

TEST REPORT

<u>APPLICANT</u>	: SCENTCO LIMITED
<u>ADDRESS</u>	: RM 401, 4/F, SUNG KEE IND. BLDG., 18 KWAI TING ROAD, KWAI CHUNG, N.T., HONG KONG
<u>SAMPLE DESCRIPTION</u>	: SMARKERS
<u>VENDOR</u>	: SCENTCO LIMITED
<u>COUNTRY OF ORIGIN</u>	: China
<u>COUNTRY OF DESTINATION</u>	: USA, EU, ASIA
<u>AGE REQUESTED ON APPLICATION FORM</u>	: 3+
<u>LABELED AGE GRADE</u>	: Not Present
<u>AGE GRADE APPLIED IN TESTING</u>	: 3+
<u>SAMPLE RECEIVED DATE</u>	: 16-May-2014
<u>FURTHER INFORMATION DATE</u>	: 09-Jun-2014
<u>TURN AROUND TIME</u>	: 09-Jun-2014 to 10-Jun-2014, 2 Working Days

TEST REQUESTED	RESULT
- EN71 Part 1:2011+A2:2013 – Mechanical and Physical Properties	Pass
- Labeling requirement (Washing/Cleaning Label, CE mark, importer / manufacturer mark (name, address), product identification) according to the Directive 2009/48/EC – Safety of toys)	Pass
- EN71 Part 2:2011 – Flammability	Pass
- EN71 Part 3:2013 – Migration of Certain Elements	Pass
- BS 7272:2008- Writing and Marking Instruments – Part1: Specification for caps to reduce the risk of asphyxiation	Pass
- BS 7272:2008- Writing and Marking Instruments – Part 2 : Specification for end closures to reduce the risk of asphyxiation	Pass

Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to sh.info@eurofins.com and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Shanghai) Co., Ltd.

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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



Terric Ji
Lab Manager

SAMPLE PHOTO



EFSH14051146-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	Red soft plastic
10	Azure plastic pen lid
11	Pink plastic pen lid
12	Purple plastic pen lid
13	Yellow plastic pen lid
14	Light green plastic pen lid
15	Red plastic pen lid
16	White fiber with azure ink
17	White fiber wit pink ink
18	White fiber with purple ink
19	White fiber with yellow ink
20	White fiber with green ink
21	White fiber with red ink
22	White plastic under transparent plastic film
23	Watermelon sticker - green/red
24	Cotton candy sticker
25	Grape soda sticker
26	Cupcake sticker
27	Chery vanilla sticker
28	Bubble gum sticker

TO BE CONTINUED

TEST RESULT

Mechanical and Physical Properties

As Specified in European Standard on Safety of Toys EN71 Part 1:2011+A2:2013

Clause	Description	Result
4	General requirements	
4.1	Material cleanliness (by visual assessment)	Pass
4.2	Assembly	Not Applicable
4.3	Flexible plastics sheeting	Not Applicable
4.4	Toy Bags	Not Applicable
4.5	Glass	Not Applicable
4.6	Expanding Materials	Not Applicable
4.7	Edges	Pass
4.8	Points and Metallic Wires	Pass
4.9	Protruding parts	Not Applicable
4.10	Parts moving against each other:	
	4.10.1 Folding and sliding mechanisms	Not Applicable
	4.10.2 Driving mechanisms.	Not Applicable
	4.10.3 Hinges	Not Applicable
	4.10.4 Springs	Not Applicable
4.11	Mouth-actuated toys and other toys intended to be put in the mouth	Not Applicable
4.12	Balloons	Not Applicable
4.13	Cords of toy kites and other flying toys.	Not Applicable
4.14	Enclosures:	
	4.14.1 Toys which a child can enter	Not Applicable
	4.14.2 Masks and helmets	Not Applicable
4.15	Toys intended to bear the mass of a child:	
	4.15.1 Toys propelled by the child or by other means	Not Applicable
	4.15.2 Toy bicycles	Not Applicable
	4.15.3 Rocking horses and similar toys	Not Applicable
	4.15.4 Toys not propelled by a child	Not Applicable
	4.15.5 Toys scooters	Not Applicable
4.16	Heavy immobile toys	Not Applicable
4.17	Projectiles	Not Applicable
4.18	Aquatic toys and inflatable toys	Not Applicable
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	Not Applicable
4.20	Acoustics	
	4.20.2.1 General	Not Applicable
	4.20.2.2 Close-to-the-ear toys	Not Applicable
	4.20.2.3 Table-top or floor toys	Not Applicable
	4.20.2.4 Hand-held toys	Not Applicable
	4.20.2.5 Toys using headphones or earphones	Not Applicable
	4.20.2.6 Rattles	Not Applicable
	4.20.2.7 Squeeze toys	Not Applicable
	4.20.2.8 Pull-along or push toys	Not Applicable
	4.20.2.9 Percussion toys	Not Applicable
	4.20.2.10 Wind toys	Not Applicable
	4.20.2.11 Cap-firing toys	Not Applicable
	4.20.2.12 Voice toys	Not Applicable

