

TEST REPORT

APPLICANT : SCENTCO LIMITED

ADDRESS : RM 401, 4/F, SUNG KEE IND. BLDG., 18 KWAI TING ROAD, KWAI CHUNG, N.T., HONG KONG

SAMPLE DESCRIPTION : COLORED SMENCILS

VENDOR : SCENTCO LIMITED

COUNTRY OF ORIGIN : China

COUNTRY OF DESTINATION : USA, EU, ASIA

AGE REQUESTED ON APPLICATION FORM : 3+

SAMPLE RECEIVED DATE : 16-May-2014

TURN AROUND TIME : 16-May-2014 to 27-May-2014, 8 Working Days

REVISED DATE : 20-Jun-2014

TEST REQUESTED	RESULT
- EN71 Part 3:2013 – Migration of Certain Elements	Pass

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***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

Signed for and on behalf of
Eurofins Product Testing Service (Shanghai) Co., Ltd



Chris Zhang
Lab Manager

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SAMPLE PHOTO



EFSH14051141-CG-01

TO BE CONTINUED

COMPONENT LIST

Component No.	Component
1	Transparent film without multi-color printing
2	Transparent plastic
3	Gray paper card (pencil body)
4	Azure soft plastic
5	Pink soft plastic
6	Purple soft plastic
7	Yellow soft plastic
8	Green soft plastic
9	Brown soft plastic
10	Black soft plastic
11	Red soft plastic
12	Orange soft plastic
13	Dark blue soft plastic
14	Azure lead
15	Pink lead
16	Purple lead
17	Green lead
18	Brown lead
19	Red lead
20	Orange lead
21	Dark blue lead
22	Azure end of pencil
23	Pink plastic end of pencil
24	Purple plastic end of pencil
25	Yellow plastic end of pencil
26	Green plastic end of pencil
27	Brown plastic end of pencil
28	Black plastic end of pencil
29	Red plastic end of pencil
30	Orange plastic end of pencil
31	Dark blue plastic end of pencil
32	Azure sticker (cotton canny)
33	Pink sticker (bubble gum)
34	Purple sticker (grape soda)
35	Yellow sticker (lemon lime fizz)
36	Green sticker (water-melon)
37	Brown sticker (root beer)
38	Black sticker (black cherry)
39	Red sticker (strawberry cupcake)
40	Orange sticker (orange lollipop)
41	Navy blue sticker (jelly donut)

TO BE CONTINUED

TEST RESULT

EN71 Part 3:2013 – Migration of Certain Elements

(Category III: scrapped-off toy material)

Test Method: Extractable Chromium(III) and Chromium(VI) – With reference to EN 71 Part 3:2013, analysis was performed by HPLC-ICP-MS

Elements – With reference to EN 71 Part 3:2013, analysis was performed by ICP-MS.

Extractable Organic Tin –With reference to EN 71 Part 3:2013, analysis was performed by GC-MS.

Requirements: European Directive 2009/48/EC

Test Item(s):	Limit	Unit	MDL	Result
				3
Extractable Lead (Pb)	160	mg/kg	10	ND
Extractable Antimony (Sb)	560	mg/kg	10	ND
Extractable Arsenic (As)	47	mg/kg	5	ND
Extractable Barium (Ba)	18750	mg/kg	50	ND
Extractable Cadmium (Cd)	17	mg/kg	1	ND
Extractable Mercury (Hg)	94	mg/kg	10	ND
Extractable Selenium (Se)	460	mg/kg	10	ND
Extractable Boron (B)	15000	mg/kg	50	ND
Extractable Cobalt (Co)	130	mg/kg	10	ND
Extractable Manganese (Mn)	15000	mg/kg	50	ND
Extractable Strontium (Sr)	56000	mg/kg	50	ND
Extractable Zinc (Zn)	46000	mg/kg	50	ND
Extractable Copper (Cu)	7700	mg/kg	50	ND
Extractable Aluminum (Al)	70000	mg/kg	50	339
Extractable Nickel (Ni)	930	mg/kg	10	ND
Extractable Tin (Sn)	180000	mg/kg	50	ND
Extractable Organic Tin [#]	12	mg/kg	0.2	ND
Extractable Chromium (III) (Cr III)	460	mg/kg	10	ND
Extractable Chromium (VI) (Cr VI)	0.2	mg/kg	0.1	ND

Remarks:

- (1) 1mg/kg=1ppm=0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)

Note:

[#] - The migration of organic tin is expressed as tributyltin.

