

Test Report

Report No.: TLSZF00064662a

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Applicant : CARPENTERS MANUFACTORY LIMITED
Address : HUANG JIN JI INDUSTRIAL ZONE, SHANG JIE VILLAGE, QI SHI TOWN,
DONGGUAN CITY, GUANGDONG PROVINCE, P.R.CHINA

Report on the submitted sample(s) said to be:

Sample Name : Crayon on Wheels
Item/Lot No. : TC0C01-Dump Truck, TC0C02-Camper Van, TC0C03-Taxi,
TC0C07-Family Car, TC0C05-Ambulance, TC0C08-School Bus,
TC0C06-Police car, TC0C04-Fire Truck
Manufacturer : Carpenters Manufactory Limited
Quantity of Sample : 2 pcs/style
Country of Origin : CHINA
Exported to : Europe
Client Specified Age Grading : 1year+
Labeled Age Grading : 1Y+
Age Group Applied in Testing : Over 12 months
Sample Received Date : Apr.22, 2013
Sample Resubmission Date : May 08, 2013
Sample Tested Date : Apr.22, 2013 to May 17, 2013

Test Conducted:

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

Tested by Jerry

Reviewed by 

Approved by Victor Wang

Date 2013-05-20



Victor Wang
Lab Manager

No. 1622535642

Centre Testing International (Shenzhen) Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

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Executive Summary:

TEST REQUEST

- 1) European Standard on Safety of Toys:
 - EN 71-1:2011 Mechanical and Physical Properties
 - EN 71-2:2011 Flammability of Toys
- 2) European Directive 2009/48/EC on the Safety of toys:
 - Point 13 of clause III of annex II, migration of certain elements
- 3) European Regulation(EC) No. 1907/2006, REACH & amendment No.552/2009 Annex XVII
 - Cadmium and its compounds
 - Phthalates in toys and childcare articles

CONCLUSION

PASS

PASS

PASS

PASS

PASS

***** For Further Details, Please Refer To the Following Page(s) *****

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1) EUROPEAN STANDARD ON SAFETY OF TOYS

▼ Mechanical and physical properties

As specified in European Standard on Safety of Toys EN 71 part 1:2011.

Clause	Description	Assessment
4	General requirements	
4.1	Material cleanliness.....	Pass
4.7	Edges	Pass
4.8	Points and metallic wires	Pass
5	Toys intended for children under 36 months	
	--Washing/Cleaning	Pass
5.1	General requirements:	
5.1a	Small part requirement on toys & removable	
	Components (Test method 8.2)	Pass
5.1b	Torque test (Test method 8.3)	Pass
	Tension test (Test method 8.4)	Pass
	Drop test (Test method 8.5)	Pass
	Impact test (Test method 8.7)	Pass
	Compression test (Test method 8.8)	Pass
	Sharp edge (Test method 8.11)	Pass
	Sharp point (Test method 8.12)	Pass
5.1e	Glued wooden toys and toys with glued on plastic decals	Pass
7	Warnings and instructions for use	
	--CE marking requirement	Pass
	--Manufacturer and importer's name or registered name/trade mark and address	See Remark 1
	Remark 1: The manufacturer's name registered trade name or registered trade mark and the address at which the manufacture can be contacted must be indicated on the toy or, where that is not possible, on its packaging or in a document accompanying the toy. This requirement applies also to the name and address etc. of any importer.	
	--Product Identification: type, batch, serial or model number or other element	See Remark 2
	Remark 2: Manufacturer must 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.	

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7.1 General N/A

N/A = Not Applicable

Note:

- Only applicable clause(s) was/ were shown.

▼ Flammability of Toys

As specified in European Standard on Safety of Toys EN 71 part 2:2011.

<u>Clause</u>	<u>Description</u>	<u>Assessment</u>
4	Requirements	
4.1	General (The following materials shall not be used in the manufacture of toys except as provided in EN 71-2:2011 : Celluloid, materials with the same behaviour in fire as celluloid, materials with a piled surface which produce surface flash, flammable gases, extremely flammable liquids, highly flammable liquids, flammable liquids and flammable gels.)	Pass

Note:

- Only applicable clause(s) was/ were shown.

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2) 2009/48/EC

▼ Migration of certain elements※

Test method: with reference to FprEN 71-3:2013.

Instruments used for analysis: ICP-OES, ICP-MS and /or GC-MS.

