



Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

Applicant: FUJIAN KANGLAIBAO CO., LTD.
Address: NO.1, INDUSTRIAL 6TH-ROAD, INDUSTRIAL AREA, LIAN CHENG COUNTY ,LONGYAN CITY, FUJIAN PROVINCE,CHINA
Product Name: Horizontal Bar
Model No: A91-099/340-005V01 (YTH10)
Labelled Age Range: Not stated
Age range in testing: Over 3 years
Age Group Assessed As per Age Guideline: Over 3 years
Receipt Date of Sample: 2024-01-04
Date of Testing: 2024-01-04 ~ 2024-01-11
Sample Submitted: The sample(s) was (were) submitted by applicant and identified.
Test Result: Refer to the data listed in following pages

Test Item	Conclusion
1. ASTM F963-17 Mechanical and Physical Properties	Pass
2. ASTM F963-17 Flammability	Pass
3. ASTM F963-17 Section 4.3.5.1(1) - Total Lead Content Test (Paint and Similar Surface Coating Materials)	Pass
4. ASTM F963-17 Section 4.3.5.2 - Total Lead Content Test (Substrate Materials)	Pass
5. ASTM F963-17 Section 4.3.5 - Heavy Element (Soluble Heavy Element)	Pass
6. ASTM F963-23 Mechanical and Physical Properties	
7. ASTM F963-23 Flammability	
8. ASTM F963-23 Section 4.3.5.1(1) - Total Lead Content Test (Paint and Similar Surface Coating Materials)	Pass
9. ASTM F963-23 Section 4.3.5.2 - Total Lead Content Test (Substrate Materials)	Pass
10. ASTM F963-23 Section 4.3.5 - Heavy Element (Soluble Heavy Element)	Pass
11. ASTM F963-23 Section 4.3.8 - Phthalates Content	Pass
12. Consumer Product Safety Improvement Act (CPSIA) of 2008 section 103 - Tracking labels for children's products	Pass
13. Consumer Product Safety Improvement Act (CPSIA) of 2008 Section 101 - Total Lead Content Test in paint/similar surface coating material	Pass
14. Consumer Product Safety Improvement Act (CPSIA) of 2008 Section 101 - Total Lead Content Test in substrate materials	Pass
15. 16 CFR Part 1307, Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates	Pass
16. Canada Toys Regulations SOR/2011-17 Mechanical, physical and flammability test	Pass
17. Canada Toys Regulations SOR/2011-17 Section 23 -Total Lead, Mercury	Pass
18. Canada Toys Regulations SOR/2011-17 Section 23 -Soluble Heavy Metals	Pass
19. Canada Surface Coating Materials Regulations (SOR/2016-193)- Total Lead	Pass
20. Canada Consumer Products Containing Lead Regulations (SOR/2018-83)-Total Lead Content	Pass
21. Canada Phthalates Regulations (SOR/2016-188)- Phthalates Content	Pass
22. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 23 - Cadmium Content	Pass
23. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Items 51 and 52 - Phthalates Content	Pass



Test Report **No.: 70.452.24.30022.01R1**
Date: 2024-03-27

- Remarks:
1. MDL = Method Detection Limit
 2. ND = Not Detected (<MDL)
 3. ≤ Less than
 4. 1 mg/kg = 1 ppm = 0.0001%
 5. NA=Not Applicable
 6. This report supersedes the previous report 70.452.24.30022.01 dated on 2024-02-06.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
Testing Center

Prepared by:

Rainie Dai

Rainie Dai
Reporting Representative

Authorized by:

Neko Ding

Neko Ding
Director

Note:

- (1) The TÜV SÜD Certification and Testing (China) Co., Ltd. "General Terms & Conditions" applied.
Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production.
For further details, please see "Testing and certification regulation", chapter A-3.4
For full version, please visit: EN : <https://www.tuvsud.cn/zh-cn/resource/terms-and-conditions---en> ; SCN: <https://www.tuvsud.cn/zh-cn/terms-and-conditions> ; TCN: <https://www.tuvsud.com/zh-tw/terms-and-conditions>
- (2) The results relate only to the items tested.
- (3) The test report shall not be reproduced except in full without the written approval of the laboratory
- (4) **Disclaimer Measurement Uncertainty:**
Unless otherwise agreed upon, Pass or Fail verdicts are given based on the measured values without any considerations of measurement uncertainties.
Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements.
By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

Test Report No.: 70.452.24.30022.01R1
Date: 2024-03-27

Description of Tested Subject:





Test Report **No.: 70.452.24.30022.01R1**
Date: 2024-03-27

Sample	Description
001	Gray coating on metal. (on pipe-A91)
002	Purple coating on metal. (on pipe-A91)
003	Blue coating on metal. (on pipe-A91)
004	Pink coating on metal. (on pipe-340)
005	Lake blue coating on metal
006	White coating on plastic. (on knob-A91/340)
007	Black plastic. (knob of screw & endpieces on pipe & bracket-A91/340)
008	Black soft plastic. (endpieces on the basepipe-A91)
009	Black soft plastic. (square ring on the pipe-A91)
010	Black soft plastic. (non-slip chock-340)
011	Black foam. (non-slip pad on the bottom-340)
012	Silvery color metal. (screw & nut & gasket-A91/340)
013	Silvery color metal. (link on pipe -340)
014	Silvery color metal excluding coating. (pipe-A91)
015	Silvery color metal excluding coating. (pipe & round bottom-340)
016	Black coating on metal. (on round bottom-340)



Test Result(s):

1. ASTM F963-17 Mechanical and Physical Properties

Clause	Requirement	Evaluation
4	Safety Requirements	
4.1	Material quality	P
4.7	Accessible edges	P
4.9	Accessible points	P
4.11	Nails and fasteners	P
4.15	Stability and over-load requirements	P
5	Labeling Requirements	
5.2	Age Grading Labeling	#
5.3	Safety Labeling Requirement	P
5.8	Toys intended to be assembled by an adult	P
5.16	Promotional materials	P
6	Instructional Literature	P
6.1	Definition and description	P
6.4	Toys intended to be assembled by an adult	P
7	Producer's Marking	P
7.1	Name and address of the producer or distributor	P

Remark: #The toy or package should indicate the minimum age for intended use.

2. ASTM F963-17 Flammability

Item	Requirement – test item	Evaluation
4.2	Flammability	P

Abbreviation: P=Pass; / = slash symbol

Note: Only applicable clauses were shown.

Test Report **No.: 70.452.24.30022.01R1**
Date: 2024-03-27

3. ASTM F963-17 Section 4.3.5.1(1) - Total Lead Content Test (Paint and Similar Surface Coating Materials)

Test with reference to CPSC-CH-E1003-09.1, determination by ICP-OES/ICP-MS.

Parameter	Unit	MDL	Limit	Result(s)	
				001+002+003	004+005+016
Lead	mg/kg	10.0	90	<10.0	<10.0
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				006	
Lead	mg/kg	10.0	90	<10.0	
Conclusion				Pass	

4. ASTM F963-17 Section 4.3.5.2 - Total Lead Content Test (Substrate Materials)

Test with reference to CPSC-CH-E1001-08.3, CPSC-CH-E1002-08.3, determination by ICP-OES/ICP-MS.

Parameter	Unit	MDL	Limit	Result(s)	
				007	008+009+010
Lead	mg/kg	10.0	100	<10.0	12.9
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				011	012+013
Lead	mg/kg	10.0	100	16.1	<10.0
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				014+015	
Lead	mg/kg	10.0	100	<10.0	
Conclusion				Pass	

5. ASTM F963-17 Section 4.3.5 - Heavy Element (Soluble Heavy Element)

Test with reference to ASTM F963-17 Section 8.3 for soluble heavy elements

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			001	002
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	181	149
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			003	004
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	10.8	72.8
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			005	006
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	86.9	<5.0
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			007	008
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	<5.0	<5.0
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			009	010
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	<5.0	<5.0
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			011	016
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	14.3	22.5
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