TO BE CONTINUED

TEST RESULT

EN71 Part 3:2013 – Migration of Certain Elements

(Category III: scrapped-off toy material)

Test Method: Extractable Chromium(III) and Chromium(VI) – With reference to EN 71 Part 3:2013, analysis was performed by HPLC-ICP-MS

Elements – With reference to EN 71 Part 3:2013, analysis was performed by ICP-MS.

Extractable Organic Tin –With reference to EN 71 Part 3:2013, analysis was performed by GC-MS.

Requirements: European Directive 2009/48/EC

Test Item(s):	Limit	Unit	MDL	Result			
				1	2	4	5
Extractable Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND
Extractable Antimony (Sb)	560	mg/kg	10	ND	ND	ND	ND
Extractable Arsenic (As)	47	mg/kg	5	ND	ND	ND	ND
Extractable Barium (Ba)	18750	mg/kg	50	ND	ND	ND	ND
Extractable Cadmium (Cd)	17	mg/kg	1	ND	ND	ND	ND
Extractable Mercury (Hg)	94	mg/kg	10	ND	ND	ND	ND
Extractable Selenium (Se)	460	mg/kg	10	ND	ND	ND	ND
Extractable Boron (B)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Cobalt (Co)	130	mg/kg	10	ND	ND	ND	ND
Extractable Manganese (Mn)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Strontium (Sr)	56000	mg/kg	50	ND	ND	ND	ND
Extractable Zinc (Zn)	46000	mg/kg	50	ND	ND	ND	ND
Extractable Copper (Cu)	7700	mg/kg	50	ND	ND	ND	ND
Extractable Aluminum (Al)	70000	mg/kg	50	ND	ND	ND	ND
Extractable Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND
Extractable Tin (Sn)	180000	mg/kg	50	ND	ND	ND	ND
Extractable Organic Tin ^{#1}	12	mg/kg	0.2	ND	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.02	ND	ND	ND	ND
Extractable Chromium (III) (Cr III)	460	mg/kg	10	-	-	-	-
Extractable Chromium (VI) (Cr VI)	0.2	mg/kg	0.1	-	-	-	-

Remarks:

- (1) 1mg/kg=1ppm=0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)

Note:

^{#1} - The migration of organic tin is expressed as tributyltin.

^{#2} - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

TO BE CONTINUED

TEST RESULT

EN71 Part 3:2013 – Migration of Certain Elements

(Category III: scrapped-off toy material)

Test Method: Extractable Chromium(III) and Chromium(VI) – With reference to EN 71 Part 3:2013, analysis was performed by HPLC-ICP-MS

Elements – With reference to EN 71 Part 3:2013, analysis was performed by ICP-MS.

Extractable Organic Tin –With reference to EN 71 Part 3:2013, analysis was performed by GC-MS.

