

Test Report

Number: GZHH00346190S1

Applicant: MAY CHEONG TOY PRODUCTS FTY., LTD
UNIT 901-2, 9/F., EAST OCEAN CENTRE,
98 GRANVILLE ROAD, TSIMSHATSUI EAST,
KOWLOON, HONG KONG

Date: Jun 02, 2020

Attn: ICY HUANG

*This is to supersede Report No.
GZHH00346190 dated Dec 05, 2019*

Sample Description:

Two (2) style of submitted sample said to be :

No.	Item	Description	Color
1	09078/12120	Rock Crawler R/C	Red
2	16950/12120	Rock Crawler 6x6	Flat Black

Labelled Age Group : "8+"
Appropriate Age Grading for : Over 8 years
Testing
Packaging Provided by Applicant : Yes
Country of Origin : China
Applicant's Ref. : 81152 Radio Control Vehicle R/C Rock Crawler, Assorted
81164 Radio Control Vehicle Rock Crawler & Rock Crawler Extreme, Asst
81325 RC Rock Crawler in smaller box
83022 RC Rock Crawler without battery in FFP packaging
81155 Rock Crawler and Rock Crawler Extreme, Asst.
83016 Rock Crawler in mailer box pack
83017 Rock Crawler Extreme in mailer box pack
81158 R/C Rock Crawler 6x6
81331 R/C Rock Crawler 6x6

Tests conducted:

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

To be continued



Test Report

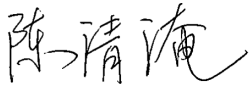
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Conclusion:

<u>Tested sample</u> Submitted sample(s)	<u>Standard</u>	<u>Result</u>
	EN71-1:2014+A1:2018 for mechanical and physical properties	Pass
	EN71-2:2011+A1:2014 Flammability test	Pass
Tested component(s) of submitted sample(s)	EN71-3:2013+A3:2018 on migration of certain elements	Pass
	EN71-3:2013+A3:2018 on migration of certain elements & EU 2018/725 amending 2009/48/EC (effective from Nov 18,2019) for chromium (VI) migration	Pass
	EN71-3:2019 on migration of certain elements	Pass
	Cadmium content requirement in REACH regulation Annex XVII Item 23 (EC) No 1907/2006 and amendment No. 552/2009, 494/2011, 835/2012 and 2016/217	Pass
	Phthalates Content Requirement in Annex XVII Entry 51 & 52 of the REACH Regulation (EC) No 1907/2006 and Amendment (EC) No 552/2009 and (EU) 2018/2005. [(EU) 2018/2005 is applicable to products including toys and childcare articles placed on the market after 7 July 2020]	Pass
	<u>Test Item</u> Phthalates Content	See Test Conducted 7#
	<u>Standard</u> Polycyclic Aromatic Hydrocarbons (PAHs) Content Requirement In Annex XVII Item 50 of the REACH Regulation (EC) NO. 1907/2006 & Amendment No. 552/2009 and 1272/2013 with effect from 27 December 2015	Pass

: This test in the report is not included in the CNAS accreditation schedule for our laboratory.

Approved:



Albert Chen
Toys Lab Assistant Manager



Approved:



Crystal Huang
Technical Support Assistant Manager



Test Report

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Tests Conducted

1 Physical and Mechanical Tests

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

The submitted samples were undergone the following abuse tests:

<u>Test</u>	<u>Clause</u>	<u>Parameter</u>
Drop test	8.5	850 mm x 5 times
Impact test	8.7	1 kg
Flexibility of metallic wires	8.13	70 N

<u>Clause</u>	<u>Testing Items</u>	<u>Assessment</u>
4	General requirements	
4.1	Material	P
4.2	Assembly	NA
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	P
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	NA
4.16	Heavy immobile toys	NA
4.17	Projectile toys	NA
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 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



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Clause	Testing Items	Assessment
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
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	NA
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, inlineskates and skateboards and certain other ride-on toys	NA
7.11	Toys intended to be attached to 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



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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

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 and toy.
- Manufacturer's address was on the packaging.
- Importer's name was on the packaging and toy.
- Importer's address was on the packaging.
- Product identification code was on the packaging.
- CE marking on the packaging and toy and were in a correct format.

