

## TEST REPORT

LAB NO. (6617)363-0825 DATE **January 9, 2018** 1 OF 14 PAGE

Applicant:

#### YONG KANG SHIYA ALMINUM FACTORY

169#, FENGXIANG ROAD, GUSHAN INDUSTRIAL ZONE, YONGKANG CITY, ZHEJIANG

Date of Submission: December 29, 2017

December 29, 2017 to January 9, 2018 Test Period:

BV EE Ref. No.:

Sample Description:	Sample(s) received is(are) stated to be: scooter		
Manufacturer:	/	Buyer:	/
Style No(s):	ES-03	Po No(s).:	/
Country of Origin:	/	Country of Destination:	Oversea Country
Client Specified Age	OVER 3 YEARS OF AGE	Tested Age Grade:	OVER 3 YEARS OF AGE
Grade:			

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there are questions or concerns on	this report, please contact	the following persons:
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#### BUREAU VERITAS CONSUMER PRODUCTS SERVICES DIVISION (SHANGHAI)

Laboratory Test Location:

No.368, Guangzhong Road, Zhuanqiao Town, Minhang, Shanghai No.168, Guanghua Road, Zhuanqiao Town, Minhang, Shanghai

PREPARED BY: Violet

Lynd Lv

Analytical Technical Specialist



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#### SUMMARY OF TEST RESULTS

TEST REQUESTED	CONCLUSION
The mechanical and physical properties requirements of the tested subclauses of the European Standard, "Safety of toys", EN71: Part 1: 2014 clauses 1-7	PASS
The flammability requirements of the European Standard "Safety of Toys", EN 71: Part 2: 2011+ A1: 2014	PASS
Labeling requirements of "CE marking, manufacturer/ Importer name and address, and product identification" under "Directive 2009/48/EC Safety of Toy"	PASS
Migration of Certain Elements – EN 71 Part 3: 2013 with Amendment A1: 2014	PASS

#### Note:

- 1. The sample is tested without packaging and instructions, thus, EN 71-1 clause 7 was not conducted. But the following warning is required on the packaging and instruction for use:
- "Warning, protective equipment should be worn. Not to be used in traffic. Not for children with a body weight of more than 50 kg"
- 2. According to 2009/48/EC, the sample shall comply with the following requirements:
- A. The manufacturers shall indicate their name, registered trade name or registered trade mark and the address at which they can be contacted on the toy, or, where that is not possible, on its packaging or in a document accompanying the toy. The name and address shall, as a rule, be affixed to the toy. However, it may exceptionally be moved from the toy if this rule cannot be followed. This would be justified where affixing it to the toy was not possible under reasonable technical or economical conditions.
- B. As a rule, the identification and the address of importer shall be indicated on the toy. Only where it is not possible, the identification and address of the importer shall be indicated on the packaging or in a document accompanying the toy. This may be the case when the importer would have to open the packaging to put his name and address. The TSD does not contain specifications on the visibility or legibility.
- c. The identification shall, as a rule, be affixed to the toy. However, it may exceptionally be moved from the toy if this rule cannot be followed. This would be justified where the size and/or the nature of the toy makes the indication illegible or technically impossible. In such cases, the identification has to be affixed to the packaging, if it exists, or to the accompanying document. The identification on the toy may neither be omitted nor be moved to the packaging or accompanying documents on purely aesthetic or economic grounds.
- 3. The sample is tested for "OVER 3 YEARS OF AGE" as the client's request.



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### **Photo of the Submitted Sample**









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#### **TEST RESULT**

#### APPROPRIATE AGE GRADE DETERMINATION

The Appropriate Age Grade is determined with reference to the EN71 :Part 1:2014, European Union Guidance Documents, CEN ISO/TR 8124-8:2016 Safety of toys - Part 8: Age determination guidelines and Age Determination Guidelines: Relating Children's Ages to Toy Characteristics and Play Behavior, September, 2002

Note: The most stringent age grade from the Labeled Age Grade and the Appropriate Age Grade will be used for

testing.