Requirements: European Directive 2009/48/EC

Test Item(s):	Limit	Unit	MDL	Result			
				6	7	8	9
Extractable Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND
Extractable Antimony (Sb)	560	mg/kg	10	ND	ND	ND	ND
Extractable Arsenic (As)	47	mg/kg	5	ND	ND	ND	ND
Extractable Barium (Ba)	18750	mg/kg	50	ND	ND	ND	ND
Extractable Cadmium (Cd)	17	mg/kg	1	ND	ND	ND	ND
Extractable Mercury (Hg)	94	mg/kg	10	ND	ND	ND	ND
Extractable Selenium (Se)	460	mg/kg	10	ND	ND	ND	ND
Extractable Boron (B)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Cobalt (Co)	130	mg/kg	10	ND	ND	ND	ND
Extractable Manganese (Mn)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Strontium (Sr)	56000	mg/kg	50	ND	ND	ND	ND
Extractable Zinc (Zn)	46000	mg/kg	50	ND	ND	ND	ND
Extractable Copper (Cu)	7700	mg/kg	50	ND	ND	ND	ND
Extractable Aluminum (Al)	70000	mg/kg	50	ND	ND	ND	ND
Extractable Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND
Extractable Tin (Sn)	180000	mg/kg	50	ND	ND	ND	ND
Extractable Organic Tin ^{#1}	12	mg/kg	0.2	ND	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.02	ND	ND	ND	ND
Extractable Chromium (III) (Cr III)	460	mg/kg	10	-	-	-	-
Extractable Chromium (VI) (Cr VI)	0.2	mg/kg	0.1	-	-	-	-

Remarks:

- (1) 1mg/kg=1ppm=0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)

Note:

^{#1} - The migration of organic tin is expressed as tributyltin.

^{#2} - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

TO BE CONTINUED

TEST RESULT

EN71 Part 3:2013 – Migration of Certain Elements

(Category III: scrapped-off toy material)

Test Method: Extractable Chromium(III) and Chromium(VI) – With reference to EN 71 Part 3:2013, analysis was performed by HPLC-ICP-MS

Elements – With reference to EN 71 Part 3:2013, analysis was performed by ICP-MS.

Extractable Organic Tin –With reference to EN 71 Part 3:2013, analysis was performed by GC-MS.

Requirements: European Directive 2009/48/EC

Test Item(s):	Limit	Unit	MDL	Result			
				10	11	12	13
Extractable Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND
Extractable Antimony (Sb)	560	mg/kg	10	ND	ND	ND	ND
Extractable Arsenic (As)	47	mg/kg	5	ND	ND	ND	ND
Extractable Barium (Ba)	18750	mg/kg	50	ND	ND	ND	ND
Extractable Cadmium (Cd)	17	mg/kg	1	ND	ND	ND	ND
Extractable Mercury (Hg)	94	mg/kg	10	ND	ND	ND	ND
Extractable Selenium (Se)	460	mg/kg	10	ND	ND	ND	ND
Extractable Boron (B)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Cobalt (Co)	130	mg/kg	10	ND	ND	ND	ND
Extractable Manganese (Mn)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Strontium (Sr)	56000	mg/kg	50	ND	ND	ND	ND
Extractable Zinc (Zn)	46000	mg/kg	50	ND	ND	ND	ND
Extractable Copper (Cu)	7700	mg/kg	50	ND	ND	ND	ND
Extractable Aluminum (Al)	70000	mg/kg	50	ND	ND	ND	ND
Extractable Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND
Extractable Tin (Sn)	180000	mg/kg	50	ND	ND	ND	ND
Extractable Organic Tin ^{#1}	12	mg/kg	0.2	ND	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.02	ND	ND	ND	ND
Extractable Chromium (III) (Cr III)	460	mg/kg	10	-	-	-	-
Extractable Chromium (VI) (Cr VI)	0.2	mg/kg	0.1	-	-	-	-

Remarks:

- (1) 1mg/kg=1ppm=0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)

Note:

^{#1} - The migration of organic tin is expressed as tributyltin.

^{#2} - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

TO BE CONTINUED

TEST RESULT

EN71 Part 3:2013 – Migration of Certain Elements

(Category I: dry, brittle, powder-like or pliable toy material)

Test Method: Extractable Chromium(III) and Chromium(VI) – With reference to EN 71 Part 3:2013, analysis was performed by HPLC-ICP-MS

Elements – With reference to EN 71 Part 3:2013, analysis was performed by ICP-MS.

Extractable Organic Tin –With reference to EN 71 Part 3:2013, analysis was performed by GC-MS.

