



Valued Quality. Delivered.

Hong Kong Government Recognized Service Supplier
Approved Laboratory of The Woolmark Company

Members of :

American National Standards Institute
American Society for Testing and Materials
British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited
Hong Kong Toys Council

Test Report

Number: HKGH0210181101

Applicant: TM TOYS SP Z O O
UL ZBOZOWA 4
70-653 SZCZECIN
POLAND

Date: May 05, 2017

Attn: DANIEL POON

Submitted sample said to be :
Item Name : **Inflatable Racing Car**
Ref. No. : **DKJ0523**
Quantity : Four sets
Labelled Age Group : Not specified
Packaging Provided : No
Supplier : Welfun Group Limited
Buyer : TM Toys Sp. z o.o.
Country of Origin : China

Conclusion:

The submitted sample was tested under the following requirements requested by the applicant, subject to the information stated in the remark and attached page(s) for details :

<u>Requirement</u>	<u>Result</u>
(1) EN71-3 : 2013 + A1:2014 - Migration of certain elements	Pass
(2) REACH Regulation (EC) No.1907/2006 , Annex XVII Item 23 & amendment No. 2016/217 - Cadmium content requirement	Pass
(3) 94/62/EC and amendment 2013/2/EU & Directive (EU) 2015/720 Directive (packaging waste) - Toxic elements test	Pass
(4) REACH Regulation (EC) no. 1907/2006, Annex XVII Items 51 & 52 & amendment no. 552/2009 - Phthalates content	Pass
(5) REACH Regulation (EC) no. 1907/2006 & amendment (EU) no. 1272/2013 Annex XVII Item 50 - Polycyclic aromatic hydrocarbons content	Pass

For and on behalf of :
Intertek Testing Services HK Ltd.

Angel Y.F. Cheung
Vice President



Test Report

Number: HKGH0210181101

(1) 19 Toxic Element Migration Test

Test Standard : EN71-3:2013 + A1:2014

Category (III): Scraped-off toy material:

	Result (mg/kg)			Limit (mg/kg)
	(1)	(2)	(3)	
Soluble Aluminium (Al)	<300	<300	<300	70000
Soluble Antimony (Sb)	<10	<10	<10	560
Soluble Arsenic (As)	<10	<10	<10	47
Soluble Barium (Ba)	27	<10	100	18750
Soluble Boron (B)	<50	<50	<50	15000
Soluble Cadmium (Cd)	<5	<5	<5	17
Soluble Chromium (III) (Cr III) ++	<10	<10	<10	460
Soluble Chromium (VI) (Cr VI) ++	<0.1	<0.1	<0.1	0.2
Soluble Cobalt (Co)	<10	<10	<10	130
Soluble Copper (Cu)	<10	<10	<10	7700
Soluble Lead (Pb)	<10	<10	<10	160
Soluble Manganese (Mn)	<10	<10	<10	15000
Soluble Mercury (Hg)	<10	<10	<10	94
Soluble Nickel (Ni)	<10	<10	<10	930
Soluble Selenium (Se)	<10	<10	<10	460
Soluble Strontium (Sr)	<100	<100	<100	56000
Soluble Tin (Sn)	<10	<10	<10	180000
Soluble Organic tin ++	<2.0	<2.0	<2.0	12
Soluble Zinc (Zn)	130	<100	<100	46000

	Result (mg/kg)			Limit (mg/kg)
	(4)	(5)	(6)	
Soluble Aluminium (Al)	<300	<300	<300	70000
Soluble Antimony (Sb)	<10	<10	<10	560
Soluble Arsenic (As)	<10	<10	<10	47
Soluble Barium (Ba)	<10	<10	<10	18750
Soluble Boron (B)	<50	<50	<50	15000
Soluble Cadmium (Cd)	<5	<5	<5	17
Soluble Chromium (III) (Cr III) ++	<10	<10	<10	460
Soluble Chromium (VI) (Cr VI) ++	<0.1	<0.1	<0.1	0.2
Soluble Cobalt (Co)	<10	<10	<10	130
Soluble Copper (Cu)	<10	<10	<10	7700
Soluble Lead (Pb)	<10	<10	<10	160
Soluble Manganese (Mn)	<10	<10	<10	15000
Soluble Mercury (Hg)	<10	<10	<10	94
Soluble Nickel (Ni)	<10	<10	<10	930
Soluble Selenium (Se)	<10	<10	<10	460
Soluble Strontium (Sr)	<100	<100	<100	56000
Soluble Tin (Sn)	<10	<10	<10	180000
Soluble Organic tin ++	<2.0	<2.0	<2.0	12
Soluble Zinc (Zn)	<100	<100	<100	46000



Test Report

Number: HKGH0210181101

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.

Tested Components:

- (1) Coatings (black, white, yellow) on plastic sheet (body of car).
- (2) Red coating on plastic sheet (exhaust pipe of car).
- (3) Grey coating on plastic sheet (wheels of car).
- (4) Black plastic sheet (body, exhaust pipe, wheels, steering wheel of car).
- (5) Red plastic sheet (body of car).
- (6) Translucent plastic (valve).

Date sample received : Mar 23, 2017
Test Period : Mar 23, 2017 to Mar 28, 2017

(2) Cadmium (Cd) Content

Test Method : Acid digestion method was used and total Cadmium content was determined by Inductively Coupled Argon Plasma Spectrometry.