Note: If the client does not specify an age grade for testing or request Bureau Veritas Consumer Products Services,

Inc. to determine an appropriate age grade, the labeled age grade will be used for testing.

#### EXPLANATION OF THE ABBREVIATIONS FOR PART 1, 2

Symbol	Explanation
NM	The samples are NOT IN COMPLIANCE WITH the requirement of this Subclause
M	The samples are IN COMPLIANCE WITH the requirement of this Subclause
NA	Not Applicable
NR	Not Requested
NE	Not Evaluated
NP	None Present
P	Present
R	Refer to Comment Section of this report

Symbol	Language Present	Symbol	Language Present	Symbol	Language Present
В	Belgian language	G	German language	PR	Portuguese language
D	Danish language	GR	Greek language	S	Spanish language
Е	English language	Н	Dutch language	SD	Swedish language
F	Finnish language	I	Italian language	SZ	Swiss language
FR	French language	N	Norwegian language		



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#### TEST RESULT

<u>I. The mechanical and physical properties requirements of the tested subclauses of the European Standard, "Safety of toys", EN71: Part 1: 2014 clauses 1-7</u>

#### MECHANICAL & PHYSICAL PROPERTIES (EN 71: PART 1 – 2014)

Subclause	Requirement	Result		
4.1	Material cleanliness	M		
4.2	Assembly	M		
4.3	Flexible plastic sheeting			
4.4	Toy Bags	NA		
4.5	Glass	NA		
4.6	Expanding materials	NA		
4.7 & 7.6	Edges	M		
4.8 & 7.6	Points and metallic wires	M		
4.8e	Splinters	M		
4.9	Protruding parts	M		
4.10.1	Folding and sliding mechanisms	NA		
4.10.2	Driving mechanisms	M		
4.10.3	Hinges	NA		
4.10.4	Springs	NA		
4.11	Mouth actuated toys and other toys intended to be put in the mouth	NA		
4.12 & 7.3	Balloons	NA		
4.13 & 7.9	Cord of toy kites and other flying toys	NA		
4.14.1	Toys which a child can enter			
4.14.2 & 7.8	Masks and helmets			
4.15.1	Toys propelled by child			
4.15.1.2 & 7.10.1 & 7.10.2 & 7.10.3 & 7.10.4 & 7.16	Toys propelled by child – Instructions for use	NA		
4.15.1.3	Toys propelled by child – Strength	M		
4.15.1.4	Toys propelled by child – Stability	M		
4.15.1.5	Toys propelled by child – Braking	NA		
4.15.1.6	Toys propelled by child - Transmission	M		
4.15.1.7	Toys propelled by child – insertion mark	NA		
4.15.1.8	Electrically-driven ride-on toys	NA		
4.15.2	Toy bicycles			
4.15.2.2 & 7.15	Toy bicycles – Warnings and instructions for use	NA		
4.15.2.3	Toy bicycles – Braking	NA		
4.15.3 & 7.16 & 7.19	Rocking horses and similar toys	NA		



