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Applicant: Choon's Design LLC

Address: 44926 PLAINE DRIVE, NOVI, MI 48377

Manufacturer: NCB TRADING LIMITED

Address: FLAT B, 6/F, TEDA BUILDING, 87 WING LOK STREET, SHEUNV WAN, Hong Kong.

Sample Name: Rainbow loom kits

Model No.: 5156600500

Test period: March 21, 2014 to March 25, 2014

Labeled age grading: Over 8 years old

Country of destination: European

Test requested: For compliance with the European Standard on Safety of Toys:

-EN71-1:2011+A2:2013- Mechanical and physical properties;

-EN 71-2:2011- Flammability;

-EN 71-3:2013-Migration of certain elements.

Test result: Please refer to next page.

Conclusion: The submitted sample comply with the requirements of the test requested.

Written by:

Checked by:

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Approved by:



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### **Test Results:**

## Part 1: Mechanical and physical properties

Section	Description	Results			
4	GENERAL REQUIREMENTS				
4.1	Material cleanliness	Pass			
4.7	Edges	Pass			
4.8	Points and Wires	Pass			
	Warnings, markings and instructions for use  This requirement according to the Directive 2009/48/EC-Safety of toy,  And the contends do not constitute requirements of this standard				
	And the contends do not constitute requirements of this standard.  Toys made available on the market shall bear the CE marking, and its height must be at least 5mm.	Pass (package )			
7	The manufacturer's or importer's name, registered trade name or registered trade mark and the address at which the manufacturer can be contacted shall be indicated on the toy.	Pass (package ) Pass			
	Manufacturers shall ensure that their toys bear a type, batch, serial or model number or other element allowing their identification.				
	The language of instructions and safety information must easily understood by consumers, A Member State may, within its territory, stipulate that warnings and safety instructions shall be written in a language or languages easily understood by consumers, as determined by that Member State.	Pass (package )			
7.1	General Remark: Warnings on toys shall not be misleading or incorrect. Toys intended for children under 36 months shall comply with the requirements in Clause 5 of this standard. A warning on a toy or its packaging does not release the manufacturer or his authorized representative from the obligation to meet these requirements.	Pass See Remark			
7.2	Toys not intended for children under 36 months  Remark:  Toys which are not intended for, but might be dangerous for children under 36 months shall bear a warning, for example: "Not suitable for children under 36 months" or "Not suitable for children under three years" together with a brief indication of the specific hazard calling for this restriction.  The age warning shall be clearly legible at the point of sale of the product and appear either on the toy itself or on its retail packaging. The indication of the specific hazard may appear on a leaflet or in the instructions for use, and so on.	Pass See Remark			
8	Test Methods				
8.2	Small parts cylinder	Pass			
8.11	Sharpness of edges	Pass			
8.12	Sharpness of points	Pass			



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### Part 2: Flammability

Section	Description	Results
4	REQUIREMENTS	
4.1	General	Pass See Note

### Note:

- 4.1 The following materials shall not be used in the manufacture of toys:
- Celluloid (cellulose nitrate), except when used in varnish, paint or glue, or in balls of the type used for table tennis or similar games, and
- materials with the same behavior in fire as celluloid. Specific materials to which the test flame is applied in order to check compliance of the toy with requirements in 4.2 to 4.5 are considered to comply with this requirement if the toy meets its appropriate requirements in 4.2 to 4.5;
- Materials with a piled surface which produce surface flash on the approach of a flame. Piled surfaces showing no momentary area of flame over the area of the piled surface remote from the test flame are considered to meet this requirement;

In addition, toys shall not contain flammable gases, extremely flammable liquids, highly flammable liquids, flammable liquids and flammable gels except as provided for below:

- Flammable liquids, flammable gels supplied in sealed containers having a maximum volume of 15 ml per container;
- Highly flammable liquids and flammable liquids being entirely retained within a porous material in capillary channels of writing instruments;
- Flammable liquids with a viscosity greater than 260 x 10<sup>-6</sup>m<sup>2</sup>/s corresponding to a flow time of more than 38 s when determined in accordance with EN ISO 2431 using cup No. 6;
  - highly flammable liquids contained in chemical toys...

Remark: Different legal requirements may exist in non-EU countries.



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# Part 3: Migration of certain elements

## Test Items:

T ( 11	Measuring	11.2	MDI	Limit	
Test Items	Instrument	Unit	MDL	In scraped-off material	
Soluble Aluminium (Al)		mg/kg	2.0	70000	
Soluble Antimony (Sb)		mg/kg	2.0	560	
Soluble Arsenic (As)		mg/kg	0.5	47	
Soluble Barium (Ba)		mg/kg	2.0	18750	
Soluble Boron (B)		mg/kg	2.0	15000	
Soluble Cadmium (Cd)	ICP-OES	mg/kg	0.1	17	
Soluble Cobalt (Co)		mg/kg	2.0	130	
Soluble Copper (Cu)		mg/kg	2.0	7700	
Soluble Lead (Pb)		mg/kg	2.0	160	
Soluble Manganese (Mn)		mg/kg	2.0	15000	
Soluble Mercury (Hg)		mg/kg	1.0	94	
Soluble Nickel (Ni)		mg/kg	2.0	930	
Soluble Selenium (Se)		mg/kg	2.0	460	
Soluble Strontium (Sr)		mg/kg	2.0	56000	
Soluble Tin (Sn)		mg/kg	2.0	180000	
Soluble Zinc (Zn)		mg/kg	0.1	46000	
Soluble Chromium(III) (Cr <sup>3+</sup> )	1	mg/kg	2.0	460	
Soluble Chromium(VI) (Cr <sup>6+</sup> )	UV-Vis	mg/kg	0.005	0.2	
Soluble Organic tin	GC-MS	mg/kg	0.1	12	



