

Test Report

Number: SZHH0142095403

Applicant: SWIFTECH COMPANY LTD
DONGCHENG INDUSTRIAL ZONE, XINPING
ROAD, MINZHONG TOWN, ZHONGSHAN CITY,
GUANGDONG PROVINCE, CHINA

Date: Jan 02, 2020

Attn: KIN.ZHANG

Sample Description:

Four (4) pieces of submitted sample said to be :
Item Name : **13 In 1 Bouncy Castle.**
Item No. : **9021.**
Labelled Age Group : 3-10 years.
Applicant Specified Age : Over 3 years.
Grading for Testing :
Packaging Provided by Applicant : Yes (artwork).
Additional Material and Wet Paint Provided : No.
Applicant's Reference Logo : Happy Hop.
Date Sample Received : Nov 28, 2019.
Testing Period : Nov 28, 2019 ~ Dec 31, 2019.

SZHH01420954



Tests conducted:

As requested by the applicant, refer to attached page(s) for details.



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Conclusion:

<u>Tested Samples</u>	<u>Standard</u>	<u>Result</u>
Submitted samples	EN71-1:2014+A1:2018 for mechanical and physical properties	Pass
	EN71 Part 2 : 2011+A1:2014 Flammability test	Pass
Tested components of submitted samples	EN 71-3:2019 on migration of certain elements	Pass
	EN 71-3:2019 on migration of certain elements and (EU) 2019/1922 amending 2009/48/EC (applies from 20 May 2021) for Aluminium migration	Pass
	EN 71-3:2013+A3:2018 on migration of certain elements	Pass
	EN 71-3:2013+A3:2018 on migration of certain elements and (EU) 2018/725 amending 2009/48/EC (applies from 18 November 2019) for Chromium (VI) migration and (EU) 2019/1922 amending 2009/48/EC (applies from 20 May 2021) for Aluminium migration	Pass

Authorized by:
For Intertek Testing Services
Shenzhen Ltd.



Rachel L. Guo
General Manager



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Tests Conducted

1 Mechanical and Physical Test

As per European Standard on Safety of toys EN71-1:2014+A1:2018.

Clause	Testing items	Assessment
4	General requirements	
4.1	Material	P
4.2	Assembly	P
4.3	Flexible plastic sheeting	NA
4.4	Toy bags	NA
4.5	Glass	NA
4.6	Expanding materials	NA
4.7	Edges	P
4.8	Points and metallic wires	P
4.9	Protruding parts	NA
4.10	Parts moving against each other	NA
4.11	Mouth actuated toys and other toys intended to be put in the mouth	NA
4.12	Balloons	NA
4.13	Cords of toy kites and other flying toys	NA
4.14	Enclosures	NA
4.15	Toys intended to bear the mass of a child	P
4.16	Heavy immobile toys	NA
4.17	Projectile toys	P
4.18	Aquatic toys and inflatable toys	NA
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	NA
4.20	Acoustics	NA
4.21	Toys containing a non-electrical heat source	NA
4.22	Small balls	NA
4.23	Magnets	NA
4.24	Yo-yo balls	NA
4.25	Toys attached to food	NA
4.26	Toy disguise costumes	NA
4.27	Flying toys	NA
5	Toys intended for children under 36 months	
5.1	General requirements	NA
5.2	Soft-filled toys and soft-filled parts of a toy	NA
5.3	Plastic sheeting	NA
5.4	Cords, chains and electrical cables in toys	NA
5.5	Liquid filled toys	NA
5.6	Speed limitation of electrically-driven ride-on toys	NA
5.7	Glass and porcelain	NA
5.8	Shape and size of certain toys	NA



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Clause	Testing items	Assessment
5.9	Toys comprising 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
5.15	Sledges with cords for pulling	NA
6	Packaging	P
7	Warnings, markings and instructions for use	
7.1	General	P
7.2	Toys not intended for children under 36 months	NA
7.3	Latex balloons	NA
7.4	Aquatic toys	NA
7.5	Functional toys	NA
7.6	Hazardous sharp functional edges and points	NA
7.7	Projectile toys	NA
7.8	Imitation protective masks and helmets	NA
7.9	Toy kites	NA
7.10	Roller skates, inline skates and skateboards and certain other ride-on toys	NA
7.11	Toys intended to be strung across a cradle, cot, or perambulator	NA
7.12	Liquid-filled teethingers	NA
7.13	Percussion caps specifically designed for use in toys	NA
7.14	Acoustics	NA
7.15	Toy bicycles	NA
7.16	Toys intended to bear the mass of a child	NA
7.17	Toys comprising monofilament fibres	NA
7.18	Toy scooters	NA
7.19	Rocking horses and similar toys	NA
7.20	Magnetic/electrical experimental sets	NA
7.21	Toys with electrical cables exceeding 300 mm in length	NA
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	NA
7.23	Toys intended to be attached to a cradle, cot or perambulator	NA
7.24	Sledges with cords for pulling	NA
7.25	Flying toys	NA
7.26	Improvised projectiles	NA

Remark : P = Pass NA = Not Applicable

Remark : Additional information according to the Toy Safety Directives 2009/48/EC requirement. These information also appears as a note within the EN71 but are not standard requirements:

1. Marking



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The manufacturer's and importer's name, registered trade name or registered trade mark, the address and the CE-marking shall be indicated on the toy or, where that is not possible, on its packaging or in a document accompany the toy. In addition, manufacturers shall ensure that their toys bear a type, batch, serial or model number or other element allowing their identification, or where the size or nature of the toy does not allow it, that the required information is provided on the packaging or in a document accompanying the toy.