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#### **TEST RESULT**

### MECHANICAL & PHYSICAL PROPERTIES (EN 71: PART 1 – 2014)

Subclause	Requirement	Result
4.15.4 & 7.16	Toys not propelled by child	NA
4.15.5 & 7.18	Toy scooters	M
4.16	Heavy immobile toys	NA
4.17.1	Projectiles – General	NA
4.17.2	Projectiles toys without stored energy	NA
4.17.3 & 7.7	Projectile toys with stored energy	NA
4.17.4 & 7.7	Bows and arrows	NA
4.18 & 7.4	Aquatic toys and inflatable toys	NA
4.19 & 7.13 & 7.14	Percussion caps	NA
*4.20.2.1- 4.20.2.8, 4.20.2.10, 4.20.2.12	Acoustics	M
4.20.2.9, 4.20.2.11 & 7.14	Acoustics – percussion toys & cap-firing toys	NA
4.21	Toys containing a non-electrical heat source	NA
4.22 & 7.2	Small balls	NA
4.23	Magnet	
4.23.2 a, b & c	Toy other than magnetic / electrical experimental sets intended for children over 8 years	NA
4.23.3 & 7.20	Magnetic / electrical experimental sets intended for children over 8 years	NA
4.24	Yo-yo ball	NA
4.25	Toys attached to food	NA
	FOR TOYS INTENDED FOR CHILDREN UNDER 36 MONTHS	
5.1	General	NA
5.1a	Small parts – as received	NA
5.1b	Small parts, sharp points, sharp edges – after tests	NA
5.1c	Cross section <2mm metal points & wires	NA
5.1e	Toys contain glue	NA
5.1f	Casing of toys	NA
5.2	Fillings, coverings and seams	NA
5.3	Adhesion of plastic sheeting	NA
5.4 &	Cords on toys	NA
5.4(a)	Cords connected to self-retraction mechanism or in pull along toys	NA
5.4(b) & 7.22	Cords and chains that can form tangled loop or noose	NA



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#### **TEST RESULT**

#### MECHANICAL & PHYSICAL PROPERTIES (EN 71: PART 1 – 2014)

Subclause	Requirement	Result
5.4(c) & 7.22	Fixed loop of cords or chains	NA
5.4(d)	Nooses	NA
5.4(e)	Self-retraction mechanism	NA
5.4(f) & 7.11	Toy across cradle, cot or perambulator	NA
5.4(g) & 7.22	Cords and chains with free end (exclude pull along toy)	NA
5.4(h)	Cords and chains with free end on pull along toy	NA
5.4(i) & 7.21	Electrical cables	NA
5.5 & 7.12	Liquid filled toys	NA
5.6	Electrically driven toys	NA
5.7	Glass and porcelain	NA
5.8	Shape and size	NA
5.9 & 7.17	Monofilament fibres	NA
5.10	Small balls	NA
5.11	Play figures	NA
5.12	Hemispheric shaped toys	NA
5.13	Suction cups	NA
5.14	Straps intended to be worn fully or partially around the neck	NA
6	Packaging	NA
	WARNINGS, INSTRUCTIONS FOR USE	-
7.1	General	SEE NOTE 1
		& 2
7.2	Toys not intended for children under 36 months	SEE NOTE 1
		& 2
7.5	Functional toys	SEE NOTE 1
		& 2



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#### **TEST RESULT**

#### REQUIREMENTS & TEST METHODS CROSS REFERENCE TABLE FOR PART 1

Sub- clause	Test Method	Sub- clause	Test Method	Sub- clause	Test Method	Sub- clause	Test Method
4.3	8.25.1	4.14.2	8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.11, 8.12	4.17.3	8.24.1	5.3	8.4.2.1, 8.25
4.5	8.5, 8.7, 8.11, 8.12	4.15.1.3	8.11, 8.12, 8.21, 8.22	4.17.4	8.24.2	5.4	8.20, 8.36, 8.38, 8.39, 8.40
4.6	8.2, 8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.14	4.15.1.4	8.23.1	4.18	8.2, 8.3, 8.4.2.1	5.5	8.15
4.7	8.11	4.15.1.5	8.26.1	4.20	8.28	5.6	8.29
4.8	8.12, 8.13	4.15.1.8	8.29	4.21	8.30	5.8	8.16
4.9	8.4.2.3, 8.11, 8.12	4.15.2.4	8.26.2	4.22	8.3, 8.4.2.1, 8.5, 8.6, 8.7, 8.8, 8.32	5.10	8.3, 8.4.2.1, 8.5, 8.6, 8.7, 8.8, 8.9, 8.32
4.10.1	8.18.2, 8.18.3	4.15.3	8.21, 8.23.1	4.23	8.2, 8.3, 8.4.2.1, 8.4.2.2, 8.5, 8.6, 8.7, 8.8, 8.34, 8.35	5.11	8.33
4.10.2	8.5, 8.6, 8.7, 8.11, 8.12	4.15.4	8.21, 8.23.1	4.24	8.37	5.12	8.3, 8.4.2.1, 8.5, 8.6, 8.7, 8.8, 8.9,
4.11	8.2, 8.3, 8.4.2.1, 8.9, 8.17	4.15.5	8.11, 8.12, 8.21, 8.22, 8.26.3, 8.27	4.25	8.2, 8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.32.1	5.13	8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.32
4.13	8.19	4.16	8.23.2	5.1	8.2, 8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.9, 8.11, 8.12		
4.14.1	8.31.1, 8.31.2	4.17.1	8.4.2.3				