Remark: 1. Adjusted Analytical Result

6. ASTM F963-23 Mechanical and Physical Properties

Clause	Requirement	Evaluation
4	Safety Requirements	
4.1	Material quality	P
4.7	<u>Accessible edges</u>	P
4.9	<u>Accessible points</u>	P
4.11	Nails and fasteners	P
4.15	<u>Stability and over-load requirements</u>	P
5	Labeling Requirements	
5.1.2	Tracking information on both product and its packaging	P
5.2	Age Grading Labeling	#
5.3	Safety Labeling Requirement	P
5.8	Toys intended to be assembled by an adult	P
5.15	Promotional materials	P
6	Instructional Literature	P
6.1	Definition and description	P
6.4	Toys intended to be assembled by an adult	P
7	Producer's Marking	P
7.1	Name and address of the producer or distributor	P

Remark: #The toy or package should indicate the minimum age for intended use.



Test Report **No.: 70.452.24.30022.01R1**
Date: 2024-03-27

7. ASTM F963-23 Flammability

Item	Requirement – test item	Evaluation
4.2	Flammability	P

Abbreviation: P=Pass; / = slash symbol

Note: Only applicable clauses were shown.

8. ASTM F963-23 Section 4.3.5.1(1) - Total Lead Content Test (Paint and Similar Surface Coating Materials)

Test with reference to CPSC-CH-E1003-09.1, determination by ICP-OES/ICP-MS.

Parameter	Unit	MDL	Limit	Result(s)	
				001+002+003	004+005+016
Lead	mg/kg	10.0	90	<10.0	<10.0
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				006	
Lead	mg/kg	10.0	90	<10.0	
Conclusion				Pass	

9. ASTM F963-23 Section 4.3.5.2 - Total Lead Content Test (Substrate Materials)

Test with reference to CPSC-CH-E1001-08.3, CPSC-CH-E1002-08.3, determination by ICP-OES/ICP-MS.

Parameter	Unit	MDL	Limit	Result(s)	
				007	008+009+010
Lead	mg/kg	10.0	100	<10.0	12.9
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				011	012+013
Lead	mg/kg	10.0	100	16.1	<10.0
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				014+015	
Lead	mg/kg	10.0	100	<10.0	
Conclusion				Pass	

Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

10. ASTM F963-23 Section 4.3.5 - Heavy Element (Soluble Heavy Element)

Test with reference to ASTM F963-17 Section 8.3 for soluble heavy elements

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			001	002
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	181	149
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			003	004
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	10.8	72.8
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			005	006
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	86.9	<5.0
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass



Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			007	008
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	<5.0	<5.0
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			009	010
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	<5.0	<5.0
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			011	016
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	14.3	22.5
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

Remark: 1. Adjusted Analytical Result



Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

11. ASTM F963-23 Section 4.3.8 - Phthalates Content

Test with reference to CPSC-CH-C1001-09.4, determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					001+002+003	004+005+016
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	<0.005	<0.005
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	<0.005	<0.005
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	<0.005	<0.005
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	<0.005	<0.005
Dipentyl phthalate (DPP)	131-18-0	%	0.005	0.1	<0.005	<0.005
Di-n-hexyl phthalate (DHP)	84-75-3	%	0.005	0.1	<0.005	<0.005
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					006	007
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	<0.005	<0.005
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	<0.005	<0.005
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	<0.005	<0.005
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	<0.005	<0.005
Dipentyl phthalate (DPP)	131-18-0	%	0.005	0.1	<0.005	<0.005
Di-n-hexyl phthalate (DHP)	84-75-3	%	0.005	0.1	<0.005	<0.005
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass

Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					008+009+010	011
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	<0.005	<0.005
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	<0.005	<0.005
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	<0.005	<0.005
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	<0.005	<0.005
Dipentyl phthalate (DPP)	131-18-0	%	0.005	0.1	<0.005	<0.005
Di-n-hexyl phthalate (DHP)	84-75-3	%	0.005	0.1	<0.005	<0.005
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass

12. Consumer Product Safety Improvement Act (CPSIA) of 2008 section 103 - Tracking labels for children's products

Section	Requirement	Evaluation
Tracking labels for children's product	Tracking label per Consumer Product Safety Improvement Act (CPSIA) of 2008	Pass

Note:

- The tracking label assessment was based on the submitted samples and the information provided by the applicant. There was no verification on the validity of such information.

