

Test Report

Report No.: TJD01F002539b

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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 : Excavator
Item/Lot No. : TC2D02
Manufacturer : Carpenters Manufactory Limited
Quantity of Sample : 2pcs/style
Country of Origin : China
Exported to : U.S.A
Client Specified Age Grading : 3Y +
Labeled Age Grading : Not stated
Age Group Applied in Testing : Over 3 years (As per client's request)
Sample Received Date : Jul. 15, 2013
Sample Tested Date : Jul. 15, 2013 to Jul. 25, 2013

Test Conducted:

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

Tested by Jerry

Reviewed by Angela

Approved by Victor Wang

Date 2013-07-26



Victor Wang
Lab Manager

No. 1622539447

Centre Testing International (Shenzhen) Co., Ltd.

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

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Executive Summary:

TEST REQUEST

CONCLUSION

1) US Consumer Product Safety Improvement Act of 2008 (CPSIA) with amendment (H.R.2715)	
- Lead in surface-coatings and similar materials of children's products	PASS
- Lead in substrate materials of children's products	PASS
- Phthalates in children's toys and child care articles	PASS
2) Consumer Product Safety Commission 16 CFR Ch.II	
- Part 1303 – Ban of Lead in paint and similar surface coating	PASS
3) ASTM F963-11 Standard Consumer Safety Specification for Toy Safety	
- Mechanical and Physical test	PASS (Ex. Clause 7.1)
- Clause 4.2 Flammability of toys	PASS
- Clause 4.3.5 Heavy elements – Total Lead content	PASS
- Clause 4.3.5 Heavy elements – Migration of certain elements	PASS
4) California proposition 65 settlements	
- Lead content test	PASS
- Phthalates test	PASS

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

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1) US CPSIA WITH AMENDMENT (H.R.2715)

▼ Lead in surface-coating and similar materials of children's products

As specified in Consumer Product Safety Improvement Act of 2008 (CPSIA) and 16 CFR Ch.II part 1303 of Consumer Product Safety Commission of U.S.A, method CPSC-CH-E1003-09.1 was used and total lead content was determined by ICP-OES and/or AAS.

<u>Tested Item</u>	<u>Result (ppm)</u>				<u>MDL (ppm)</u>	<u>Limit (ppm)</u>
	(1)	(2)	(3)	(4)		
Total Lead (Pb)	ND	ND	ND	ND	10	90

Tested Component(s):

- (1) Bright red paint(A1Y)
- (2) Orange paint(A2Y)
- (3) Light yellow paint(A3Y)
- (4) Dark green paint(A5Y)

Remark:

- ppm = parts per million = mg/kg
- ND = Not Detected (less than MDL)
- MDL = Method Detection Limit
- All results shown is/are quoted from CTI test report TLSZF00061943b.

▼ Lead in substrate materials of children's products

As specified in Consumer Product Safety Improvement Act of 2008 (CPSIA), method(s) CPSC-CH-E1001-08.1/CPSC-CH-E1002-08.1 were used and total lead content was determined by ICP-OES and/or AAS.

<u>Tested Item</u>	<u>Result (ppm)</u>			<u>MDL (ppm)</u>	<u>Limit (ppm)</u>
	(1)	(2)/(3)	(4)		
Total Lead (Pb)	ND	ND	ND	10	100

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Tested Component(s):

- (1) Brown MDF
- (2) Black soft plastic(wheels)
- (3) Yellow plastic(hub of wheels)
- (4) Natural veneer

Remark:

- ppm = parts per million = mg/kg
- 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)is/are quoted from CTI test report TLSZF00066790b.

▼ Phthalates in children's toys and childcare articles

As specified in Consumer Product Safety Improvement Act of 2008 (CPSIA), method CPSC-CH-C1001-09.3 was used and phthalates were determined by gas chromatograph with mass spectrometry (GC-MS).

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

Tested Item	Result (%)			MDL (%)	Limit (%)
	(4)	(5)	(6)		
Di-2-ethylhexyl Phthalate (DEHP)	ND	ND	ND	0.003	0.1
Dibutyl Phthalate (DBP)	ND	ND	ND	0.003	0.1
Benzylbutyl Phthalate (BBP)	ND	ND	ND	0.003	0.1

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

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Tested Item	Result (%)			MDL	Limit
	(4)	(5)	(6)	(%)	(%)
Diisononyl Phthalate (DINP)	ND	ND	ND	0.005	0.1
Di-n-octyl Phthalate (DNOP)	ND	ND	ND	0.003	0.1
Diisodecyl Phthalate (DIDP)	ND	ND	ND	0.005	0.1

Tested Component(s):

- (1) Bright red paint(A1Y)
- (2) Orange paint(A2Y)
- (3) Light yellow paint(A3Y)
- (4) Dark green paint(A5Y)
- (5) Black soft plastic(wheels)
- (6) Yellow plastic(hub of wheels)

Remark:

- % = percentage
- ND = Not Detected (less than MDL)
- MDL = Method Detection Limit
- Result(s) shown of tested component(s) (1)~(4) is/are quoted from CTI test report TLSZF00061943.