- Manufacturer's name was on the packaging & toy.
- Manufacturer's address was on the packaging.
- Importer's name was missed.
- Importer's address was missed.
- Product identification code was on the packaging.
- CE-marking was on the packaging & toy.

2 **Flammability Test**

As per European Standard on Safety of Toys EN71-2:2011+A1:2014

Clause	Testing items	Assessment
4.1	General	P
4.2	Toys to be worn on the head	NA
4.3	Toy disguise costumes and toys intended to be worn by a child in play	NA
4.4	Toys intended to be entered by a child	P
4.5	Soft filled toys	NA

Remark : P = Pass NA = Not applicable

Washing method:

The test specimen was pre-washed according to the EN71-2 Clause 5.4.1 before testing.



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3 19 Toxic Element Migration Test

(A) Test Result

As per EN 71-3:2019 and followed by Inductively Coupled Plasma Atomic Emission Spectrometry, Inductively Coupled Argon Mass Spectrometry, Ion Chromatography- Inductively Coupled Plasma-Mass Spectrometry, Ion Chromatography with UV-VIS and Gas Chromatographic - Mass Spectrometry.

Category (III): Scraped-off toy material

Element	Result (mg/kg)				Reporting Limit (mg/kg)	Limit (mg/kg)
	Tested Component					
	(10)	(25)	(30)	(32)		
Aluminium (Al)	ND	ND	481	531	300	70000 / 28130 [▲]
Antimony (Sb)	ND	ND	ND	ND	10	560
Arsenic (As)	ND	ND	ND	ND	10	47
Barium (Ba)	10	60	ND	ND	10	18750
Boron (B)	ND	ND	ND	ND	50	15000
Cadmium (Cd)	ND	ND	ND	ND	5	17
Chromium (III) (Cr III) ^{**}	ND	ND	ND	ND	10	460
Chromium (VI) (Cr VI) ^{**}	ND#	ND#	ND#	ND#	0.025	0.053
Cobalt (Co)	ND	ND	ND	ND	10	130
Copper (Cu)	ND	ND	ND	2960	10	7700
Lead (Pb)	ND	ND	ND	ND	10	23
Manganese (Mn)	ND	ND	ND	ND	10	15000
Mercury (Hg)	ND	ND	ND	ND	10	94
Nickel (Ni)	ND	ND	ND	ND	10	930
Selenium (Se)	ND	ND	ND	ND	10	460
Strontium (Sr)	ND	ND	ND	ND	100	56000
Tin (Sn)	ND	13	ND	ND	2.5	180000
Organic tin ^{**}	ND	NDA	ND	4.9	2.0	12
Zinc (Zn)	ND	ND	ND	326	100	46000



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Element	Result (mg/kg)		Reporting Limit (mg/kg)	Limit (mg/kg)
	Tested Component			
	(34)	(35)		
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Strontium (Sr)	ND	ND	100	56000
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Organic tin ^{**}	ND	5.1	2.0	12
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Element	Result (mg/kg) θ	Reporting Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(1)to(9),(11)to(24),(26)to(29),(31),(33)		
Aluminium (Al)	ND	300	70000 / 28130 [▲]
Antimony (Sb)	ND	10	560
Arsenic (As)	ND	10	47
Barium (Ba)	ND	10	18750
Boron (B)	ND	50	15000
Cadmium (Cd)	ND	5	17
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Tin (Sn)	ND	2.5	180000
Organic tin ^{**}	ND	2.0	12
Zinc (Zn)	ND	100	46000

Remark : mg/kg = milligram per kilogram

++ = Unless the test results were marked with "#" or "Δ", Chromium (III) & Chromium (VI) and Organic tin contents were not directly determined and were derived from migration results of total chromium and tin respectively.

- Organic tin test result was expressed as tributyl tin.

ND = Not detected (less than reporting limit)

θ = Single result for each test component/group

▲ = The new Aluminium migration limit were quoted from Directive (EU) 2019/1922 amending Directive 2009/48/EC applicable from 20 May 2021.

= Confirmation of Chromium (VI) test was performed on the tested component. And the reported value of migration of Chromium (III) = migration value of total Chromium – migration value of Chromium(VI).

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. Other Organic tin compounds may be also be present in sample as stated in EN 71-3:2019.