Requirements: European Directive 2009/48/EC

Test Item(s):	Limit	Unit	MDL	Result			
				14	15	16	17
Extractable Lead (Pb)	13.5	mg/kg	1	ND	ND	ND	ND
Extractable Antimony (Sb)	45	mg/kg	5	ND	ND	ND	ND
Extractable Arsenic (As)	3.8	mg/kg	0.2	ND	ND	ND	ND
Extractable Barium (Ba)	1500	mg/kg	50	ND	ND	ND	ND
Extractable Cadmium (Cd)	1.3	mg/kg	0.1	ND	ND	ND	ND
Extractable Mercury (Hg)	7.5	mg/kg	0.5	ND	ND	ND	ND
Extractable Selenium (Se)	37.5	mg/kg	2	ND	ND	ND	ND
Extractable Boron (B)	1200	mg/kg	50	ND	ND	ND	ND
Extractable Cobalt (Co)	10.5	mg/kg	1	ND	ND	ND	ND
Extractable Manganese (Mn)	1200	mg/kg	50	ND	ND	ND	ND
Extractable Strontium (Sr)	4500	mg/kg	50	ND	ND	ND	ND
Extractable Zinc (Zn)	3750	mg/kg	50	3190	ND	3250	ND
Extractable Copper (Cu)	622.5	mg/kg	10	ND	ND	ND	ND
Extractable Aluminum (Al)	5625	mg/kg	50	134	191	126	ND
Extractable Nickel (Ni)	75	mg/kg	5	ND	ND	ND	ND
Extractable Tin (Sn)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Organic Tin ^{#1}	0.9	mg/kg	0.2	ND	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.02	ND	ND	ND	ND
Extractable Chromium (III) (Cr III)	37.5	mg/kg	2	-	-	-	-
Extractable Chromium (VI) (Cr VI)	0.02	mg/kg	0.02	-	-	-	-

Remarks:

- (1) 1mg/kg=1ppm=0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)

Note:

^{#1} - The migration of organic tin is expressed as tributyltin.

^{#2} - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

TO BE CONTINUED

TEST RESULT

EN71 Part 3:2013 – Migration of Certain Elements

(Category I: dry, brittle, powder-like or pliable toy material)

Test Method: Extractable Chromium(III) and Chromium(VI) – With reference to EN 71 Part 3:2013, analysis was performed by HPLC-ICP-MS

Elements – With reference to EN 71 Part 3:2013, analysis was performed by ICP-MS.

Extractable Organic Tin –With reference to EN 71 Part 3:2013, analysis was performed by GC-MS.

Requirements: European Directive 2009/48/EC

Test Item(s):	Limit	Unit	MDL	Result			
				18	19	20	21
Extractable Lead (Pb)	13.5	mg/kg	1	ND	ND	ND	ND
Extractable Antimony (Sb)	45	mg/kg	5	ND	ND	ND	ND
Extractable Arsenic (As)	3.8	mg/kg	0.2	ND	ND	ND	ND
Extractable Barium (Ba)	1500	mg/kg	50	ND	ND	ND	ND
Extractable Cadmium (Cd)	1.3	mg/kg	0.1	ND	ND	ND	ND
Extractable Mercury (Hg)	7.5	mg/kg	0.5	ND	ND	ND	ND
Extractable Selenium (Se)	37.5	mg/kg	2	ND	ND	ND	ND
Extractable Boron (B)	1200	mg/kg	50	ND	ND	ND	ND
Extractable Cobalt (Co)	10.5	mg/kg	1	ND	ND	ND	ND
Extractable Manganese (Mn)	1200	mg/kg	50	ND	ND	ND	ND
Extractable Strontium (Sr)	4500	mg/kg	50	ND	ND	ND	ND
Extractable Zinc (Zn)	3750	mg/kg	50	3560	2650	ND	2980
Extractable Copper (Cu)	622.5	mg/kg	10	ND	ND	ND	ND
Extractable Aluminum (Al)	5625	mg/kg	50	96.3	92.7	51.0	116
Extractable Nickel (Ni)	75	mg/kg	5	ND	ND	ND	ND
Extractable Tin (Sn)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Organic Tin ^{#1}	0.9	mg/kg	0.2	ND	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.02	ND	ND	ND	ND
Extractable Chromium (III) (Cr III)	37.5	mg/kg	2	-	-	-	-
Extractable Chromium (VI) (Cr VI)	0.02	mg/kg	0.02	-	-	-	-

Remarks:

- (1) 1mg/kg=1ppm=0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)
- (4) * The result was found to be more than the permissible limit

Note:

^{#1} - The migration of organic tin is expressed as tributyltin.

