

CONSUMER PRODUCTS SERVICES DIVISION

LIFETIME PRODUCTS INC

Technical Report: (8524)320-0174(Revision) Report Date: November 26, 2024 Revision Date: December 04, 2024

Date Received: November 15, 2024 Page 1 of 13

MELINDA COLE LIFETIME PRODUCTS INC FREEPORT CENTER BLDG, D12 CLEARFIELD, UT 84016-0010 UNITED STATES

Sample Description: PLAYSET SWATCH&SMALL COMPONENTS

Vendor: N/A Sample Size: 1
Manufacturer: DONGGUAN L'S GIANT METAL Style No(s): N/A

PRODUCTS CO.,LTD

SKN/SKU No.: LIFETIME PRODUCTS INC. N/A Buyer: Labeled Age Grade: **NOT PRESENT** PO No.: N/A Appropriate Age Grade: NOT REQUESTED Ref#: N/A Client Specified Age Country of Origin: **CHINA** 3 - 10 YEARS

Grade:

Tested Age Grade: FROM 3 TO 10 YEARS OF AGE Assortment No.: N/A

UPC Code: N/A

EXECUTIVE SUMMARY:

The sample(s) MEETS the following requirement(s):

- The total lead content of 90ppm requirements by composite testing of 16 CFR 1303, "Ban of lead-containing paint and certain consumer products bearing lead-containing paint" as mandated by Congress in section 101(f) of the Consumer Products Safety Improvement Act (CPSIA) of 2008, Public Law 110-314.
- The total lead content of 100ppm requirements by composite testing in substrate materials (Consumer Products Safety Improvement Act (CPSIA) of 2008).
- The soluble heavy metals content in surface coating requirements of ASTM F963-23, "Standard Consumer Safety Specification for Toy Safety," Section 4.3.5.1(2).
- The soluble heavy metals content in substrate requirements of ASTM F963-23, "Standard Consumer Safety Specification for Toy Safety," Section 4.3.5.2(2)(b).
- The phthalates (BBP, DBP, DEHP, DINP, DIBP, DPENP, DHEXP & DCHP) content requirements of the Consumer Product Safety Improvement Act (CPSIA) of 2008 Sec. 108(a) and 108(c), 16 CFR 1307).
- The phthalates (BBP, DBP, DEHP, DINP, DIBP, DPENP, DHEXP & DCHP) content requirements of ASTM F963-23, "Standard Consumer Safety Specification for Toy Safety," Section 4.3.8.

(*)Note: This report is amendment of and supersedes the previous (8524)320-0174 dated November 26, 2024.



Technical Report: (8524)320-0174(Revision)

Report Date: November 26, 2024 Revision Date: December 04, 2024

Page 2 of 13

NOTE: If there are questions or concerns regarding above report, please contact the appropriate lab persons.

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FZ/kg



Technical Report: (8524)320-0174(Revision)

Report Date: November 26, 2024 Revision Date: December 04, 2024

Page 3 of 13

RESULTS:

TOTAL LEAD CONTENT IN SURFACE COATING BY COMPOSITE TESTING ("Ban of Lead-containing paint and certain consumer products bearing Lead-containing paint", Consumer Product Safety Improvement Act (CPSIA) of 2008)

Test Method : U.S. CPSC-CH-E1003.09.1:2011

Sample Identity	Color / Component	Location	Style
1	Deep grey coating	Metal sheet	Α
2	Dull grey coating	Metal sheet	Α
3	Black coating	Metal sheet	Α
4	Bright black coating	Metal sheet	Α
5	Grey coating	Metal sheet	Α
6	Brown coating	Metal sheet	Α
7	Orange red coating	Metal sheet	Α
8	Red coating	Metal sheet	Α
9	Deep red coating	Metal sheet	Α
10	Deep blue coating	Metal sheet	Α
11	Blue coating	Metal sheet	Α
12	Dull blue coating	Metal sheet	Α
13	Deep green coating	Metal sheet	Α
14	Green coating	Metal sheet	Α
15	Light green coating	Metal sheet	Α
16	Soft black coating	Logo	Α

				Result			
Parameter	Unit	1 + 2 + 3	4 + 5 + 6	7 + 8 + 9	10 + 11 + 12	13 + 14	Limit
Lead (Pb)	mg/kg	LT 10	LT 10	LT 10	LT 10	LT 10	90
Conclusion	-	PASS	PASS	PASS	PASS	PASS	-

Parameter	Unit	Result	Limeit
	Oilit	15 + 16	Limit
Lead (Pb)	mg/kg	LT 10	90
Conclusion	-	PASS	-

LT = Less Than

mg/kg = milligrams per kilogram (ppm = parts per million)

Remark:

In some cases, the tested component cannot be tested individually due to overlapped coatings.