Date sample received :Nov 21, 2019
Testing period :Nov 21, 2019 to Nov 28, 2019

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	NA
4.5	Soft filled toys	NA

Remark: P = Pass NA = Not Applicable

Date sample received :Nov 21, 2019
Testing period :Nov 21, 2019 to Nov 28, 2019



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Tests Conducted

3 19 Toxic Element Migration Test

(A) Test Result

As per EN71-3:2013+A3:2018 and followed by Inductively Coupled Plasma Atomic Emission 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					
	(3)	(12)	(14)	(19)		
Aluminium (Al)	1672	ND	ND	ND	300	70000
Antimony (Sb)	ND	ND	ND	ND	10	560
Arsenic (As)	ND	ND	ND	ND	10	47
Barium (Ba)	ND	ND	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	0.2/0.053 [◎]
Cobalt (Co)	ND	ND	ND	ND	10	130
Copper (Cu)	ND	ND	ND	ND	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	ND	ND	ND	2.5	180000
Organic tin **	ND	ND	ND	ND	2.0	12
Zinc (Zn)	ND	ND	ND	ND	100	46000



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Tests Conducted

Element	Result (mg/kg)		Reporting Limit (mg/kg)	Limit (mg/kg)
	Tested Component			
	(21)	(60)		
Aluminium (Al)	ND	ND	300	70000
Antimony (Sb)	ND	ND	10	560
Arsenic (As)	ND	ND	10	47
Barium (Ba)	ND	ND	10	18750
Boron (B)	ND	ND	50	15000
Cadmium (Cd)	ND	ND	5	17
Chromium (III) (Cr III) **	ND	ND	10	460
Chromium (VI) (Cr VI) **	ND#	ND#	0.025	0.2/0.053◎
Cobalt (Co)	ND	ND	10	130
Copper (Cu)	ND	ND	10	7700
Lead (Pb)	ND	ND	10	23
Manganese (Mn)	ND	ND	10	15000
Mercury (Hg)	ND	ND	10	94
Nickel (Ni)	ND	ND	10	930
Selenium (Se)	ND	ND	10	460
Strontium (Sr)	ND	ND	100	56000
Tin (Sn)	ND	22	2.5	180000
Organic tin **	ND	ND ^Δ	2.0	12
Zinc (Zn)	ND	ND	100	46000

Element	Result (mg/kg)		Reporting Limit (mg/kg)	Limit (mg/kg)
	Tested Component			
	(6)to(11), (13), (15)to(18), (20), (22)to(25), (61)			
Aluminium (Al)	ND		300	70000
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
Chromium (III) (Cr III) **	ND		10	460
Chromium (VI) (Cr VI) **	ND		0.025	0.2/0.053◎
Cobalt (Co)	ND		10	130
Copper (Cu)	ND		10	7700
Lead (Pb)	ND		10	23
Manganese (Mn)	ND		10	15000
Mercury (Hg)	ND		10	94
Nickel (Ni)	ND		10	930
Selenium (Se)	ND		10	460
Strontium (Sr)	ND		100	56000
Tin (Sn)	ND		2.5	180000
Organic tin **	ND		2.0	12
Zinc (Zn)	ND		100	46000



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Tests Conducted

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)
 © = The new chromium (VI) migration limit [(0.053mg/kg for Category (III))] were quoted from directive (EU) 2018/725 amending 2009/48/EC effective from 18 November 2019.
 # = 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 Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetra-butyl 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 EN71-3:2013+A3:2018.

Tested Component(s):

Sequence No.	Test Component No.	Test Component Description(s)
SN1	(2) @	Bright silver color coating on plastic (pattern of remote control of both styles).
SN2	(3)	Coatings (white, black, silver color) on plastic (pattern of #09078/12120).
SN3	(6)	White paper label with transparent plastic film and inaccessible coatings (sticker, remote control of both styles)(sample weight : 21.1mg).
SN4	(7)	Red plastic (body of #09078/12120).
SN5	(8)	Bright black plastic (window of car #09078/12120, rotary knob of remote control of both styles).
SN6	(9)	Black plastic (chassis, wheel of both styles).
SN7	(10)	Bright red plastic (damping device of #09078/12120).
SN8	(11)	Beige plastic (lid of motor of car of both styles).
SN9	(12)	Black plastic (switch of both cars).
SN10	(13)	Semi-transparent beige plastic (direction adjustment of car of both styles).
SN11	(14)	Dark brown plastic (remote control of both styles).
SN12	(15)	Black plastic (tube of both styles).
SN13	(16)	Black plastic (cap of tube of both styles).
SN14	(17)	Green plastic (damping device of car of #16950/12120).
SN15	(18)	Grass green plastic (wheel of car of #16950/12120).