Tested component(s):

- (1) Yellow woven backed with plastic sheet (body).
- (2) Red woven backed with plastic sheet (body).
- (3) Deep blue woven backed with plastic sheet (body).
- (4) Cyan woven backed with plastic sheet (body).
- (5) Sky blue woven backed with plastic sheet (body).
- (6) Grey woven backed with plastic sheet (body).



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- (7) Red plastic sheet (body).
- (8) Dark blue plastic sheet (body).
- (9) Sky blue plastic sheet (body).
- (10) Grey plastic sheet (body).
- (11) Black net (net).
- (12) Black plastic (small rectangle buckle).
- (13) Yellow plastic (big stake).
- (14) Yellow plastic (small stake).
- (15) Red plastic sheet (ball).
- (16) Yellow plastic sheet (ball).
- (17) Blue plastic sheet (ball).
- (18) Black webbing (binding, handle).
- (19) Red webbing (binding, handle).
- (20) Red webbing (thick hollow big handle).
- (21) Sky blue Velcro hook (fastener).
- (22) Sky blue Velcro loop (fastener).
- (23) Yellow Velcro hook (fastener).
- (24) Yellow Velcro loop (fastener).
- (25) Coatings(green, black, red)on woven(set-up warning area) (sample weight: 45.3mg).
- (26) Yellow woven backed with glue layer(set-up warning woven).
- (27) Blue embroidery thread (repair kit).
- (28) Yellow embroidery thread (repair kit).
- (29) Red embroidery thread (repair kit).
- (30) Coatings (black, yellow, blue, red) on woven (Happy Hop logo).
- (31) Dark yellow plastic sheet (body).
- (32) Coatings (white, gold color) on woven (dragon pattern) (sample weight: 62.1mg).
- (33) Red coating on woven (pattern) (sample weight: 65.1mg).
- (34) Coatings (white, grey) on woven (wall) (sample weight: 69.1mg).
- (35) Coatings on woven (badge) (sample weight: 81.0mg).

The sample weight in bracket(s) was for soluble toxic elements analysis only.



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(B) Categories of various toy materials

Category I: Dry, brittle, powder like or pliable

Solid toy material from which powder-like material is released during playing and semi-solid materials that may also leave residues on the hands during play. The material can be ingested. Contamination of the hands with the material may contribute to the oral exposure of the material. (e.g. the cores of colouring pencils, chalk, crayons, modelling clays and plaster).

Category II: Liquid or sticky

Fluid or viscous toy material, which can be ingested or to which dermal exposure may occur during playing. (e.g. liquid paints, finger paints, liquid ink in pens, glue sticks, slimes, bubble solution).

Category III: Scraped-off

Solid toy material with or without a coating, which can be ingested as a result of biting, tooth scraping, sucking or licking. (e.g. coatings, lacquers, plastics, paper, textiles, glass, ceramic, metallic, wooden, bone, leather and other materials).



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Tests Conducted

4 19 Toxic Element Migration Test

(A) Test Result

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	(1)to(9),(11)to(24),(26)to(29),(31),(33)			
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- Organic tin test result was expressed as tributyl tin.
ND = Not detected (less than reporting limit)
θ = Single result for each test component/group
▲ = The new Aluminium migration limit were quoted from Directive (EU) 2019/1922 amending Directive 2009/48/EC applicable from 20 May 2021.
◎ = The new Chromium (VI) migration limit [(0.053mg/kg for Category (III))] were quoted from Directive (EU) 2018/725 amending Directive 2009/48/EC applicable from 18 November 2019.
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- (5) Sky blue woven backed with plastic sheet (body).
- (6) Grey woven backed with plastic sheet (body).
- (7) Red plastic sheet (body).
- (8) Dark blue plastic sheet (body).
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- (10) Grey plastic sheet (body).
- (11) Black net (net).
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- (32) Coatings (white, gold color) on woven (dragon pattern) (sample weight: 62.1mg).
- (33) Red coating on woven (pattern) (sample weight: 65.1mg).
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The sample weight in bracket(s) was for soluble toxic elements analysis only.

(B) Categories of various toy materials

Category I: Dry, brittle, powder like or pliable

Solid toy material from which powder-like material is released during playing and semi-solid materials that may also leave residues on the hands during play. The material can be ingested. Contamination of the hands with the material may contribute to the oral exposure of the material. (e.g. the cores of colouring pencils, chalk, crayons, modelling clays and plaster).

Category II: Liquid or sticky

Fluid or viscous toy material, which can be ingested or to which dermal exposure may occur during playing. (e.g. liquid paints, finger paints, liquid ink in pens, glue sticks, slimes, bubble solution).

Category III: Scraped-off

Solid toy material with or without a coating, which can be ingested as a result of biting, tooth scraping, sucking or licking. (e.g. coatings, lacquers, plastics, paper, textiles, glass, ceramic, metallic, wooden, bone, leather and other materials).

End of report

The statements of conformity reported have considered the decision rule agreed, namely that Intertek have taken account of measurement uncertainty as calculated by Intertek, and applied according to ILAC-G8/09:2019 (APPENDIX B – Example 2) except designation from the customer, regulation or test specification.

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