^{* =} Average of duplicate analyses



Technical Report: **(8524)320-0174(Revision)**Report Date: November 26, 2024
Revision Date: December 04, 2024 Page 4 of 13

RESULTS:

TOTAL LEAD CONTENT IN SUBSTRATE BY COMPOSITE TESTING (100PPM) (Consumer Product Safety Improvement Act (CPSIA) of 2008)

Test Method : U.S. CPSC-CH-E1001-08.3:2012 or U.S. CPSC-CH-E1002-08.3:2012

Sample Identity	Color / Component	Location	Style
17	Black plastic	Accessory	Α
18	Yellow plastic	Accessory	Α
19	White foam sticker	Back of logo	А
20	Grey plastic	Inner nut	Α
21	Bright black plastic	Cap nut	А
22	Silvery metal	Logo	Α
23	Silvery metal	Thin allen screw	А
24	Silvery metal	Thick allen screw	Α
25	Silvery metal	Full thread allen screw	А
26	Silvery metal	Philip's head screw	А
27	Silvery metal	Flat philip's head screw	А
28	Silvery metal	Small allen screw	А
29	Silvery metal	Flat allen screw	А
30	Silvery metal	Big washer	А
31	Silvery metal	Medium washer	А
32	Silvery metal	Washer	А
33	Silvery metal	Small washer	А
34	Silvery metal	Cap nut	А
35	Silvery metal	Nut	А
36	Silvery metal	Allen nut	А
37	Silvery metal	Stick	А
38	Silvery metal	Small nut	А
39	Silvery metal	String	Α
40	Silvery metal	End of string	Α
41	Silvery metal	U screw	Α
42	Silvery metal	Lock	Α
43	Silvery metal	Connector of string	Α
44	Silvery metal	Triangle piece of string	Α

				Result			
Parameter	Unit	17 + 18 + 19	20 + 21	22	23	24	Limit
Lead (Pb)	mg/kg	LT 10	LT 10	LT 10	LT 10	LT 10	100
Conclusion	-	PASS	PASS	PASS	PASS	PASS	-



Technical Report: (8524)320-0174(Revision)

Report Date: November 26, 2024 Revision Date: December 04, 2024

Page 5 of 13

Parameter	Unit		Limit				
	Unit	25	26	27	28	29	Limit
Lead (Pb)	mg/kg	LT 10	100				
Conclusion	-	PASS	PASS	PASS	PASS	PASS	-

Parameter	Unit		Limit				
	Unit	30	31	32	33	34	
Lead (Pb)	mg/kg	LT 10	100				
Conclusion	-	PASS	PASS	PASS	PASS	PASS	-

Parameter	Heit	Result					
	Unit	35	36	37	38	39	Limit
Lead (Pb)	mg/kg	LT 10	LT 10	LT 10	LT 10	LT 10	100
Conclusion	-	PASS	PASS	PASS	PASS	PASS	-

Parameter	Unit			Result		Limit	
	Unit	40	41	42	43	44	LIIIII
Lead (Pb)	mg/kg	LT 10	LT 10	LT 10	28	LT 10	100
Conclusion	-	PASS	PASS	PASS	PASS	PASS	-

LT = Less Than

mg/kg = milligrams per kilogram (ppm = parts per million)

<add "Remark" when Conclusion is "Exempted"> Remark:

According to Children's Products Containing Lead; Exemptions for Certain Electronic Devices; Interim Final Rule, exemptions were granted to steel alloy containing up to 0.35 % lead by weight/ aluminium containing up to 0.4 % lead by weight/ copper-based alloy containing up to 4 % lead by weight. Therefore, this material containing the found heavy metals level should be exempted.

According to Petition Requesting Exception from Lead Content Limits; Notice Granting Exception, exemptions were granted to certain aluminum alloy containing up to 0.03 % lead by weight. Therefore, this material containing the found heavy metals level should be exempted.