^{#2} - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

TO BE CONTINUED

TEST RESULT

EN71 Part 3:2013 – Migration of Certain Elements

(Category III: scrapped-off toy material)

Test Method: Extractable Chromium(III) and Chromium(VI) – With reference to EN 71 Part 3:2013, analysis was performed by HPLC-ICP-MS

Elements – With reference to EN 71 Part 3:2013, analysis was performed by ICP-MS.

Extractable Organic Tin –With reference to EN 71 Part 3:2013, analysis was performed by GC-MS.

Requirements: European Directive 2009/48/EC

Test Item(s):	Limit	Unit	MDL	Result			
				22	23	24	25
Extractable Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND
Extractable Antimony (Sb)	560	mg/kg	10	ND	ND	ND	ND
Extractable Arsenic (As)	47	mg/kg	5	ND	ND	ND	ND
Extractable Barium (Ba)	18750	mg/kg	50	ND	56.5	58.8	64.1
Extractable Cadmium (Cd)	17	mg/kg	1	ND	ND	ND	ND
Extractable Mercury (Hg)	94	mg/kg	10	ND	ND	ND	ND
Extractable Selenium (Se)	460	mg/kg	10	ND	ND	ND	ND
Extractable Boron (B)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Cobalt (Co)	130	mg/kg	10	ND	ND	ND	ND
Extractable Manganese (Mn)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Strontium (Sr)	56000	mg/kg	50	ND	ND	ND	ND
Extractable Zinc (Zn)	46000	mg/kg	50	ND	ND	ND	ND
Extractable Copper (Cu)	7700	mg/kg	50	ND	ND	ND	ND
Extractable Aluminum (Al)	70000	mg/kg	50	ND	ND	ND	ND
Extractable Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND
Extractable Tin (Sn)	180000	mg/kg	50	ND	ND	ND	ND
Extractable Organic Tin ^{#1}	12	mg/kg	0.2	ND	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.02	ND	ND	ND	ND
Extractable Chromium (III) (Cr III)	460	mg/kg	10	-	-	-	-
Extractable Chromium (VI) (Cr VI)	0.2	mg/kg	0.1	-	-	-	-

Remarks:

- (1) 1mg/kg=1ppm=0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)

Note:

^{#1} - The migration of organic tin is expressed as tributyltin.

^{#2} - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

TO BE CONTINUED

TEST RESULT

EN71 Part 3:2013 – Migration of Certain Elements

(Category III: scrapped-off toy material)

Test Method: Extractable Chromium(III) and Chromium(VI) – With reference to EN 71 Part 3:2013, analysis was performed by HPLC-ICP-MS

Elements – With reference to EN 71 Part 3:2013, analysis was performed by ICP-MS.

Extractable Organic Tin –With reference to EN 71 Part 3:2013, analysis was performed by GC-MS.