TO BE CONTINUED

TEST RESULT

Clause	Description	Result
4	General requirements	
4.21	Toys containing a non-electrical heat source	Not Applicable
4.22	Small balls	Not Applicable
4.23	Magnets	Not Applicable
4.24	Yo-yo balls	Not Applicable
4.25	Toys attached to food	Not Applicable
5	Toys intended for children under 36 months	
5.1	General requirements	Not Applicable
5.2	Soft-filled toys and soft-filled parts of a toy	Not Applicable
5.3	Plastic sheeting	Not Applicable
5.4	Cords, chains and electrical cables in toys	Not Applicable
5.5	Liquid-filled toys	Not Applicable
5.6	Speed limitation of electrically-driven ride-on toys	Not Applicable
5.7	Glass and porcelain	Not Applicable
5.8	Shape and size of certain toys	Not Applicable
5.9	Toys comprising monofilament fibres	Not Applicable
5.10	Small balls	Not Applicable
5.11	Play figures	Not Applicable
5.12	Hemispheric-shaped toys	Not Applicable
5.13	Suction cups	Not Applicable
5.14	Straps intended to be worn fully or partially around the neck	Not Applicable
6	Packaging	Not Applicable
7	Warnings, markings and instructions for use	
7.1	General	Pass
7.2	Toys not intended for children under 36 months	Pass
7.3	Latex Balloons	Not Applicable
7.4	Aquatic toys	Not Applicable
7.5	Functional Toys	Not Applicable
7.6	Hazardous sharp functional edges and points	Not Applicable
7.7	Projectiles	Not Applicable
7.8	Imitation protective masks and helmets	Not Applicable
7.9	Toy kites	Not Applicable
7.10	Roller skates, inline skates, skateboards and certain other ride-on toys	Not Applicable
7.11	Toys intended to be attached to or strung across a cradle, cot, or perambulator	Not Applicable
7.12	Liquid-filled teethers	Not Applicable
7.13	Percussion caps specifically designed for use in toys	Not Applicable
7.14	Acoustics	Not Applicable
7.15	Toys bicycles	Not Applicable
7.16	Toys intended to bear the mass of a child	Not Applicable
7.17	Toys comprising monofilament fibres	Not Applicable
7.18	Toy scooters	Not Applicable
7.19	Rocking horses and similar toys	Not Applicable
7.20	Magnetic/electrical experimental sets	Not Applicable
7.21	Toy with electrical cables exceeding 300mm in length	Not Applicable
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	Not Applicable

TO BE CONTINUED

TEST RESULT

Labeling requirement (Washing/Cleaning instruction, CE mark, importer / manufacturer name and address, product identification) according to the Directive 2009/48/EC – Safety of toys

	Observation Result	Location	Conclusion
Washing/Cleaning instruction	Not Applicable	--	--
CE mark	Present, Correct form, CE marking (height=5.52mm)	Packaging	Pass
Importer's Name & Address	Present	Packaging	Pass
Manufacturer's Name & Address	Present	Packaging	
Product ID	Present	Packaging	Pass

Flammability of Toys

As Specified in European Standard on Safety of Toys EN71 Part 2: 2011.