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Tests Conducted

Tested Components:

Sequence No.	Test Component No.	Test Component Description(s)
SN16	(19)	Metallic grey plastic (clip of car of #16950/12120).
SN17	(20)	Dull black plastic (shell of car of #16950/12120).
SN18	(21)	Transparent black plastic (joint of car of #16950/12120).
SN19	(22)	Black PVC plastic with white printing (antenna of car, remote control of both styles).
SN20	(23)	Black 60 °PVC plastic (tire of both cars).
SN21	(24)	Black PVC plastic (cable tubing of both cars).
SN22	(25)	Black PVC plastic (back cable of car of #16950/12120).
SN23	(60)	White paper label with multicolor coatings (sticker of car of #09078/12120) (sample weight : 32.2mg).
SN24	(61)	Transparent plastic label with inaccessible coatings (sticker of #16950/12120).

@: Since the sample weight of the component was less than 10 mg, soluble heavy metal analysis was not applicable.

(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).

Date sample received: Nov 21, 2019
Testing period: Nov 21, 2019 to Dec 03, 2019



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Number: GZHH00346190S1

Tests Conducted

4 19 Toxic Element Migration Test

(A) Test Result

As per EN71-3:2019 and followed by Inductively Coupled Plasma Atomic Emission Spectrometry, Ion Chromatography with UV-VIS and Gas Chromatographic - Mass Spectrometry.

Category (III): Scraped-off toy material

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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	ND	10	7700
Lead (Pb)	ND	ND	ND	ND	10	23
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Organic tin **	ND	ND	ND	ND	2.0	12
Zinc (Zn)	ND	ND	ND	ND	100	46000



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Zinc (Zn)	ND	ND	100	46000

Element	Result (mg/kg)		Reporting Limit (mg/kg)	Limit (mg/kg)
	Tested Component			
	(6)to(11), (13), (15)to(18), (20), (22)to(25), (61)			
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Zinc (Zn)	ND		100	46000



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Tests Conducted

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Tested Component(s):

Sequence No.	Test Component No.	Test Component Description(s)
SN1	(2) @	Bright silver color coating on plastic (pattern of remote control of both styles).
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SN3	(6)	White paper label with transparent plastic film and inaccessible coatings (sticker, remote control of both styles)(sample weight : 21.1mg).
SN4	(7)	Red plastic (body of #09078/12120).
SN5	(8)	Bright black plastic (window of car #09078/12120, rotary knob of remote control of both styles).
SN6	(9)	Black plastic (chassis, wheel of both styles).
SN7	(10)	Bright red plastic (damping device of #09078/12120).
SN8	(11)	Beige plastic (lid of motor of car of both styles).
SN9	(12)	Black plastic (switch of both cars).
SN10	(13)	Semi-transparent beige plastic (direction adjustment of car of both styles).
SN11	(14)	Dark brown plastic (remote control of both styles).
SN12	(15)	Black plastic (tube of both styles).
SN13	(16)	Black plastic (cap of tube of both styles).
SN14	(17)	Green plastic (damping device of car of #16950/12120).
SN15	(18)	Grass green plastic (wheel of car of #16950/12120).



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Tested Components:

Sequence No.	Test Component No.	Test Component Description(s)
SN16	(19)	Metallic grey plastic (clip of car of #16950/12120).
SN17	(20)	Dull black plastic (shell of car of #16950/12120).
SN18	(21)	Transparent black plastic (joint of car of #16950/12120).
SN19	(22)	Black PVC plastic with white printing (antenna of car, remote control of both styles).
SN20	(23)	Black 60 °PVC plastic (tire of both cars).
SN21	(24)	Black PVC plastic (cable tubing of both cars).
SN22	(25)	Black PVC plastic (back cable of car of #16950/12120).
SN23	(60)	White paper label with multicolor coatings (sticker of car of #09078/12120) (sample weight : 32.2mg).
SN24	(61)	Transparent plastic label with inaccessible coatings (sticker of #16950/12120).

@: Since the sample weight of the component was less than 10 mg, soluble heavy metal analysis was not applicable.

(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).

Date sample received: Nov 21, 2019
Testing period: Nov 21, 2019 to Dec 03, 2019



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Tests Conducted

5 Cadmium (Cd) Content

With reference to test method IEC 62321-5:2013, acid digestion method was used and total Cadmium content was determined by Inductively Coupled Argon Plasma Spectrometry.