Requirements: European Directive 2009/48/EC

Test Item(s):	Limit	Unit	MDL	Result			
				26	27	28	29
Extractable Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND
Extractable Antimony (Sb)	560	mg/kg	10	ND	ND	ND	ND
Extractable Arsenic (As)	47	mg/kg	5	ND	ND	ND	ND
Extractable Barium (Ba)	18750	mg/kg	50	56.5	52.2	ND	ND
Extractable Cadmium (Cd)	17	mg/kg	1	ND	ND	ND	ND
Extractable Mercury (Hg)	94	mg/kg	10	ND	ND	ND	ND
Extractable Selenium (Se)	460	mg/kg	10	ND	ND	ND	ND
Extractable Boron (B)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Cobalt (Co)	130	mg/kg	10	ND	ND	ND	ND
Extractable Manganese (Mn)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Strontium (Sr)	56000	mg/kg	50	ND	ND	ND	ND
Extractable Zinc (Zn)	46000	mg/kg	50	ND	ND	ND	ND
Extractable Copper (Cu)	7700	mg/kg	50	ND	ND	ND	ND
Extractable Aluminum (Al)	70000	mg/kg	50	ND	ND	ND	ND
Extractable Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND
Extractable Tin (Sn)	180000	mg/kg	50	ND	ND	ND	ND
Extractable Organic Tin ^{#1}	12	mg/kg	0.2	ND	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.02	ND	ND	ND	ND
Extractable Chromium (III) (Cr III)	460	mg/kg	10	-	-	-	-
Extractable Chromium (VI) (Cr VI)	0.2	mg/kg	0.1	-	-	-	-

Remarks:

- (1) 1mg/kg=1ppm=0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)

Note:

^{#1} - The migration of organic tin is expressed as tributyltin.

^{#2} - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

TO BE CONTINUED

TEST RESULT

EN71 Part 3:2013 – Migration of Certain Elements

(Category III: scrapped-off toy material)

Test Method: Extractable Chromium(III) and Chromium(VI) – With reference to EN 71 Part 3:2013, analysis was performed by HPLC-ICP-MS

Elements – With reference to EN 71 Part 3:2013, analysis was performed by ICP-MS.

Extractable Organic Tin –With reference to EN 71 Part 3:2013, analysis was performed by GC-MS.

Requirements: European Directive 2009/48/EC

Test Item(s):	Limit	Unit	MDL	Result			
				30	31	32	33
Extractable Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND
Extractable Antimony (Sb)	560	mg/kg	10	ND	ND	ND	ND
Extractable Arsenic (As)	47	mg/kg	5	ND	ND	ND	ND
Extractable Barium (Ba)	18750	mg/kg	50	54.7	66.0	ND	ND
Extractable Cadmium (Cd)	17	mg/kg	1	ND	ND	ND	ND
Extractable Mercury (Hg)	94	mg/kg	10	ND	ND	ND	ND
Extractable Selenium (Se)	460	mg/kg	10	ND	ND	ND	ND
Extractable Boron (B)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Cobalt (Co)	130	mg/kg	10	ND	ND	ND	ND
Extractable Manganese (Mn)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Strontium (Sr)	56000	mg/kg	50	ND	ND	ND	ND
Extractable Zinc (Zn)	46000	mg/kg	50	ND	ND	ND	ND
Extractable Copper (Cu)	7700	mg/kg	50	ND	ND	ND	ND
Extractable Aluminum (Al)	70000	mg/kg	50	ND	ND	ND	ND
Extractable Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND
Extractable Tin (Sn)	180000	mg/kg	50	ND	ND	ND	ND
Extractable Organic Tin ^{#1}	12	mg/kg	0.2	ND	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.02	ND	ND	ND	ND
Extractable Chromium (III) (Cr III)	460	mg/kg	10	-	-	-	-
Extractable Chromium (VI) (Cr VI)	0.2	mg/kg	0.1	-	-	-	-

Remarks:

- (1) 1mg/kg=1ppm=0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)

Note:

^{#1} - The migration of organic tin is expressed as tributyltin.

^{#2} - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

TO BE CONTINUED

TEST RESULT

EN71 Part 3:2013 – Migration of Certain Elements

(Category III: scrapped-off toy material)

Test Method: Extractable Chromium(III) and Chromium(VI) – With reference to EN 71 Part 3:2013, analysis was performed by HPLC-ICP-MS

Elements – With reference to EN 71 Part 3:2013, analysis was performed by ICP-MS.

Extractable Organic Tin –With reference to EN 71 Part 3:2013, analysis was performed by GC-MS.

