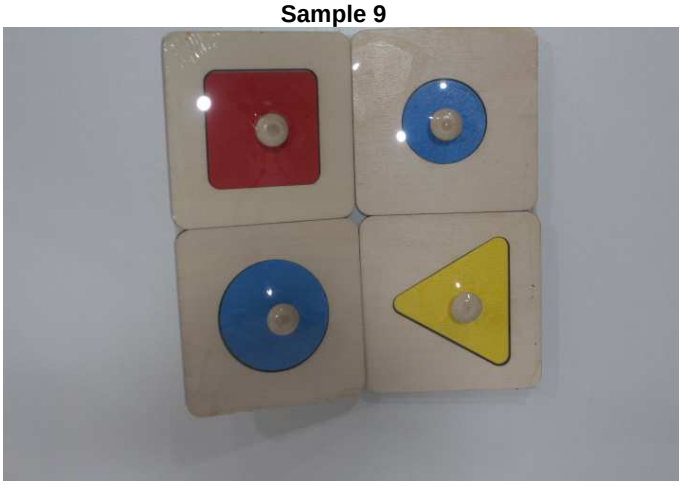
Sample 7



Sample 8

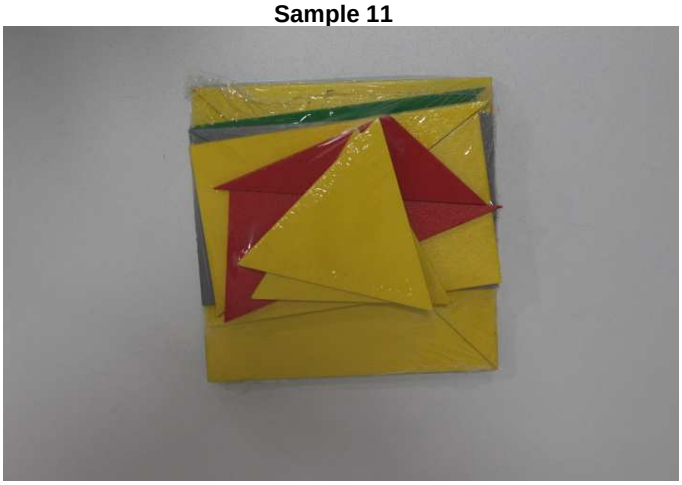


Sample 9

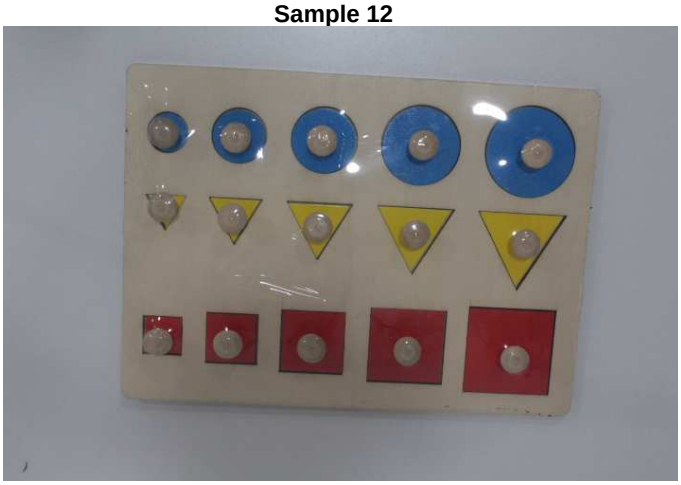


Sample 10

Sample 11

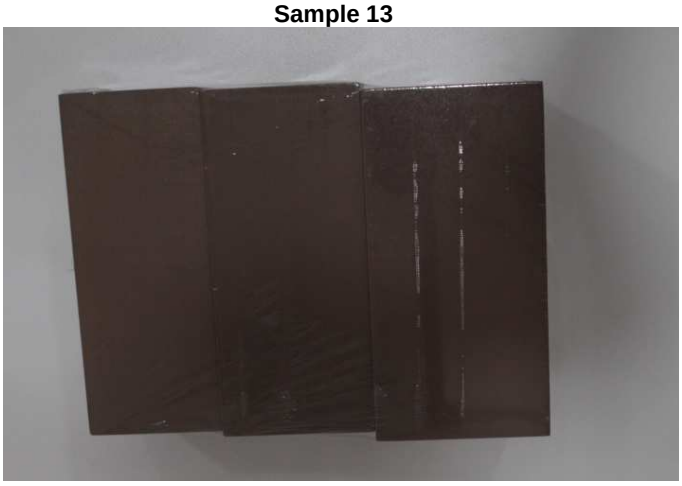


Sample 12



Intertek Test Hizmetleri A.S.
Merkez Mahallesi Sanayi Cad. No: 23 Altındağ Plaza Yenibosna 34197 - ISTANBUL / TURKEY
Phone : +90.212. 496 46 46 Fax : +90.212. 452 80 55
e-mail : intertekcg.turkiye@intertek.com
www.intertek-turkey.com

Sample 13



Sample 14

Sample 15

Sample 16

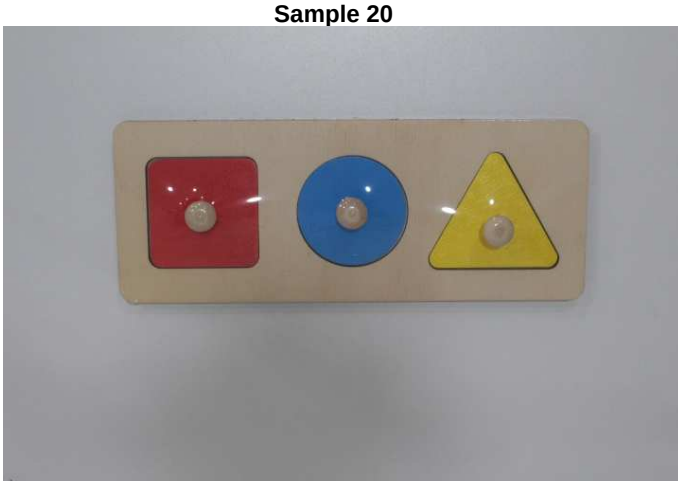
Intertek Test Hizmetleri A.S.