Element	Result (%)	Reporting Limit (%)
	Tested Component	
	(49)	
Cadmium (Cd)	ND ^Δ	0.0005

Element	Result (%)	Reporting Limit (%)
	Tested Component	
	(1/2/3), (6), (7+8+9), (10+11+12), (13+14+15), (16+17+18), (19+20+21), (22+23), (24+25), (26+27+28), (29+30+31), (32+33+34), (35+36+37), (38+39+40), (41+42+43), (44+45+46), (47+48), (50+51), (52)to(57), (61)	
	ND	
Cadmium (Cd)	ND	0.0005

Limit:

Category	Limit (%)
Wet paint	0.01
Surface coating	0.1
Plastic	0.01
Metal parts of jewelry & hair accessories	0.01

ND = Not detected (less than reporting limit)
Δ = The result is based on dry weight of testing sample

Tested Component(s):

Sequence No.	Test Component No.	Test Component Description(s)
SN1	(1)	Multicolor coatings on paper (sticker of car of #09078/12120).
SN2	(2)	Bright silver color coating on plastic (pattern of remote control of both styles).
SN3	(3)	Coatings (white, black, silver color) on plastic (pattern of #09078/12120).
SN4	(6)	White paper label with transparent plastic film and inaccessible coatings (sticker, remote control of both styles).
SN5	(7)	Red plastic (body of #09078/12120).
SN6	(8)	Bright black plastic (window of car #09078/12120, rotary knob of remote control of both styles).
SN7	(9)	Black plastic (chassis, wheel of both styles).
SN8	(10)	Bright red plastic (damping device of #09078/12120).
SN9	(11)	Beige plastic (lid of motor of car of both styles).



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Number: GZHH00346190S1

Tests Conducted

Tested Component(s):

Sequence No.	Test Component No.	Test Component Description(s)
SN10	(12)	Black plastic (switch of both cars).
SN11	(13)	Semi-transparent beige plastic (direction adjustment of car of both styles).
SN12	(14)	Dark brown plastic (remote control of both styles).
SN13	(15)	Black plastic (tube of both styles).
SN14	(16)	Black plastic (cap of tube of both styles).
SN15	(17)	Green plastic (damping device of car of #16950/12120).
SN16	(18)	Grass green plastic (wheel of car of #16950/12120).
SN17	(19)	Metallic grey plastic (clip of car of #16950/12120).
SN18	(20)	Dull black plastic (shell of car of #16950/12120).
SN19	(21)	Transparent black plastic (joint of car of #16950/12120).
SN20	(22)	Black PVC plastic with white printing (antenna of car, remote control of both styles).
SN21	(23)	Black 60 °PVC plastic (tire of both cars).
SN22	(24)	Black PVC plastic (cable tubing of both cars).
SN23	(25)	Black PVC plastic (back cable of car of #16950/12120).
SN24	(26)	Red PVC plastic with white printing (thick wire covering of car, remote control of both styles) (internal).
SN25	(27)	Black PVC plastic with white orienting (thick wire covering of car, remote control of both styles) (internal).
SN26	(28)	Grey PVC plastic white black printing (wire covering of car of #09078/12120) (internal).
SN27	(29)	Purple PVC plastic (thin wire covering of car of both styles) (internal).
SN28	(30)	Green PVC plastic with white printing (thick wire covering of car of both styles) (internal).
SN29	(31)	White PVC plastic with black printing (thick wire covering of car of both styles) (internal).
SN30	(32)	Dark blue PVC with white printing (thick wire covering of car of #16950/12120) (internal).
SN31	(33)	Orange PVC with black printing (thick wire covering of car of #16950/12120) (internal).
SN32	(34)	Purple PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN33	(35)	Dark blue PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN34	(36)	Orange PVC plastic with printing (thin wire covering of car of #16950/12120) (internal).
SN35	(37)	Green PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN36	(38)	Yellow PVC plastic with black printing (thin wire covering of car of #16950/12120) (internal).



Test Report

Number: GZHH00346190S1

Tests Conducted

Tested Component(s):