13. Consumer Product Safety Improvement Act (CPSIA) of 2008 Section 101 - Total Lead Content Test in paint/similar surface coating material

Test with reference to CPSC-CH-E1003-09.1 and determination by ICP-OES/ICP-MS.

Parameter	Unit	MDL	Limit	Result(s)	
				001+002+003	004+005+016
Lead (Pb)	mg/kg	10	90	<10	<10
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				006	
Lead (Pb)	mg/kg	10	90	<10	
Conclusion				Pass	

14. Consumer Product Safety Improvement Act (CPSIA) of 2008 Section 101 - Total Lead Content Test in substrate materials

Test with reference to CPSC-CH-E1001-08.3, CPSC-CH-E1002-08.3, determination by ICP-OES/ICP-MS.

Parameter	Unit	MDL	Limit	Result(s)	
				007	008+009+010
Lead	mg/kg	10.0	100	<10.0	12.9
Conclusion				Pass	Pass



Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

Parameter	Unit	MDL	Limit	Result(s)	
				011	012+013
Lead	mg/kg	10.0	100	16.1	<10.0
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				014+015	
Lead	mg/kg	10.0	100	<10.0	
Conclusion				Pass	

15. 16 CFR Part 1307, Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates

Test with reference to CPSC-CH-C1001-09.4, determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					001+002+003	004+005+016
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	<0.005	<0.005
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	<0.005	<0.005
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	<0.005	<0.005
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	<0.005	<0.005
Dipentyl phthalate (DPP)	131-18-0	%	0.005	0.1	<0.005	<0.005
Di-n-hexyl phthalate (DHP)	84-75-3	%	0.005	0.1	<0.005	<0.005
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					006	007
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	<0.005	<0.005
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	<0.005	<0.005
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	<0.005	<0.005
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	<0.005	<0.005
Dipentyl phthalate (DPP)	131-18-0	%	0.005	0.1	<0.005	<0.005
Di-n-hexyl phthalate (DHP)	84-75-3	%	0.005	0.1	<0.005	<0.005
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass

Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					008+009+010	011
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	<0.005	<0.005
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	<0.005	<0.005
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	<0.005	<0.005
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	<0.005	<0.005
Dipentyl phthalate (DPP)	131-18-0	%	0.005	0.1	<0.005	<0.005
Di-n-hexyl phthalate (DHP)	84-75-3	%	0.005	0.1	<0.005	<0.005
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass

16. Canada Toys Regulations SOR/2011-17 Mechanical, physical and flammability test

Clause	Requirement	Evaluation
8	Metal edges	P
10	Plastic edges	P
11	Wood	P
13	Fasteners	P
18	Stationary toys that is intended to bear weight a child	P
21	Celluloid or cellulose nitrate, other than ping-pong ball	P

* Abbreviation:

P = Pass, NA = Not Applicable

Note:

- Only applicable clauses were shown.

17. Canada Toys Regulations SOR/2011-17 Section 23 -Total Lead, Mercury

Test with reference to Method C-02.2& C-02.3 (total Pb), Method C-07(total Hg), determination by ICP-OES/ICP-MS.