2) CONSUMER PRODUCT SAFETY COMMISSION 16 CFR CH.II

▼ Total Lead content

As specified in CPSC 16 CFR CH.II part 1303, method CPSC-CH-E1003-09.1 was used and total Lead content was determined by ICP-OES and/or AAS.

Tested Item	Result (%)				MDL	Limit
	(1)	(2)	(3)	(4)	(%)	(%)
Total Lead (Pb)	ND	ND	ND	ND	0.0010	0.0090

Tested Component(s):

- (1) Bright red paint(A1Y)
- (2) Orange paint(A2Y)

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- (3) Light yellow paint(A3Y)
- (4) Dark green paint(A5Y)

Remark:

- %= Percentage
- ND = Not Detected (less than MDL)
- MDL = Method Detection Limit
- All results shown is/are quoted from CTI test report TLSZF00061943b.

3) ASTM F963-11

▼ Mechanical and Physical test

As specified in ASTM F963-11 standard consumer safety specification for toy safety.

<u>Clause</u>	<u>Description</u>	<u>Assessment</u>
4.	Safety Requirements	
4.1	Material Quality (Visual Examination).....	Pass
4.6	Small Objects.....	N/A
4.7	Accessible Edges.....	Pass
4.9	Accessible Points.....	Pass
4.13	Folding Mechanisms & Hinges.....	N/A
4.17	Wheels, Tires & Axles.....	Pass
7.	Producers Markings	
7.1	Producers Markings.....	See Remark
	Remark: It is drawn to your attention that either a principal component of a toy or the package of a toy shall be marked with the name and address of the producer or the distributor.	
8.	Test Method	
8.5	Normal Use Testing.....	Pass
8.7	Impact Test	Pass
8.8	Torque Test.....	Pass
8.9	Tension Test.....	Pass

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8.10 Compression Test..... Pass

N/A = Not Applicable

Note:

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

▼ Clause 4.2 Flammability of toys

As specified in ASTM F963-11 standard consumer safety specification for toy safety.

Flammability Test on Solid

<u>Burning Rate (inch/sec)</u>	<u>Limit (inch/sec)</u>
DNI	0.1

-- DNI = Did Not Ignite

Note:

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

▼ Heavy elements test - Total Lead content

As specified in ASTM F963-11 standard consumer safety specification for toy safety clause 4.3.5, acid digestion methods specified in clause 8.3 were used and total Lead content was determined by ICP-OES and/or AAS.

1. Paint and similar surface coating materials:

<u>Tested Item</u>	<u>Result (mg/kg)</u>				<u>MDL (mg/kg)</u>	<u>Limit (mg/kg)</u>
	(1)	(2)	(3)	(4)		
Total Lead (Pb)	ND	ND	ND	ND	10	90

2. Toy substrate materials:

<u>Tested Item</u>	<u>Result (mg/kg)</u>			<u>MDL (mg/kg)</u>	<u>Limit (mg/kg)</u>
	(5)	(6)/(7)	(8)		
Total Lead (Pb)	ND	ND	ND	10	100

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Tested Component(s):

- (1) Bright red paint(A1Y)
- (2) Orange paint(A2Y)
- (3) Light yellow paint(A3Y)
- (4) Dark green paint(A5Y)
- (5) Brown MDF
- (6) Black soft plastic(wheels)
- (7) Yellow plastic(hub of wheels)
- (8) Natural veneer

Remark:

- mg/kg = milligram per kilogram = ppm
- 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)~(4) is/are quoted from CTI test report TLSZF00061943b.
Result(s) shown of tested component(s) (5) is/are quoted from CTI test report TLSZF00066790b.

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▼ Heavy elements test - Migration of certain elements

As specified in ASTM F963-11 standard consumer safety specification for toy safety clause 4.3.5, acid extraction methods specified in clause 8.3 were used and toxic elements content were determined by ICP-OES.

Tested Item	Result (mg/kg)						MDL (mg/kg)	Limit (mg/kg)
	(1)	(2)	(3)	(4)	(5)	(6)		
Soluble Antimony (Sb)	ND	ND	ND	ND	ND	ND	5	60
Soluble Arsenic (As)	ND	ND	ND	ND	ND	ND	2.5	25
Soluble Barium (Ba)	ND	ND	ND	ND	ND	ND	5	1000
Soluble Cadmium (Cd)	ND	ND	ND	ND	ND	ND	5	75
Soluble Chromium (Cr)	ND	ND	ND	ND	ND	ND	2.5	60
Soluble Lead (Pb)	ND	ND	ND	ND	ND	ND	5	90
Soluble Mercury (Hg)	ND	ND	ND	ND	ND	ND	2.5	60
Soluble Selenium (Se)	ND	ND	ND	ND	ND	ND	5	500