Sequence No.	Test Component No.	Test Component Description(s)
SN37	(39)	Light red PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN38	(40)	Brown PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN39	(41)	Green plastic film with gold color printing (cover of capacitor of car of #09078/12120) (internal).
SN40	(42)	Black soft plastic (bottom of capacitor of car of both styles) (internal).
SN41	(43)	Dark beige plastic with wax (inductor of car of #09078/12120) (internal).
SN42	(44)	Brown plastic with red printing (base of switch of car, remote control of both styles) (internal).
SN43	(45)	White plastic with white lube (gear of car of both styles) (internal).
SN44	(46)	Bright white plastic (plug on PCB of car of #16950/12120) (internal).
SN45	(47)	Black plastic film with white printing (cover of capacitor of car of #16950/12120) (internal).
SN46	(48)	Black plastic with beige wax (inductor of car of #16950/12120) (internal).
SN47	(49)	Transparent glue (fastener of PCB of car of #16950/12120) (internal).
SN48	(50)	Matt black plastic (button, contact switch of remote control of both styles) (internal).
SN49	(51)	Semi-transparent plastic (lid of motor of car of both styles) (internal).
SN50	(52)	Plastic part of motor (motor of car of both styles) (internal).
SN51	(53)	Green/light brown PCB (PCB base on switch of car of both styles) (internal).
SN52	(54)	Green/brown PCB (PCB of car of both styles) (internal).
SN53	(55)	Plastic part of PCB (PCB of car of both styles) (internal).
SN54	(56)	Green PCB (PCB of car, remote control of #16950/12120) (internal).
SN55	(57)	Green/dark brown PCB (PCB of remote control of both styles)
SN56	(61)	Transparent plastic label with inaccessible coatings (sticker of #16950/12120).

The Cadmium content test of the tested components (1)to(3) were conducted in composite for the materials which sample size is not sufficient to carry out the test individually.

Date sample received: Nov 21, 2019 & Nov 29, 2019

Testing period: Nov 21, 2019 to Dec 03, 2019



Test Report

Number: GZHH00346190S1

Tests Conducted

6 Phthalate Content

With reference to International Standard ISO 8124-6:2018, and phthalate content was determined by Gas Chromatographic-Mass Spectrometric (GC-MS).

For 4 phthalates

Test Item	CAS No.	Result (%)	Reporting Limit (%)	Limit (%)
		Tested component		
		(26+27+28), (29+30+31), (32+33+34), (35+36+37), (38+39+40), (41+42+43), (44+45+46), (47+48+49), (50+51), (52)to(56)		
Dibutyl phthalate (DBP)	84-74-2	ND	0.005	--
Di-(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ND	0.005	--
Benzyl butyl phthalate (BBP)	85-68-7	ND	0.005	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	0.005	--
Sum of DBP, DEHP, BBP and DIBP	--	ND	--	0.1

For 7 phthalates

Test Item	CAS No.	Result (%)	Reporting Limit (%)	Limit (%)
		Tested component		
		(4)to(6), (7+8+9), (10+11+12), (13+14+15), (16+17+18), (19+20+21), (22+23), (24+25), (57), (61)		
Dibutyl phthalate (DBP)	84-74-2	ND	0.005	--
Di-(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ND	0.005	--
Benzyl butyl phthalate (BBP)	85-68-7	ND	0.005	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	0.005	--
Sum of DBP, DEHP, BBP and DIBP	--	ND	--	0.1
Di-iso-nonyl phthalate (DINP)	28553-12-0/ 68515-48-0	ND	0.005	--
Di-n-octyl phthalate(DNOP)	117-84-0	ND	0.005	--
Di-iso-decyl phthalate (DIDP)	26761-40-0/ 68515-49-1	ND	0.005	--
Sum of DINP, DNOP and DIDP	--	ND	--	0.1

The limit was quoted according to Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Amendment (EC) No 552/2009 and (EU) 2018/2005, Annex XVII Entry 51 & 52 on Phthalate Content.



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Number: GZHH00346190S1

Tests Conducted

For toys and childcare articles, combination of DIBP to current limit (sum of DBP, DEHP and BBP) was quoted from Commission Regulation (EU) 2018/2005 effective from 7 July 2020.

ND = Not detected (less than reporting limit)

Tested Component(s):