Clause	Description	Result
4	Requirements	
4.1	General Requirements	Pass
4.2	Toys to be worn on the head	Not Applicable
4.3	Toy disguise costumes and toys intended to be worn by a child in play	Not Applicable
4.4	Toys intended to be entered by a child.	Not Applicable
4.5	Soft-filled toys (animals and dolls, etc) (Sample was not tested if its maximum dimension is 150mm or less.)	Not Applicable

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 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			
				14	15	22	23
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	124
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				
				24	25	26	27	28
Extractable Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	560	mg/kg	10	ND	ND	ND	ND	ND
Extractable Arsenic (As)	47	mg/kg	5	ND	ND	ND	ND	ND
Extractable Barium (Ba)	18750	mg/kg	50	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	17	mg/kg	1	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	94	mg/kg	10	ND	ND	ND	ND	ND
Extractable Selenium (Se)	460	mg/kg	10	ND	ND	ND	ND	ND
Extractable Boron (B)	15000	mg/kg	50	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	130	mg/kg	10	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	15000	mg/kg	50	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	56000	mg/kg	50	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	46000	mg/kg	50	ND	ND	ND	ND	ND
Extractable Copper (Cu)	7700	mg/kg	50	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	70000	mg/kg	50	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND	ND
Extractable Tin (Sn)	180000	mg/kg	50	ND	ND	ND	ND	ND
Extractable Organic Tin ^{#1}	12	mg/kg	0.2	ND	ND	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.02	ND	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 II: liquid or sticky 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		
				16	17	18
Extractable Lead (Pb)	3.4	mg/kg	0.2	ND	ND	ND
Extractable Antimony (Sb)	11.3	mg/kg	1	ND	ND	ND
Extractable Arsenic (As)	0.9	mg/kg	0.1	ND	ND	ND
Extractable Barium (Ba)	375	mg/kg	10	ND	ND	ND
Extractable Cadmium (Cd)	0.3	mg/kg	0.05	ND	ND	ND
Extractable Mercury (Hg)	1.9	mg/kg	0.2	ND	ND	ND
Extractable Selenium (Se)	9.4	mg/kg	1	ND	ND	ND
Extractable Boron (B)	300	mg/kg	10	ND	ND	ND
Extractable Cobalt (Co)	2.6	mg/kg	0.2	ND	ND	ND
Extractable Manganese (Mn)	300	mg/kg	10	ND	ND	ND
Extractable Strontium (Sr)	1125	mg/kg	50	ND	ND	ND
Extractable Zinc (Zn)	938	mg/kg	50	ND	ND	ND
Extractable Copper (Cu)	156	mg/kg	10	ND	ND	ND
Extractable Aluminum (Al)	1406	mg/kg	50	ND	ND	ND
Extractable Nickel (Ni)	18.8	mg/kg	2	ND	ND	ND
Extractable Tin (Sn)	3750	mg/kg	50	ND	ND	ND
Extractable Organic Tin ^{#1}	0.2	mg/kg	0.2	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.005	ND	ND	ND
Extractable Chromium (III) (Cr III)	9.4	mg/kg	1	-	-	-
Extractable Chromium (VI) (Cr VI)	0.005	mg/kg	0.005	-	-	-

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 II: liquid or sticky 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		
				19	20	21
Extractable Lead (Pb)	3.4	mg/kg	0.2	ND	ND	ND
Extractable Antimony (Sb)	11.3	mg/kg	1	ND	ND	ND
Extractable Arsenic (As)	0.9	mg/kg	0.1	ND	ND	ND
Extractable Barium (Ba)	375	mg/kg	10	ND	ND	ND
Extractable Cadmium (Cd)	0.3	mg/kg	0.05	ND	ND	ND
Extractable Mercury (Hg)	1.9	mg/kg	0.2	ND	ND	ND
Extractable Selenium (Se)	9.4	mg/kg	1	ND	ND	ND
Extractable Boron (B)	300	mg/kg	10	ND	ND	ND
Extractable Cobalt (Co)	2.6	mg/kg	0.2	ND	ND	ND
Extractable Manganese (Mn)	300	mg/kg	10	ND	ND	ND
Extractable Strontium (Sr)	1125	mg/kg	50	ND	ND	ND
Extractable Zinc (Zn)	938	mg/kg	50	ND	ND	ND
Extractable Copper (Cu)	156	mg/kg	10	ND	ND	ND
Extractable Aluminum (Al)	1406	mg/kg	50	ND	ND	ND
Extractable Nickel (Ni)	18.8	mg/kg	2	ND	ND	ND
Extractable Tin (Sn)	3750	mg/kg	50	ND	ND	ND
Extractable Organic Tin ^{#1}	0.2	mg/kg	0.2	ND	ND	ND
Extractable Chromium ^{#2}	-	mg/kg	0.005	ND	ND	ND
Extractable Chromium (III) (Cr III)	9.4	mg/kg	1	-	-	-
Extractable Chromium (VI) (Cr VI)	0.005	mg/kg	0.005	-	-	-