Merkez Mahallesi Sanayi Cad. No: 23 Altındağ Plaza Yenibosna 34197 - ISTANBUL / TURKEY
Phone : +90.212. 496 46 46 Fax : +90.212. 452 80 55
e-mail : intertekcg.turkiye@intertek.com
www.intertek-turkey.com

Sample 17

Sample 18

Sample 19

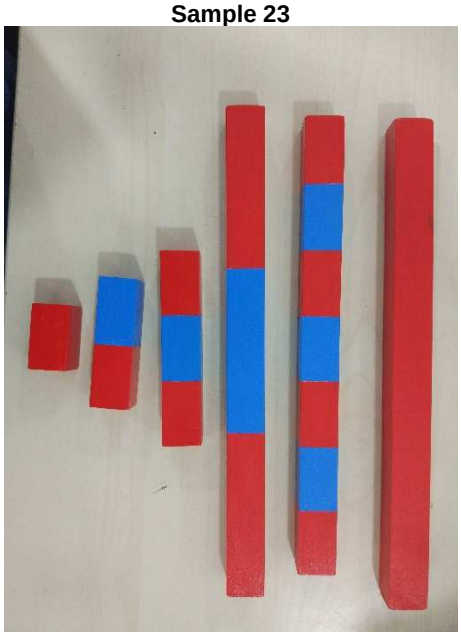
Sample 20



Sample 21

Sample 22

Sample 23



END OF TEST REPORT

Intertek Test Hizmetleri A.S.
Merkez Mahallesi Sanayi Cad. No: 23 Altındağ Plaza Yenibosna 34197 - ISTANBUL / TURKEY
Phone : +90.212. 496 46 46 Fax : +90.212. 452 80 55
e-mail : intertekcg.turkiye@intertek.com
www.intertek-turkey.com