Requirements: European Directive 2009/48/EC

Test Item(s):	Limit	Unit	MDL	Result			
				34	35	36	37
Extractable Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND
Extractable Antimony (Sb)	560	mg/kg	10	ND	ND	ND	ND
Extractable Arsenic (As)	47	mg/kg	5	ND	ND	ND	ND
Extractable Barium (Ba)	18750	mg/kg	50	ND	ND	124	ND
Extractable Cadmium (Cd)	17	mg/kg	1	ND	ND	ND	ND
Extractable Mercury (Hg)	94	mg/kg	10	ND	ND	ND	ND
Extractable Selenium (Se)	460	mg/kg	10	ND	ND	ND	ND
Extractable Boron (B)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Cobalt (Co)	130	mg/kg	10	ND	ND	ND	ND
Extractable Manganese (Mn)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Strontium (Sr)	56000	mg/kg	50	ND	ND	ND	ND
Extractable Zinc (Zn)	46000	mg/kg	50	ND	ND	ND	ND
Extractable Copper (Cu)	7700	mg/kg	50	ND	ND	ND	ND
Extractable Aluminum (Al)	70000	mg/kg	50	ND	ND	ND	ND
Extractable Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND
Extractable Tin (Sn)	180000	mg/kg	50	ND	ND	ND	ND
Extractable Organic Tin ^{#1}	12	mg/kg	0.2	ND	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.02	ND	ND	ND	ND
Extractable Chromium (III) (Cr III)	460	mg/kg	10	-	-	-	-
Extractable Chromium (VI) (Cr VI)	0.2	mg/kg	0.1	-	-	-	-

Remarks:

- (1) 1mg/kg=1ppm=0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)

Note:

^{#1} - The migration of organic tin is expressed as tributyltin.

^{#2} - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

TO BE CONTINUED

TEST RESULT

EN71 Part 3:2013 – Migration of Certain Elements

(Category III: scrapped-off toy material)

Test Method: Extractable Chromium(III) and Chromium(VI) – With reference to EN 71 Part 3:2013, analysis was performed by HPLC-ICP-MS

Elements – With reference to EN 71 Part 3:2013, analysis was performed by ICP-MS.

Extractable Organic Tin –With reference to EN 71 Part 3:2013, analysis was performed by GC-MS.

Requirements: European Directive 2009/48/EC

Test Item(s):	Limit	Unit	MDL	Result			
				38	39	40	41
Extractable Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND
Extractable Antimony (Sb)	560	mg/kg	10	ND	ND	ND	ND
Extractable Arsenic (As)	47	mg/kg	5	ND	ND	ND	ND
Extractable Barium (Ba)	18750	mg/kg	50	ND	ND	ND	ND
Extractable Cadmium (Cd)	17	mg/kg	1	ND	ND	ND	ND
Extractable Mercury (Hg)	94	mg/kg	10	ND	ND	ND	ND
Extractable Selenium (Se)	460	mg/kg	10	ND	ND	ND	ND
Extractable Boron (B)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Cobalt (Co)	130	mg/kg	10	ND	ND	ND	ND
Extractable Manganese (Mn)	15000	mg/kg	50	ND	ND	ND	ND
Extractable Strontium (Sr)	56000	mg/kg	50	ND	ND	ND	ND
Extractable Zinc (Zn)	46000	mg/kg	50	ND	ND	ND	ND
Extractable Copper (Cu)	7700	mg/kg	50	ND	ND	ND	ND
Extractable Aluminum (Al)	70000	mg/kg	50	ND	ND	ND	ND
Extractable Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND
Extractable Tin (Sn)	180000	mg/kg	50	ND	ND	ND	ND
Extractable Organic Tin ^{#1}	12	mg/kg	0.2	ND	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.02	ND	ND	ND	ND
Extractable Chromium (III) (Cr III)	460	mg/kg	10	-	-	-	-
Extractable Chromium (VI) (Cr VI)	0.2	mg/kg	0.1	-	-	-	-

Remarks:

- (1) 1mg/kg=1ppm=0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)

Note:

^{#1} - The migration of organic tin is expressed as tributyltin.

^{#2} - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

*** END OF THE REPORT ***