Sequence No.	Test Component No.	Test Component Description(s)
SN1	(4)	Multicolor coatings on plastic/paper (pattern, sticker of #09078/12120).
SN2	(5)	White paper label excluding coating (sticker of #09078/12120).
SN3	(6)	White paper label with transparent plastic film and inaccessible coatings (sticker, remote control of both styles).
SN4	(7)	Red plastic (body of #09078/12120).
SN5	(8)	Bright black plastic (window of car #09078/12120, rotary knob of remote control of both styles).
SN6	(9)	Black plastic (chassis, wheel of both styles).
SN7	(10)	Bright red plastic (damping device of #09078/12120).
SN8	(11)	Beige plastic (lid of motor of car of both styles).
SN9	(12)	Black plastic (switch of both cars).
SN10	(13)	Semi-transparent beige plastic (direction adjustment of car of both styles).
SN11	(14)	Dark brown plastic (remote control of both styles).
SN12	(15)	Black plastic (tube of both styles).
SN13	(16)	Black plastic (cap of tube of both styles).
SN14	(17)	Green plastic (damping device of car of #16950/12120).
SN15	(18)	Grass green plastic (wheel of car of #16950/12120).
SN16	(19)	Metallic grey plastic (clip of car of #16950/12120).
SN17	(20)	Dull black plastic (shell of car of #16950/12120).
SN18	(21)	Transparent black plastic (joint of car of #16950/12120).
SN19	(22)	Black PVC plastic with white printing (antenna of car, remote control of both styles).
SN20	(23)	Black 60 °PVC plastic (tire of both cars).
SN21	(24)	Black PVC plastic (cable tubing of both cars).
SN22	(25)	Black PVC plastic (back cable of car of #16950/12120).
SN23	(26)	Red PVC plastic with white printing (thick wire covering of car, remote control of both styles) (internal).
SN24	(27)	Black PVC plastic with white orienting (thick wire covering of car, remote control of both styles) (internal).
SN25	(28)	Grey PVC plastic white black printing (wire covering of car of #09078/12120) (internal).
SN26	(29)	Purple PVC plastic (thin wire covering of car of both styles) (internal).
SN27	(30)	Green PVC plastic with white printing (thick wire covering of car of both styles) (internal).
SN28	(31)	White PVC plastic with black printing (thick wire covering of car of both styles) (internal).



Test Report

Number: GZHH00346190S1

Tests Conducted

Tested Component(s):

Sequence No.	Test Component No.	Test Component Description(s)
SN29	(32)	Dark blue PVC with white printing (thick wire covering of car of #16950/12120) (internal).
SN30	(33)	Orange PVC with black printing (thick wire covering of car of #16950/12120) (internal).
SN31	(34)	Purple PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN32	(35)	Dark blue PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN33	(36)	Orange PVC plastic with printing (thin wire covering of car of #16950/12120) (internal).
SN34	(37)	Green PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN35	(38)	Yellow PVC plastic with black printing (thin wire covering of car of #16950/12120) (internal).
SN36	(39)	Light red PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN37	(40)	Brown PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN38	(41)	Green plastic film with gold color printing (cover of capacitor of car of #09078/12120) (internal).
SN39	(42)	Black soft plastic (bottom of capacitor of car of both styles) (internal).
SN40	(43)	Dark beige plastic with wax (inductor of car of #09078/12120) (internal).
SN41	(44)	Brown plastic with red printing (base of switch of car, remote control of both styles) (internal).
SN42	(45)	White plastic with white lube (gear of car of both styles) (internal).
SN43	(46)	Bright white plastic (plug on PCB of car of #16950/12120) (internal).
SN44	(47)	Black plastic film with white printing (cover of capacitor of car of #16950/12120) (internal).
SN45	(48)	Black plastic with beige wax (inductor of car of #16950/12120) (internal).
SN46	(49)	Transparent glue (fastener of PCB of car of #16950/12120) (internal).
SN47	(50)	Matt black plastic (button, contact switch of remote control of both styles) (internal).
SN48	(51)	Semi-transparent plastic (lid of motor of car of both styles) (internal).
SN49	(52)	Plastic part of motor (motor of car of both styles) (internal).
SN50	(53)	Green/light brown PCB (PCB base on switch of car of both styles) (internal).
SN51	(54)	Green/brown PCB (PCB of car of both styles) (internal).
SN52	(55)	Plastic part of PCB (PCB of car of both styles) (internal).
SN53	(56)	Green PCB (PCB of car, remote control of #16950/12120) (internal).
SN54	(57)	Green/dark brown PCB (PCB of remote control of both styles)
SN55	(61)	Transparent plastic label with inaccessible coatings (sticker of #16950/12120).

Date sample received: Nov 21, 2019 & Nov 29, 2019

Testing period: Nov 21, 2019 to Dec 04, 2019



Test Report

Number: GZHH00346190S1

Tests Conducted

7 Phthalates Content

By solvent extraction and followed by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

Test item	Result (%)	Reporting limit (%)
	Tested component	
	(4)to(6), (7+8+9), (10+11+12), (13+14+15), (16+17+18), (19+20+21), (22+23), (24+25), (26+27+28), (29+30+31), (32+33+34), (35+36+37), (38+39+40), (41+42+43), (44+45+46), (47+48+49), (50+51), (52)to(57), (61)	
Di-n-hexyl phthalate (DnHP)	ND	0.01
Di-iso-butyl phthalate (DIBP)	ND	0.01
Di-cyclohexyl phthalate (DCHP)	ND	0.01
Di-n-pentyl phthalate (DPENP)	ND	0.01