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### **Test Results:**

	Results							
Test Items	No.1	No.2	No.3	No.4	No.5	No.6	No.7	
Soluble Aluminium (AI)	626	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Antimony (Sb)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Arsenic (As)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Barium (Ba)	13	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Boron (B)	33	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Cobalt (Co)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Copper (Cu)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Lead (Pb)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Manganese (Mn)	16	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Mercury (Hg)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Nickel (Ni)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Selenium (Se)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Strontium (Sr)	33	24	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Tin (Sn)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Zinc (Zn)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	24	
Soluble Chromium(III) (Cr <sup>3+</sup> )	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Chromium(VI) (Cr <sup>6+</sup> )	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Organic tin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	



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	Results							
Test Items	No.8	No.9	No.10	No.11	No.12	No.13	No.14	
Soluble Aluminium (AI)	N.D.	N.D.	N.D.	609	N.D.	N.D.	N.D.	
Soluble Antimony (Sb)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Arsenic (As)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Barium (Ba)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Boron (B)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Cobalt (Co)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Copper (Cu)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Lead (Pb)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Manganese (Mn)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Mercury (Hg)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Nickel (Ni)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Selenium (Se)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Strontium (Sr)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Tin (Sn)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Zinc (Zn)	N.D.	N.D.	N.D.	4562	11	N.D.	N.D.	
Soluble Chromium(III) (Cr <sup>3+</sup> )	N.D.	N.D.	N.D.	61	N.D.	N.D.	N.D.	
Soluble Chromium(VI) (Cr <sup>6+</sup> )	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Soluble Organic tin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	



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	Results								
Test Items	No.15	No.16	No.17	No.18	No.19	No.20			
Soluble Aluminium (Al)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Antimony (Sb)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Arsenic (As)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Barium (Ba)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Boron (B)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Cobalt (Co)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Copper (Cu)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Lead (Pb)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Manganese (Mn)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Mercury (Hg)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Nickel (Ni)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Selenium (Se)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Strontium (Sr)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Tin (Sn)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Zinc (Zn)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Chromium(III) (Cr <sup>3+</sup> )	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Chromium(VI) (Cr <sup>6+</sup> )	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			
Soluble Organic tin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.			



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## **Test Part Description:**

No.1: Color box No.11: Silver metal hook

No.2: Specification No.12: Luminous yellow rubber band

No.3: Blue plastic tube No.13: Orange rubber band

No.4: Transparent plastic base No.14: Red rubber band

No.5: Blue plastic base No.15: Light green rubber band

No.6: Beige plastic handle No.16: Pink rubber band

No.7: Transparent plastic bag No.17: Glitter purple rubber band

No.8: Transparent plastic card No.18: White rubber band

No.9: Black blister box No.19: Black rubber band

No.10: Transparent blister box No.20: Brilliant blue rubber band

#### Note:

(1) mg/kg=ppm=0.0001%, N.D.=Not Detected(<MDL);

(2) MDL=Method Detection Limit;

(3) The results of Soluble Chromium(III) (Cr3+) = Soluble Chromium(Cr)-Soluble Chromium(Cr6+);

(4) The migration of organic tins content is expressed as Tributyltin (TBT) in this test report.

## Photograph of Sample:





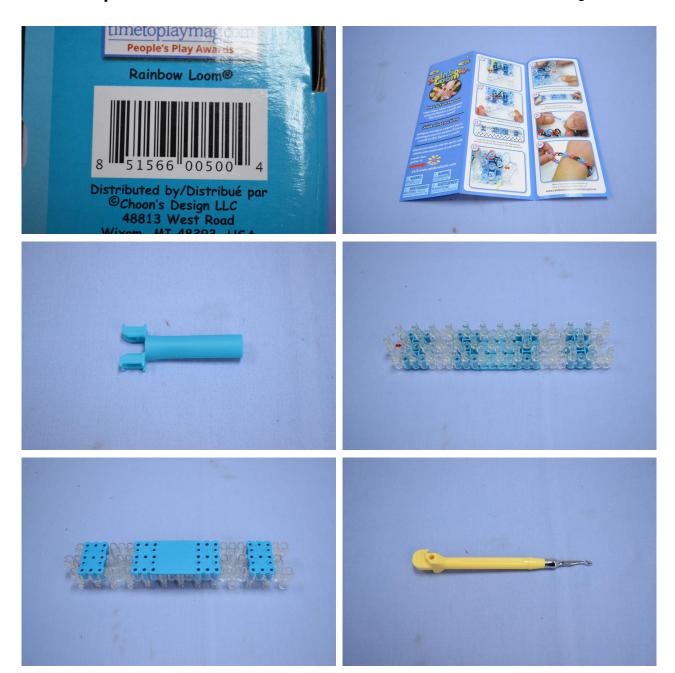
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