Category III: scraped-off toy material

Tested Item	Result (mg/kg)					MDL	Limit
	(1)	(2)	(3)	(4)	(5)	(mg/kg)	(mg/kg)
Aluminium (Al)	ND	ND	ND	ND	ND	50	70000
Antimony (Sb)	ND	ND	ND	ND	ND	5	560
Arsenic (As)	ND	ND	ND	ND	ND	5	47
Barium (Ba)	ND	ND	ND	ND	ND	50	56000
Boron (B)	ND	ND	ND	ND	ND	50	15000
Cadmium (Cd)	ND	ND	ND	ND	ND	1	17
Chromium (Cr ³⁺)	ND	ND	11	ND	ND	0.16	460
Chromium (Cr ⁶⁺)	ND	ND	ND ^{#1}	ND	ND	0.16	0.2
Cobalt (Co)	ND	ND	ND	ND	ND	5	130
Copper (Cu)	ND	ND	ND	ND	ND	50	7700
Lead (Pb)	ND	ND	ND	ND	ND	5	160
Manganese (Mn)	ND	ND	ND	ND	ND	50	15000
Mercury (Hg)	ND	ND	ND	ND	ND	5	94
Nickel (Ni)	ND	ND	6	ND	ND	5	930
Selenium (Se)	ND	ND	ND	ND	ND	5	460
Strontium (Sr)	174	ND	ND	ND	ND	50	56000
Tin (Sn)	ND	ND	3.7	ND	ND	2	180000
Organic tin	ND	ND	ND ^{#2}	ND	ND	5	12
Zinc (Zn)	ND	ND	87	ND	ND	50	46000

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Tested Item	Result (mg/kg)					MDL	Limit
	(6)	(7)	(8)	(9)	(10)	(mg/kg)	(mg/kg)
Aluminium (Al)	1275	66	129	ND	73	50	70000
Antimony (Sb)	ND	ND	ND	ND	ND	5	560
Arsenic (As)	ND	ND	ND	ND	ND	5	47
Barium (Ba)	ND	ND	ND	ND	ND	50	56000
Boron (B)	ND	ND	ND	ND	ND	50	15000
Cadmium (Cd)	ND	ND	ND	ND	ND	1	17
Chromium (Cr ³⁺)	ND	ND	ND	ND	ND	0.16	460
Chromium (Cr ⁶⁺)	ND	ND	ND	ND	ND	0.16	0.2
Cobalt (Co)	ND	ND	ND	ND	ND	5	130
Copper (Cu)	ND	ND	ND	ND	ND	50	7700
Lead (Pb)	ND	ND	ND	ND	ND	5	160
Manganese (Mn)	ND	ND	ND	ND	ND	50	15000
Mercury (Hg)	ND	ND	ND	ND	ND	5	94
Nickel (Ni)	ND	ND	ND	ND	ND	5	930
Selenium (Se)	ND	ND	ND	ND	ND	5	460
Strontium (Sr)	ND	ND	ND	ND	ND	50	56000
Tin (Sn)	ND	ND	ND	ND	ND	2	180000
Organic tin	ND	ND	ND	ND	ND	5	12
Zinc (Zn)	ND	ND	ND	ND	ND	50	46000

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Tested Item	Result (mg/kg)			MDL	Limit
	(11)	(12)	(13)	(mg/kg)	(mg/kg)
Aluminium (Al)	65	ND	ND	50	70000
Antimony (Sb)	ND	ND	ND	5	560
Arsenic (As)	ND	ND	ND	5	47
Barium (Ba)	ND	ND	ND	50	56000
Boron (B)	ND	ND	ND	50	15000
Cadmium (Cd)	ND	ND	ND	1	17
Chromium (Cr ³⁺)	ND	ND	ND	0.16	460
Chromium (Cr ⁶⁺)	ND	ND	ND	0.16	0.2
Cobalt (Co)	ND	ND	ND	5	130
Copper (Cu)	ND	ND	ND	50	7700
Lead (Pb)	ND	ND	ND	5	160
Manganese (Mn)	ND	ND	ND	50	15000
Mercury (Hg)	ND	ND	ND	5	94
Nickel (Ni)	ND	ND	ND	5	930
Selenium (Se)	ND	ND	ND	5	460
Strontium (Sr)	ND	ND	ND	50	56000
Tin (Sn)	ND	ND	ND	2	180000
Organic tin	ND	ND	ND	5	12
Zinc (Zn)	ND	ND	ND	50	46000

Tested Component(s):

- (1) Bright red coating(A1Y) (sample weight:70.3 mg)
- (2) Orange coating(A2Y) (sample weight:65.0 mg)
- (3) Light yellow coating(A3Y) (sample weight:53.4 mg)
- (4) Dark yellow coating(A4Y) (sample weight:41.2 mg)
- (5) Grey coating(A15Y) (sample weight:14.2 mg)
- (6) Dark blue coating(A7Y) (sample weight:37.8 mg)
- (7) Light blue coating(A8Y) (sample weight:48.0 mg)
- (8) White coating(A14Y)
- (9) Kelly coating(sample weight:37.5 mg)
- (10) Black coating(A19Y) (sample weight:28.5 mg)