ND = Not Detected

Tested Components:

Sequence No.	Test Component No.	Test Component Description(s)
SN1	(4)	Multicolor coatings on plastic/paper (pattern, sticker of #09078/12120).
SN2	(5)	White paper label excluding coating (sticker of #09078/12120).
SN3	(6)	White paper label with transparent plastic film and inaccessible coatings (sticker, remote control of both styles).
SN4	(7)	Red plastic (body of #09078/12120).
SN5	(8)	Bright black plastic (window of car #09078/12120, rotary knob of remote control of both styles).
SN6	(9)	Black plastic (chassis, wheel of both styles).
SN7	(10)	Bright red plastic (damping device of #09078/12120).
SN8	(11)	Beige plastic (lid of motor of car of both styles).
SN9	(12)	Black plastic (switch of both cars).
SN10	(13)	Semi-transparent beige plastic (direction adjustment of car of both styles).
SN11	(14)	Dark brown plastic (remote control of both styles).
SN12	(15)	Black plastic (tube of both styles).
SN13	(16)	Black plastic (cap of tube of both styles).
SN14	(17)	Green plastic (damping device of car of #16950/12120).
SN15	(18)	Grass green plastic (wheel of car of #16950/12120).
SN16	(19)	Metallic grey plastic (clip of car of #16950/12120).
SN17	(20)	Dull black plastic (shell of car of #16950/12120).
SN18	(21)	Transparent black plastic (joint of car of #16950/12120).
SN19	(22)	Black PVC plastic with white printing (antenna of car, remote control of both styles).



Test Report

Number: GZHH00346190S1

Tests Conducted

Tested Components:

Sequence No.	Test Component No.	Test Component Description(s)
SN20	(23)	Black 60 °PVC plastic (tire of both cars).
SN21	(24)	Black PVC plastic (cable tubing of both cars).
SN22	(25)	Black PVC plastic (back cable of car of #16950/12120).
SN23	(26)	Red PVC plastic with white printing (thick wire covering of car, remote control of both styles) (internal).
SN24	(27)	Black PVC plastic with white orienting (thick wire covering of car, remote control of both styles) (internal).
SN25	(28)	Grey PVC plastic white black printing (wire covering of car of #09078/12120) (internal).
SN26	(29)	Purple PVC plastic (thin wire covering of car of both styles) (internal).
SN27	(30)	Green PVC plastic with white printing (thick wire covering of car of both styles) (internal).
SN28	(31)	White PVC plastic with black printing (thick wire covering of car of both styles) (internal).
SN29	(32)	Dark blue PVC with white printing (thick wire covering of car of #16950/12120) (internal).
SN30	(33)	Orange PVC with black printing (thick wire covering of car of #16950/12120) (internal).
SN31	(34)	Purple PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN32	(35)	Dark blue PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN33	(36)	Orange PVC plastic with printing (thin wire covering of car of #16950/12120) (internal).
SN34	(37)	Green PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN35	(38)	Yellow PVC plastic with black printing (thin wire covering of car of #16950/12120) (internal).
SN36	(39)	Light red PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN37	(40)	Brown PVC plastic (thin wire covering of car of #16950/12120) (internal).
SN38	(41)	Green plastic film with gold color printing (cover of capacitor of car of #09078/12120) (internal).
SN39	(42)	Black soft plastic (bottom of capacitor of car of both styles) (internal).
SN40	(43)	Dark beige plastic with wax (inductor of car of #09078/12120) (internal).
SN41	(44)	Brown plastic with red printing (base of switch of car, remote control of both styles) (internal).
SN42	(45)	White plastic with white lube (gear of car of both styles) (internal).
SN43	(46)	Bright white plastic (plug on PCB of car of #16950/12120) (internal).
SN44	(47)	Black plastic film with white printing (cover of capacitor of car of #16950/12120) (internal).