Tested Component(s):

- (1) Orange coating(A2Y)
- (2) Light yellow coating(A3Y)
- (3) Natural veneer
- (4) Brown MDF
- (5) Black soft plastic(wheels)
- (6) Yellow plastic(hub of wheels)

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Remark:

- mg/kg = milligram per kilogram = ppm
- ND = Not Detected (less than MDL)
- MDL = Method Detection Limit
- Results shown of soluble elements are of adjusted analytical results by subtracting analytical correction factor
- Filter paper was used instead of 0.45µm membrane filter in lab testing.
- As received, the test portion of bright red coating(A1Y) and dark green coating(A5Y) are less than 10mg, therefore such components were not tested for soluble elements, as specified in ASTM F963-11 Clause 8.3.
- Result(s) shown of tested component(s) (1) and (2) is/are quoted from CTI test report TLSZF00066791b.
Result(s) shown of tested component(s) (4) is/are quoted from CTI test report TLSZF00066790b.

4) CALIFORNIA PROPOSITION 65 SETTLEMENTS

▼ Lead content test※

With reference to concerned California proposition 65 settlements, acid digestion method was used and total Lead content was determined by ICP-OES and/or AAS.

1. Lead in paints and surface-coating materials:

<u>Tested Item</u>	<u>Result (ppm)</u>				<u>MDL (ppm)</u>	<u>Reference limit (ppm)</u>
	(1)	(2)	(3)	(4)		
Total Lead (Pb)	ND	ND	ND	ND	10	90

2. Lead in other materials:

<u>Tested Item</u>	<u>Result (ppm)</u>			<u>MDL (ppm)</u>	<u>Reference limit (ppm)</u>
	(5)	(6)/(7)	(8)		
Total Lead (Pb)	ND	ND	ND	10	600

Tested Component(s):

- (1) Bright red paint(A1Y)
- (2) Orange paint(A2Y)
- (3) Light yellow paint(A3Y)

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- (4) Dark green paint(A5Y)
- (5) Brown MDF
- (6) Black soft plastic(wheels)
- (7) Yellow plastic(hub of wheels)
- (8) Natural veneer

Remark:

- ppm = parts per million = mg/kg
- 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)~(4) is/are quoted from CTI test report TLSZF00061943b.
Result(s) shown of tested component(s) (5) is/are quoted from CTI test report TLSZF00066790b.
- “※” indicates the method(s) is (are) not applied for CNAS accreditation yet.

▼ Phthalates test※

With reference to concerned California Proposition 65 settlements, solvent extraction method was used and phthalates were determined by gas chromatograph with mass spectrometer (GC-MS).

Tested Item	Result (%)			MDL	Reference Limit
	(1)	(2)	(3)	(%)	(%)
Di-2-ethylhexyl Phthalate (DEHP)	ND	ND	ND	0.003	0.1
Dibutyl Phthalate (DBP)	ND	ND	ND	0.003	0.1
Benzylbutyl Phthalate (BBP)	ND	ND	ND	0.003	0.1
Diisononyl Phthalate (DINP)	ND	ND	ND	0.005	0.1
Di-n-octyl Phthalate (DNOP)	ND	ND	ND	0.003	0.1
Diisodecyl Phthalate (DIDP)	ND	ND	ND	0.005	0.1
Di-n-hexyl Phthalate (DnHP)	ND	ND	ND	0.003	0.1

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Tested Item	Result (%)			MDL	Reference Limit
	(4)	(5)	(6)	(%)	(%)
Di-2-ethylhexyl Phthalate (DEHP)	ND	ND	ND	0.003	0.1
Dibutyl Phthalate (DBP)	ND	ND	ND	0.003	0.1
Benzylbutyl Phthalate (BBP)	ND	ND	ND	0.003	0.1
Diisononyl Phthalate (DINP)	ND	ND	ND	0.005	0.1
Di-n-octyl Phthalate (DNOP)	ND	ND	ND	0.003	0.1
Diisodecyl Phthalate (DIDP)	ND	ND	ND	0.005	0.1
Di-n-hexyl Phthalate (DnHP)	ND	ND	ND	0.003	0.1

Tested Component(s):

- (1) Bright red paint(A1Y)
- (2) Orange paint(A2Y)
- (3) Light yellow paint(A3Y)
- (4) Dark green paint(A5Y)
- (5) Black soft plastic(wheels)
- (6) Yellow plastic(hub of wheels)

Remark:

- % = Percentage
- ND = Not Detected (less than MDL)
- MDL = Method Detection Limit
- Result(s) shown of tested component(s) (1)~(4) is/are quoted from CTI test report TLSZF00061943b.
- “※” indicates the method(s) is (are) not applied for CNAS accreditation yet.

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Photo of the sample



*** End of Report ***

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