^{* =} Average of duplicate analyses



Technical Report: **(8524)320-0174(Revision)**Report Date: November 26, 2024
Revision Date: December 04, 2024

Page 6 of 13

RESULTS:

SOLUBLE HEAVY METALS CONTENT IN SURFACE COATING (ASTM F963-23, Section 4.3.5.1(2))

Test Method : ASTM International Standard ASTM F963-23, Section 8.3.2 to 8.3.4

Sample Identity	Color / Component	Location	Style
1	Deep grey coating	Metal sheet	Α
2	Dull grey coating	Metal sheet	Α
3	Black coating	Metal sheet	А
4	Bright black coating	Metal sheet	Α
5	Grey coating	Metal sheet	А
6	Brown coating	Metal sheet	А
7	Orange red coating	Metal sheet	Α
8	Red coating	Metal sheet	Α
9	Deep red coating	Metal sheet	А
10	Deep blue coating	Metal sheet	Α
11	Blue coating	Metal sheet	Α
12	Dull blue coating	Metal sheet	Α
13	Deep green coating	Metal sheet	Α
14	Green coating	Metal sheet	Α
15	Light green coating	Metal sheet	Α
16	Soft black coating	Logo	Α

Davamatar	Unit			Limit			
Parameter	Unit	1	2	3	4	5	LIIIII
Arsenic (As)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	25
Barium (Ba)	mg/kg	41	83	25	170	10	1000
Cadmium (Cd)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	75
Chromium (Cr)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	60
Mercury (Hg)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	60
Lead (Pb)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	90
Antimony (Sb)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	60
Selenium (Se)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	500
Mass of trace amount (g)		-	-	-	-	-	-
Conclusion		PASS	PASS	PASS	PASS	PASS	-



Technical Report: **(8524)320-0174(Revision)**Report Date: November 26, 2024
Revision Date: December 04, 2024

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Parameter	Unit	6	7	8	9	10	Limit
Arsenic (As)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	25
Barium (Ba)	mg/kg	14	6	8	39	17	1000
Cadmium (Cd)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	75
Chromium (Cr)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	60
Mercury (Hg)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	60
Lead (Pb)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	90
Antimony (Sb)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	60
Selenium (Se)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	500
Mass of trace amount (g)		-	-		-	-	-
Conclusion		PASS	PASS	PASS	PASS	PASS	-

Parameter	Unit	Result					Limit
Farameter	Ollit	11	12	13	14	15	LIIIII
Arsenic (As)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	25
Barium (Ba)	mg/kg	75	19	15	23	8	1000
Cadmium (Cd)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	75
Chromium (Cr)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	60
Mercury (Hg)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	60
Lead (Pb)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	90
Antimony (Sb)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	60
Selenium (Se)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	500
Mass of trace amount (g)		-	-	-	-	-	-
Conclusion		PASS	PASS	PASS	PASS	PASS	-

Davamatav	11-2	Result	1 ::4
Parameter	Unit	16	Limit
Arsenic (As)	mg/kg	LT 2	25
Barium (Ba)	mg/kg	LT 2	1000
Cadmium (Cd)	mg/kg	LT 2	75
Chromium (Cr)	mg/kg	LT 2	60
Mercury (Hg)	mg/kg	LT 2	60
Lead (Pb)	mg/kg	LT 2	90
Antimony (Sb)	mg/kg	LT 2	60
Selenium (Se)	mg/kg	LT 2	500
Mass of trace amoun	t (g)	-	-
Conclusion		PASS	-

LT = Less Than

mg/kg = milligrams per kilogram (ppm=parts per million)

CR = adjusted analytical result

* = Average of duplicate analysis



Technical Report: (8524)320-0174(Revision)

Report Date: November 26, 2024 Revision Date: December 04, 2024

Page 8 of 13

RESULTS:

SOLUBLE HEAVY METALS CONTENT IN SUBSTRATE (ASTM F963-23, Section 4.3.5.2(2)(b))

Test Method : ASTM International Standard ASTM F963-23, Section 8.3.5 (Excluding 8.3.5.5(3))

Sample Identity	Color / Component	Location	Style
17	Black plastic	Accessory	Α
18	Yellow plastic	Accessory	Α
19	White foam sticker	Back of logo	А
20	Grey plastic	Inner nut	Α
21	Bright black plastic	Cap nut	А

Parameter	Unit	Result					Limit
Farameter	Unit	17	18	19	20	21	LIIIII
Arsenic (As)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	25
Barium (Ba)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	1000
Cadmium (Cd)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	75
Chromium (Cr)	mg/kg	LT 2	LT 2	LT 2	7	7	60
Mercury (Hg)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	60
Lead (Pb)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	90
Antimony (Sb)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	60
Selenium (Se)	mg/kg	LT 2	LT 2	LT 2	LT 2	LT 2	500
Mass of trace amount (g)		-	-	-	-	-	-
Conclusion		PASS	PASS	PASS	PASS	PASS	-

mg/kg = milligrams per kilogram (ppm=parts per million) CR = adjusted analytical result LT = Less Than ND = None Detected

Remark

Textiles (natural or synthetic) are exempted for lead content requirement according to clarification of Toy Industry Association for ASTM F963-23. The lead content analysis result of corresponding material herein is for client's reference only.