Tested Component	Result in %, w/w	Limit in %, w/w
(1)	ND	0.1
(2/3/4)	ND	0.01

ND : Not detected (< 0.0005%)

Tested Components:

- (1) Coatings on plastic sheet (body, exhaust pipe, wheels of car).
- (2) Black plastic sheet (body, exhaust pipe, wheels, steering wheel of car).
- (3) Red plastic sheet (body of car).
- (4) Translucent plastic (valve).

Date sample received : Mar 23, 2017
Test Period : Mar 23, 2017 to Mar 28, 2017



Test Report

Number: HKGH0210181101

(3) Toxic Elements Analysis

Test Method : 94/62/EC and amendment 2013/2/EU & Directive (EU) 2015/720 Directive on packaging and packaging waste, acid digestion method was used and toxic elements contents were determined by Inductively Coupled Argon Plasma Spectrometry, and Hexavalent Chromium content was determined by UV-Visible Spectrophotometry.

	Result (ppm)	Limit (ppm)
	(1/2)	
Total Lead (Pb)	<5	--
Total Cadmium (Cd)	<5	--
Total Mercury (Hg)	<5	--
Chromium VI (Cr (VI))	<1	--
Sum of Lead, Cadmium, Mercury and Chromium Cr (VI)	<16	100

ppm = parts per million = mg/kg

Tested Components:

- (1) Translucent plastic sheet with black coating (bag) (packaging).
- (2) Transparent adhesive plastic tape (packaging).

Date sample received : Mar 23, 2017

Test Period : Mar 23, 2017 to Mar 28, 2017



Test Report

Number: HKGH0210181101

(4) Phthalate Content Test

Test Method : EN14372, by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

Six Phthalate content:

Compounds	Result (% , w/w)		Limit (% , w/w)
	(1)	(2/3/4)	
Dibutyl phthalate (DBP)	<0.01	<0.01	--
Diethyl hexyl phthalate (DEHP)	0.01	<0.01	--
Benzyl butyl phthalate (BBP)	0.01	<0.01	--
Sum of DBP,DEHP & BBP	0.02	<0.01	0.1
Diisononyl phthalate (DINP)	<0.01	<0.01	--
Di-n-octyl phthalate (DnOP)	<0.01	<0.01	--
Diisodecyl phthalate (DIDP)	<0.01	<0.01	--
Sum of DINP,DnOP & DIDP	<0.01	<0.01	0.1

The above limit was quoted according to Annex XVII Items 51 & 52 of the REACH Regulation (EC) no. 1907/2006 & amendment no. 552/2009 for phthalate content in toys and childcare articles.

Tested Components:

- (1) Coatings on plastic sheet (body, exhaust pipe, wheels of car).
- (2) Black plastic sheet (body, exhaust pipe, wheels, steering wheel of car).
- (3) Red plastic sheet (body of car).
- (4) Translucent plastic (valve).

Date sample received : Mar 23, 2017

Test Period : Mar 23, 2017 to Mar 28, 2017



Test Report

Number: HKGH0210181101

(5) Polycyclic Aromatic Hydrocarbons (PAH) Content

Test Method : Solvent extraction and determined by Gas Chromatographic - Mass Spectrometry (GC/MS).

Compound	Result (ppm)		Limit (ppm)
	(1)	(2/3/4)	
Benzo(a)pyrene	<0.10	<0.10	0.5
Benzo(e)pyrene	<0.10	<0.10	0.5
Benzo(a)anthracene	<0.10	<0.10	0.5
Chrysene	<0.10	<0.10	0.5
Benzo(b)fluoranthene	<0.10	<0.10	0.5
Benzo(j)fluoranthene	<0.10	<0.10	0.5
Benzo(k)fluoranthene	<0.10	<0.10	0.5
Dibenzo(a,h)anthracene	<0.10	<0.10	0.5

The above limit was quoted according to Annex XVII Items 50 of the REACH Regulation (EC) no. 1907/2006 & amendment (EU) no. 1272/2013 for polycyclic aromatic hydrocarbons (PAH).

ppm = parts per million = mg/kg

Tested Components:

- (1) Coatings on plastic sheet (body, exhaust pipe, wheels of car).
- (2) Black plastic sheet (body, exhaust pipe, wheels, steering wheel of car).
- (3) Red plastic sheet (body of car).
- (4) Translucent plastic (valve).

Date sample received : Mar 23, 2017

Test Period : Mar 23, 2017 to Mar 29, 2017



Valued Quality. Delivered.

Hong Kong Government Recognized Service Supplier
Approved Laboratory of The Woolmark Company

Members of :
American National Standards Institute
American Society for Testing and Materials
British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited
Hong Kong Toys Council

Test Report

Number: HKGH0210181101



End of report

Except where explicitly agreed in writing, all work and services performed by Intertek is subject to our standard Terms and Conditions which can be obtained at our website: <http://www.intertek.com/terms/>. Intertek's responsibility and liability are limited to the terms and conditions of the agreement.

This report is made solely on the basis of your instructions and / or information and materials supplied by you and provide no warranty on the tested sample(s) be truly representative of the sample source. The report is not intended to be a recommendation for any particular course of action, you are responsible for acting as you see fit on the basis of the report results. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accepts no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. This report does not discharge or release you from your legal obligations and duties to any other person. You are the only one authorized to permit copying or distribution of this report (and then only in its entirety). Any such third parties to whom this report may be circulated rely on the content of the report solely at their own risk.

This report shall not be reproduced, except in full.