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

BS 7272:2008- Writing and Marking Instruments

- Part1: Specification for caps to reduce the risk of asphyxiation

1. Number of Test Specimen: 5 pieces of samples
2. Test Result : Details Shown As Following Table:

Clause	Test Requirement / Method	Result
3	Requirements	
3.1	General Caps shall conform to at least one of the following 3.2or 3.3	
3.2	Cap Size When a cap is introduced with its main axis perpendicular to a 16mm diameter ring gauge of at least 19mm thickness, and part of the cap enters the gauge, at least 5mm of the length shall not enter under its own weight	N/A
3.3	Ventilated caps air flow When tested in accordance with Annex A, Caps shall permit a minimum air flow of 8L/min, measured at room temperature, with a maximum pressure drop of 1.33kPa	PASS
3.4	Test report	
4	Identification Writing or marking instruments, or their packaging or accompanying documentation, shall be legibly and indelibly identified with the name, trademark or other means of identifying the manufacturer/supplier	PASS

Note:

N/A=Not applicable

N/C=Not conducted as per client's request

- Part 2: Specification for end closures to reduce the risk of asphyxiation

1. Number of Test Specimen: 5 pieces of samples
2. Test Result : Details Shown As Following Table:

Clause	Test Requirement / Method	Result
4	Requirements	
4.1	General Except for cap-like end closures and those secured by a thread, which shall conform to 4.7, other end closures shall conform to at least one of the following requirements. -Size -Security -Inaccessibility -Minimal protrusion or; -Air flow	

TO BE CONTINUED

TEST RESULT

Clause	Test Requirement / Method	Result
4.2	Size An end closure shall not pass through a 16 mm diameter ring gauge of at least 19mm thickness under its own weight.	N/A
4.3	Security The end closure shall not be removed when subjected to a force of 50N applied in line with the body of the writing or marking instrument	PASS
4.4	Inaccessibility The end closure when in the form of a plug shall be completely recessed, and be reasonably secure by withstanding minimum of force of 10N When tested in accordance with Annex B, applied in line with the body of the writing or marking instrument.	N/A
4.5	Minimal protrusion The grippable surface of an end closure, when in the form of a plug, shall not extend more than 1 mm beyond the end of writing or marking instrument and overall the end closure shall not extend more than 3mm beyond the end of the writing or marking instrument, It shall be reasonably secure by withstanding a minimum force of 10N, when tested in accordance with Annex B, applied in line with the body of the writing or marking instrument.	N/A
4.6	Air flow An end closure shall meet the requirements of BS 7272-1:2008,3.3 and be reasonably secure by withstanding a minimum force of 10N, when tested in accordance with Annex B, applied in line with the body of the writing or marking instrument.	N/A
4.7	Additional safeguard Where the end closure is in the form of a cap and fits over the barrel(instead of inside it like a plug) and its length exceeds its diameter or the end closure is secured by a screw thread but does not conform to requirement 4.2 or 4.4, It shall meet both requirements 4.3 and 4.6	N/A
5	Identification Writing or marking instruments, or their packaging or accompanying documentation, shall be legibly and indelibly identified with the name, trademark or other means of identifying the manufacturer/supplier.	PASS

Note:

N/A=Not applicable

*** END OF THE REPORT ***