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#### **TEST RESULT**

# II. The flammability requirements of the European Standard "Safety of Toys", EN 71: Part 2: 2011+ A1: 2014 FLAMMABILITY (BS EN 71 PART 2: 2011 + A1: 2014)

Subclause	Requirement	Result
4.1	Cellulose nitrate	NP
4.1	Surface flash on a piled surface	N/A
*4.1	Flammable gases	N/A
*4.1	Extremely flammable liquids, highly flammable liquids, flammable liquids and flammable gels	N/A
4.2	Toys to be worn on the head	N/A
4.3	Toy disguise costumes and toys intended to be worn by child in play	N/A
4.3	warning on product and packaging (10 - 30 mm/s)	N/A
4.4	Toys intended to be entered by a child	N/A
4.4	warning on product and packaging (10 – 30 mm/s)	N/A
4.5	Soft-filled toys	N/A

#### REQUIREMENTS & TEST METHODS CROSS REFERENCE TABLE FOR PART 2

Sub-clause	Test Method	Sub-clause	Test Method	Sub-clause	Test Method	Sub-clause	Test Method
4.2.2	5.2	4.2.4	5.3	4.3	5.4	4.5	5.5
4.2.3	5.3	4.2.5	5.4	4.4	5.4	-	-



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#### **TEST RESULT**

### III. Labeling requirements of "CE marking, manufacturer/ Importer name and address, and product identification" under "Directive 2009/48/EC Safety of Toy"

2009/48/EC General Labeling Requirement

2007/40/EC General Eastering Requirement				
Requirement				
CE Mark	SEE NOTE 1			
	& 2			
Manufacturer/ Importer name and address	SEE NOTE 1			
	& 2			
Product Identification	SEE NOTE 1			
	& 2			

M = Meet NM = Not Meet N/A = Not Applicable R = Refer to Comment Section



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### **Photo of the Submitted Sample for Chemical Test**









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#### **Sample Description Assigned by Laboratory:**

Test Item	Description
1	Black coating
2	Transparent plastic
3	Black plastic
4	Red plastic
5	Red plastic
6	Transparent plastic

Note: g = gram(s) % = percentage

mcg = microgram(s)

mg/kg = milligram per kilogram

mg/L = milligram per litre

g/kg = gram(s) per kilogram

MDL = Method Detection Limit

ND = Not Detected (< MDL)

1 mg/kg = 0.0001%

"<" = less than

">" = Greater than

Req. = Requirement

"-" = Not Regulated

NA = Not applicable

EX = Exempted

Remark: The tested part of the sample was specified by client.

The test conclusion was given based on the results of tested part.



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#### **TEST RESULT**

#### IV. Migration of Certain Elements - EN 71 Part 3: 2013 with Amendment A1: 2014

Test Method : EN 71 Part 3: 2013 with Amendment A1: 2014: Safety of Toys-Migration of certain elements

See Soluble Element (Parameter)	Category I	Dry, brittle, powder-like or pliable toy material	
and its corresponding Maximum Allowable Limit (Req.) in Result	Category II	Liquid or sticky toy material	
Table	Category III	Scraped-off toy material	