Test Report

Number: GZHH00346190S1

Tests Conducted

Tested Components:

Sequence No.	Test Component No.	Test Component Description(s)
SN45	(48)	Black plastic with beige wax (inductor of car of #16950/12120) (internal).
SN46	(49)	Transparent glue (fastener of PCB of car of #16950/12120) (internal).
SN47	(50)	Matt black plastic (button, contact switch of remote control of both styles) (internal).
SN48	(51)	Semi-transparent plastic (lid of motor of car of both styles) (internal).
SN49	(52)	Plastic part of motor (motor of car of both styles) (internal).
SN50	(53)	Green/light brown PCB (PCB base on switch of car of both styles) (internal).
SN51	(54)	Green/brown PCB (PCB of car of both styles) (internal).
SN52	(55)	Plastic part of PCB (PCB of car of both styles) (internal).
SN53	(56)	Green PCB (PCB of car, remote control of #16950/12120) (internal).
SN54	(57)	Green/dark brown PCB (PCB of remote control of both styles)
SN55	(61)	Transparent plastic label with inaccessible coatings (sticker of #16950/12120).

Date sample received : Nov 21, 2019 & Nov 29, 2019
Testing period : Nov 21, 2019 to Dec 04, 2019

8 Polycyclic Aromatic Hydrocarbons (PAHs) Content

With reference to AfPS GS 2014:01 PAK (PAH), PAHs content was determined by Gas Chromatography-Mass Spectrometry (GC-MS).

Test item	Result (mg/kg)	Reporting limit (mg/kg)	Limit (mg/kg)
	Tested component		
	(3), (7+8), (9+10), (11+12), (13+14), (15+16), (17+18), (19+20), (21+22), (23+24), (25+61)		
Benzo[a]anthracene	ND	0.1	0.5
Chrysene	ND	0.1	0.5
Benzo[b]fluoranthene	ND	0.1	0.5
Benzo[k]fluoranthene	ND	0.1	0.5
Benzo[a]pyrene	ND	0.1	0.5
Dibenzo[a,h]anthracene	ND	0.1	0.5
Benzo[j]fluoranthene	ND	0.1	0.5
Benzo[e]pyrene	ND	0.1	0.5

ND= Not detected (less than reporting limit)



Test Report

Number: GZHH00346190S1

Tests Conducted

Tested Component(s):

Sequence No.	Test Component No.	Test Component Description(s)
SN1	(3)	Coatings (white, black, silver color) on plastic (pattern of #09078/12120).
SN2	(7)	Red plastic (body of #09078/12120).
SN3	(8)	Bright black plastic (window of car #09078/12120, rotary knob of remote control of both styles).
SN4	(9)	Black plastic (chassis, wheel of both styles).
SN5	(10)	Bright red plastic (damping device of #09078/12120).
SN6	(11)	Beige plastic (lid of motor of car of both styles).
SN7	(12)	Black plastic (switch of both cars).
SN8	(13)	Semi-transparent beige plastic (direction adjustment of car of both styles).
SN9	(14)	Dark brown plastic (remote control of both styles).
SN10	(15)	Black plastic (tube of both styles).
SN11	(16)	Black plastic (cap of tube of both styles).
SN12	(17)	Green plastic (damping device of car of #16950/12120).
SN13	(18)	Grass green plastic (wheel of car of #16950/12120).
SN14	(19)	Metallic grey plastic (clip of car of #16950/12120).
SN15	(20)	Dull black plastic (shell of car of #16950/12120).
SN16	(21)	Transparent black plastic (joint of car of #16950/12120).
SN17	(22)	Black PVC plastic with white printing (antenna of car, remote control of both styles).
SN18	(23)	Black 60 °PVC plastic (tire of both cars).
SN19	(24)	Black PVC plastic (cable tubing of both cars).
SN20	(25)	Black PVC plastic (back cable of car of #16950/12120).
SN21	(61)	Transparent plastic label with inaccessible coatings (sticker of #16950/12120).

Date sample received: Nov 21, 2019
Testing period: Nov 21, 2019 to Nov 28, 2019



Test Report

Number: GZHH00346190S1

Tests Conducted



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.

This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct. This report shall not be reproduced unless with prior written approval from Intertek Testing Services Shenzhen Limited, Guangzhou Branch.



To: MAY CHEONG TOY PRODUCTS FTY., LTD
Attention: ICY HUANG

Ref: FC-200(0593)
Date: Jun 02, 2020

Re : Report Revision Notification

Intertek Testing Services Report Number GZHH00346190 dated Dec 05, 2019

Please be informed that all the content recorded in the above captioned report will be void. This captioned report is now supersede by a revised Intertek Testing Services Report, GZHH00346190S1

Details of report amendment:

1. Add applicant's ref. information as per client's request.

Thank you for your attention.

Authorized by:
For Intertek Testing Services Shenzhen Ltd.
Guangzhou Branch, Hardlines



Victor T.J. Wang
Assistant General Manager