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- (11) Light grey coating(sample weight:26.0 mg)
- (12) Natural wood(car)
- (13) Flesh plastic(wheel)

Remark:

- mg/kg = milligram per kilogram = ppm
- ND = Not Detected (less than MDL)
- MDL = Method Detection Limit
- Method FprEN 71-3:2013 is still a draft, applicant should take care to estimate its compliance when final version published.
- Unless specified, Cr species (Cr^{3+} and Cr^{6+}) and organic Tin were determined based on elemental analysis.
- ^{#1} Chromium (Cr^{6+}) confirmation test had been performed.
- ^{#2} Organic Tin confirmation test had been performed.
- Where the test portion has a mass of between 10mg and 100mg, the quantity of the appropriate elements shall be calculated as if 100mg of the test portion had been used.
- As received, the test portion of dark green coating(A5Y) is less than 10mg, therefore such components were not tested for migration of certain elements.
- Result(s) shown of tested component(s) (12) and (13) is/are quoted from CTI test report TLSZF00063915.
- “※” indicates the method(s) is (are) not applied for CNAS accreditation yet.

3) REACH ANNEX XVII

▼ Cadmium and its compounds

As specified in entry 23, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendments No.552/2009 & No.494/2011, method EN 1122:2001 Method B was used and total Cadmium content was determined by ICP-OES and/or AAS.

Tested Item	Result (%)			MDL	Limit
	(1)/(2)/(3)	(4)/(5)/(6)	(7)/(8)/(9)	(%)	(%)
Cadmium (Cd)	ND	ND	ND	0.0005	0.01

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Tested Item	Result (%)		MDL	Limit
	(10)/(11)/(12)	(13)	(%)	(%)
Cadmium (Cd)	ND	ND	0.0005	0.01

Tested Component(s):

- (1) Bright red coating(A1Y)
- (2) Orange coating(A2Y)
- (3) Light yellow coating(A3Y)
- (4) Dark yellow coating(A4Y)
- (5) Dark green paint(A5Y)
- (6) Dark blue coating(A7Y)
- (7) Light blue coating(A8Y)
- (8) White coating(A14Y)
- (9) Grey paint (A15Y)
- (10) Kelly coating
- (11) Black coating(7#)
- (12) Light grey coating
- (13) Flesh plastic(wheel)

Remark:

- % = Percentage
- ND = Not Detected (less than MDL)
- MDL = Method Detection Limit
- The limit for composite test should be divided by the mixed number.
- Result(s) shown of tested component(s) (13) is/are quoted from CTI test report TLSZF00063915.

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▼ Phthalates in toys and childcare articles

As specified in entry 51 & entry 52, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendment No.552/2009, method EN 14372:2004 was used and phthalates were determined by gas chromatograph with mass spectrometer (GC-MS).

Tested Item	Result (%)				MDL	Limit
	(1)	(2)	(3)	(4)	(%)	(%)
Di-2-ethylhexyl Phthalate (DEHP)	ND	ND	ND	ND	0.003	--
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	0.003	--
Benzylbutyl Phthalate (BBP)	ND	ND	ND	ND	0.003	--
SUM(DEHP+DBP+BBP)	ND	ND	ND	ND	--	0.1

Tested Item	Result (%)				MDL	Limit
	(5)	(6)	(7)	(8)	(%)	(%)
Di-2-ethylhexyl Phthalate (DEHP)	ND	ND	ND	ND	0.003	--
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	0.003	--
Benzylbutyl Phthalate (BBP)	ND	ND	ND	ND	0.003	--
SUM(DEHP+DBP+BBP)	ND	ND	ND	ND	--	0.1

Tested Item	Result (%)				MDL	Limit
	(9)	(10)	(11)/(12)	(13)	(%)	(%)
Di-2-ethylhexyl Phthalate (DEHP)	ND	0.034	ND	ND	0.003	--
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	0.003	--
Benzylbutyl Phthalate (BBP)	ND	ND	ND	ND	0.003	--
SUM(DEHP+DBP+BBP)	ND	0.034	ND	ND	--	0.1

Tested Item	Result (%)				MDL	Limit
	(1)	(2)	(3)	(4)	(%)	(%)
Diisononyl Phthalate (DINP)	ND	ND	ND	ND	0.005	--
Di-n-octyl Phthalate (DNOP)	ND	ND	ND	ND	0.003	--
Diisodecyl Phthalate (DIDP)	ND	ND	ND	ND	0.005	--
SUM(DINP+DNOP+DIDP)	ND	ND	ND	ND	--	0.1