-	Unit	Non- Germa n Req.	Germa n Req.	Result					
Test Item(s)	-	-		1	2	3	4	5	6
Category	III	III	III	III	III	III	III	III	III
Parameter	-	-	-	-	-	-	-	-	-
Mass of Trace Amount	g	-	-	0.0157	-	-	-	-	-
Boron (B)	mg/kg	15000	15000	<1500	<1500	<1500	<1500	<1500	<1500
Aluminium (Al)	mg/kg	70000	70000	< 7000	< 7000	< 7000	< 7000	< 7000	< 7000
Chromium III (Cr III)	mg/kg	460	460	<46	0.102@	0.093@	0.105@	$0.090^{@}$	0.134@
Chromium VI (Cr VI)	mg/kg	0.2	0.2	< 0.02	0.102@	0.093@	0.105@	0.090@	0.134@
Manganese (Mn)	mg/kg	15000	15000	<1500	<1500	<1500	<1500	<1500	<1500
Cobalt (Co)	mg/kg	130	130	<13	<13	<13	<13	<13	<13
Nickel (Ni)	mg/kg	930	930	<93	<93	<93	<93	<93	<93
Copper (Cu)	mg/kg	7700	7700	<770	<770	<770	<770	<770	<770
Zinc (Zn)	mg/kg	46000	46000	<4600	<4600	<4600	<4600	<4600	<4600
Arsenic (As)	mg/kg	47	47	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
Selenium (Se)	mg/kg	460	460	<46	<46	<46	<46	<46	<46
Strontium (Sr)	mg/kg	56000	56000	< 5600	< 5600	< 5600	< 5600	< 5600	< 5600
Cadmium (Cd)	mg/kg	17	17	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
Tin (Sn)	mg/kg	180000	180000	<18000	<18000	<18000	<18000	<18000	<18000
Organic tin	mg/kg	12	12	<12*	<12	<12*	<12*	<12*	<12*
Antimony (Sb)	mg/kg	560	560	< 56	<56	<56	<56	<56	< 56
Barium (Ba)	mg/kg	18750	18750	<1875	<1875	<1875	<1875	<1875	<1875
Mercury (Hg)	mg/kg	94	94	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
Lead (Pb)	mg/kg	160	90	6.07	<2.3	<2.3	<2.3	<2.3	<2.3
Conclusion	-	-	-	PASS	PASS	PASS	PASS	PASS	PASS

#### Remark:

- @Results of Cr III and Cr VI were reported as sum of soluble Chromium content.
- If combined Cr content exceeds 0.02mg/kg in I mat., 0.005 mg/kg in II mat., or 0.2mg/kg in III mat., confirmation Cr(VI) by LC-ICP-MS or IC and Cr(III) by LC-ICP-MS. If confirmation with IC, Cr(III)=Combined Cr Cr(VI).
- \*Result(s) of organic tin was (were) reported as soluble tin content.
- If total tin content in sample exceeds 0.369mg/kg in I mat., 0.082mg/kg in II mat., or 4.915mg/kg in III mat., the sample is required for organic tin analysis.

#### Comment:

Latest amendment of European Parliament and Council Directive 2009/48/EC, Annex II, Part III, Point 13:					
-	Type I	Type II	Type III		
Element(s)	Lead (Pb)	Lead (Pb)	Lead (Pb)		
Current	13.5 mg/kg	3.4 mg/kg	160 mg/kg		
Amended <sup>[a]</sup>	2.0 mg/kg	0.5 mg/kg	23 mg/kg		

<sup>[</sup>a] denotes as these maximum allowable limits apply from October 28, 2018 according to European Council Directive (EU) 2017/738 of 27 March 2017 amending, for the purpose of adapting to technical progress, Annex II to Directive 2009/48/EC of the European Parliament and of the Council on the safety of toys, as regards lead.



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#### Annex

The client declared that the materials used of below Styles are same as tested style ES-03.

Description	
ES-01, ES-02, ES-04, ES-05	

#### Remark:

Since the client was not able to provide the sample of additional Style, above additional Style(s) hasn't been tested, but only based on the guarantee letter provided by the client. Bureau Veritas-CPS takes no responsibility for any mistakes and the problems of product consistency caused by inaccurate and/or invalid information submitted by the client. The client will take the responsibility of all discrepancy and risk.