Parameter	Unit	MDL	Limit	Result(s)	
				001	002
Total Lead (Pb)	mg/kg	5.0	90	<5.0	<5.0
Total Mercury (Hg)	mg/kg	10.0	10	<10.0	<10.0
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				003	004
Total Lead (Pb)	mg/kg	5.0	90	<5.0	<5.0
Total Mercury (Hg)	mg/kg	10.0	10	<10.0	<10.0
Conclusion				Pass	Pass

Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

Parameter	Unit	MDL	Limit	Result(s)	
				005	006
Total Lead (Pb)	mg/kg	5.0	90	<5.0	<5.0
Total Mercury (Hg)	mg/kg	10.0	10	<10.0	<10.0
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				016	
Total Lead (Pb)	mg/kg	5.0	90	<5.0	
Total Mercury (Hg)	mg/kg	10.0	10	<10.0	
Conclusion				Pass	

18. Canada Toys Regulations SOR/2011-17 Section 23 -Soluble Heavy Metals

Test with reference to ASTM F963-17 Section 8.3 for soluble heavy metal, determination by ICP-OES/ICP-MS.

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			001	002
Soluble Antimony (Sb)	5.0	1000	<5.0	<5.0
Soluble Arsenic (As)	2.5	1000	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	181	149
Soluble Cadmium (Cd)	5.0	1000	<5.0	<5.0
Soluble Selenium (Se)	5.0	1000	<5.0	<5.0
Conclusion			Pass	Pass

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			003	004
Soluble Antimony (Sb)	5.0	1000	<5.0	<5.0
Soluble Arsenic (As)	2.5	1000	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	10.8	72.8
Soluble Cadmium (Cd)	5.0	1000	<5.0	<5.0
Soluble Selenium (Se)	5.0	1000	<5.0	<5.0
Conclusion			Pass	Pass

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			005	006
Soluble Antimony (Sb)	5.0	1000	<5.0	<5.0
Soluble Arsenic (As)	2.5	1000	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	86.9	<5.0
Soluble Cadmium (Cd)	5.0	1000	<5.0	<5.0
Soluble Selenium (Se)	5.0	1000	<5.0	<5.0
Conclusion			Pass	Pass

Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27



Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]
			016
Soluble Antimony (Sb)	5.0	1000	<5.0
Soluble Arsenic (As)	2.5	1000	<2.5
Soluble Barium (Ba)	5.0	1000	22.5
Soluble Cadmium (Cd)	5.0	1000	<5.0
Soluble Selenium (Se)	5.0	1000	<5.0
Conclusion			Pass

19. Canada Surface Coating Materials Regulations (SOR/2016-193)- Total Lead Content

Test with reference to Health Canada, Product Safety Reference Manual Book 5 -Laboratory Policies and Procedures, Part B: Test Methods Section, Method C-02.2& C-02.3 (total Pb), determination by ICP-OES/ICP-MS.

Parameter	Unit	MDL	Limit	Result(s)	
				001+002+003	004+005+016
Total Lead (Pb)	mg/kg	5.0	90	<5.0	<5.0
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)
				006
Total Lead (Pb)	mg/kg	5.0	90	<5.0
Conclusion				Pass

20. Canada Consumer Products Containing Lead Regulations (SOR/2018-83)-Total Lead Content

With reference to Health Canada, Product Safety Reference Manual Book 5 -Laboratory Policies and Procedures, Part B: Test Methods Section, Method C-02.2&C-02.3&C-02.4, determination by ICP-OES/ICP-MS.

Parameter	Unit	MDL	Limit	Result(s)	
				001+002+003	004+005+016
Total Lead (Pb)	mg/kg	5.0	90	<5.0	<5.0
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				006	007
Total Lead (Pb)	mg/kg	5.0	90	<5.0	<5.0
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				008+009+010	011
Total Lead (Pb)	mg/kg	5.0	90	12.9	16.1
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				012+013	014+015
Total Lead (Pb)	mg/kg	5.0	90	<5.0	<5.0
Conclusion				Pass	Pass

Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

21. Canada Phthalates Regulations (SOR/2016-188)- Phthalates Content

With reference to in house method, determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					001+002+003	004+005+016
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	<0.005	<0.005
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	<0.005	<0.005
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	<0.005	<0.005
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	<0.005	<0.005
Di-isodecyl phthalate, (DIDP)	26761-40-0	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					006	007
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	<0.005	<0.005
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	<0.005	<0.005
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	<0.005	<0.005
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	<0.005	<0.005
Di-isodecyl phthalate, (DIDP)	26761-40-0	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					008+009+010	011
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	<0.005	<0.005
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	<0.005	<0.005
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	<0.005	<0.005
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	<0.005	<0.005
Di-isodecyl phthalate, (DIDP)	26761-40-0	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass

Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

22. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 23 - Cadmium Content

Test with reference to EN 1122:2001 Method B, determination by ICP-OES

Specimen No.	Unit	MDL	Limit	Result(s)	Conclusion
001+002+003	mg/kg	10	1000	<10.0	Pass
004+005+016	mg/kg	10	1000	<10.0	Pass
006	mg/kg	10	1000	<10.0	Pass
007	mg/kg	10	100	<10.0	Pass
008+009+010	mg/kg	10	100	<10.0	Pass
011	mg/kg	10	100	<10.0	Pass

23. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Items 51 and 52 - Phthalates Content

Test with reference to in house method, solvent extraction and determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					001+002+003	004+005+016
Bis (2-ethylhexyl) phthalate, DEHP	117-81-7	%	0.005	-	<0.005	<0.005
Dibutyl phthalate, DBP	84-74-2	%	0.005	-	<0.005	<0.005
Benzyl butyl phthalate, BBP	85-68-7	%	0.005	-	<0.005	<0.005
Diisobutylphthalate, DIBP	84-69-5	%	0.005	-	<0.005	<0.005
Sum of DBP, BBP, DEHP, DIBP	-	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, DINP	28553-12-0	%	0.005	-	<0.005	<0.005
Di-isodecyl phthalate, DIDP	26761-40-0	%	0.005	-	<0.005	<0.005
Di-n-octyl phthalate, DNOP	117-84-0	%	0.005	-	<0.005	<0.005
Sum of DINP, DIDP, DNOP	-	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					006	007
Bis (2-ethylhexyl) phthalate, DEHP	117-81-7	%	0.005	-	<0.005	<0.005
Dibutyl phthalate, DBP	84-74-2	%	0.005	-	<0.005	<0.005
Benzyl butyl phthalate, BBP	85-68-7	%	0.005	-	<0.005	<0.005
Diisobutylphthalate, DIBP	84-69-5	%	0.005	-	<0.005	<0.005
Sum of DBP, BBP, DEHP, DIBP	-	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, DINP	28553-12-0	%	0.005	-	<0.005	<0.005
Di-isodecyl phthalate, DIDP	26761-40-0	%	0.005	-	<0.005	<0.005
Di-n-octyl phthalate, DNOP	117-84-0	%	0.005	-	<0.005	<0.005
Sum of DINP, DIDP, DNOP	-	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass



Test Report

No.: 70.452.24.30022.01R1

Date: 2024-03-27

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					008+009+010	011
Bis (2-ethylhexyl) phthalate, DEHP	117-81-7	%	0.005	-	<0.005	<0.005
Dibutyl phthalate, DBP	84-74-2	%	0.005	-	<0.005	<0.005
Benzyl butyl phthalate, BBP	85-68-7	%	0.005	-	<0.005	<0.005
Diisobutylphthalate, DIBP	84-69-5	%	0.005	-	<0.005	<0.005
Sum of DBP, BBP, DEHP, DIBP	-	%	0.005	0.1	<0.005	<0.005
Di-isononyl phthalate, DINP	28553-12-0	%	0.005	-	<0.005	<0.005
Di-isodecyl phthalate, DIDP	26761-40-0	%	0.005	-	<0.005	<0.005
Di-n-octyl phthalate, DNOP	117-84-0	%	0.005	-	<0.005	<0.005
Sum of DINP, DIDP, DNOP	-	%	0.005	0.1	<0.005	<0.005
Conclusion					Pass	Pass

-End of Test Report-