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Tested Item	Result (%)				MDL	Limit
	(5)	(6)	(7)	(8)	(%)	(%)
Diisononyl Phthalate (DINP)	ND	ND	ND	ND	0.005	--
Di-n-octyl Phthalate (DNOP)	ND	ND	ND	ND	0.003	--
Diisodecyl Phthalate (DIDP)	ND	ND	ND	ND	0.005	--
SUM(DINP+DNOP+DIDP)	ND	ND	ND	ND	--	0.1

Tested Item	Result (%)				MDL	Limit
	(9)	(10)	(11)/(12)	(13)	(%)	(%)
Diisononyl Phthalate (DINP)	ND	ND	ND	ND	0.005	--
Di-n-octyl Phthalate (DNOP)	ND	ND	ND	ND	0.003	--
Diisodecyl Phthalate (DIDP)	ND	ND	ND	ND	0.005	--
SUM(DINP+DNOP+DIDP)	ND	ND	ND	ND	--	0.1

Tested Component(s):

- (1) Bright red paint(A1Y)
- (2) Orange paint(A2Y)
- (3) Light yellow paint(A3Y)
- (4) Dark yellow paint(A4Y)
- (5) Dark green paint(A5Y)
- (6) Dark blue paint(A7Y)
- (7) Light blue paint(A8Y)
- (8) White paint(A14Y)
- (9) Grey paint(A15Y)
- (10) Black paint(A19Y)
- (11) Kelly paint
- (12) Light grey paint
- (13) Flesh plastic(wheel)

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Remark:

- % = percentage
- ND = Not Detected (less than MDL)
- MDL = Method Detection Limit
- The limit for composite test should be divided by the mixed number.
- Result(s) shown of tested component(s) (1)~(9) is/are quoted from CTI test report

TLSZF00061943a.

Result(s) shown of tested component(s) (10) is/are quoted from CTI test report TLSZF00065029b.

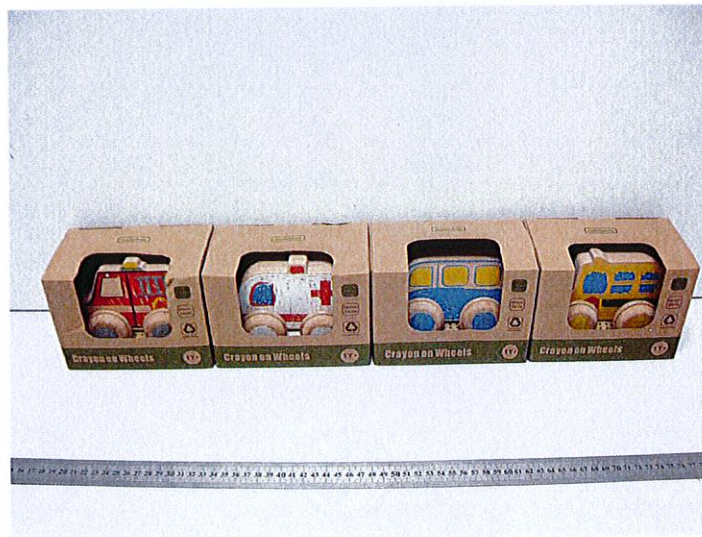
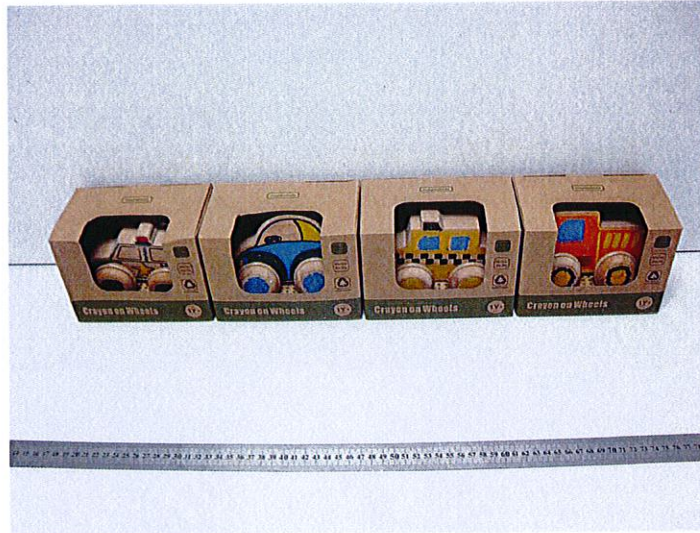
Result(s) shown of tested component(s) (13) is/are quoted from CTI test report TLSZF00063915.

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Photo of the sample



*** End of Report ***

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