Technical Report: (8524)320-0174(Revision)

Report Date: November 26, 2024 Revision Date: December 04, 2024 Page 9 of 13

RESULTS:

PHTHALATES CONTENT IN CHILDREN'S TOYS AND CHILD CARE ARTICLES (Consumer Product Safety Improvement Act (CPSIA) of 2008, Section 108(a) and 108(c), 16 CFR 1307)

With reference to U. S. CPSC-CH-C1001-09.3 (April 1, 2010) / CPSC-CH-C1001-09.4 **Test Method**

(January 17, 2018).

Sample Identity	Color / Component	Location	Style
1	Deep grey coating	Metal sheet	Α
2	Dull grey coating	Metal sheet	Α
3	Black coating	Metal sheet	Α
4	Bright black coating	Metal sheet	Α
5	Grey coating	Metal sheet	Α
6	Brown coating	Metal sheet	Α
7	Orange red coating	Metal sheet	Α
8	Red coating	Metal sheet	Α
9	Deep red coating	Metal sheet	Α
10	Deep blue coating	Metal sheet	Α
11	Blue coating	Metal sheet	Α
12	Dull blue coating	Metal sheet	Α
13	Deep green coating	Metal sheet	Α
14	Green coating	Metal sheet	Α
15	Light green coating	Metal sheet	Α
16	Soft black coating	Logo	Α
17	Black plastic	Accessory	Α
18	Yellow plastic	Accessory	Α
19	White foam sticker	Back of logo	Α
20	Grey plastic	Inner nut	Α
21	Bright black plastic	Cap nut	Α

Maximum Limit: Each 0.1%

Toot Itom(a)	Res	sult	Unit	Conclusion
Test Item(s)	Detected Analyte(s)	Conc.	Unit	Conclusion
1 + 2 + 3	ND	ND	%	PASS
4 + 5 + 6	ND	ND	%	PASS
7 + 8 + 9	ND	ND	%	PASS
10 + 11 + 12	ND	ND	%	PASS
13 + 14	ND	ND	%	PASS
15 + 16	ND	ND	%	PASS
17 + 18 + 19	ND	ND	%	PASS
20 + 21	ND	ND	%	PASS



Technical Report: **(8524)320-0174(Revision)**Report Date: November 26, 2024
Revision Date: December 04, 2024

Page 10 of 13

Results reported in percentage Detection Limit: Each Phthalate (0.005%)

ND = None detected

LIST OF RESTRICTED PHTHALATES				
Number	Chemical Name	CAS Number		
1.	Butyl benzyl phthalate (BBP)	85-68-7		
2.	Dibutyl phthalate (DBP)	84-74-2		
3.	Di(2-ethylhexyl) phthalate (DEHP)	117-81-7		
4.	Di-iso-nonyl phthalate (DINP)	28553-12-0 & 68515-48-0		
5.	Di-iso-butyl phthalate (DIBP)	84-69-5		
6.	Di-n-pentyl phthalate (DPENP or DnPP)	131-18-0		
7.	Di-n-hexyl phthalate (DHEXP or DnHP)	84-75-3		
8.	Dicyclohexyl phthalate (DCHP)	84-61-7		



Technical Report: (8524)320-0174(Revision)

Report Date: November 26, 2024 Revision Date: December 04, 2024 Page 11 of 13

RESULTS:

PHTHALATES CONTENT IN CHILDREN'S TOYS (ASTM F963-23, Section 4.3.8)

With reference to U. S. CPSC-CH-C1001-09.3 (April 1, 2010) / CPSC-CH-C1001-09.4 (January 17, 2018). **Test Method**

Sample Identity	Color / Component	Location	Style
1	Deep grey coating	Metal sheet	Α
2	Dull grey coating	Metal sheet	Α
3	Black coating	Metal sheet	Α
4	Bright black coating	Metal sheet	Α
5	Grey coating	Metal sheet	Α
6	Brown coating	Metal sheet	Α
7	Orange red coating	Metal sheet	Α
8	Red coating	Metal sheet	Α
9	Deep red coating	Metal sheet	Α
10	Deep blue coating	Metal sheet	Α
11	Blue coating	Metal sheet	Α
12	Dull blue coating	Metal sheet	Α
13	Deep green coating	Metal sheet	Α
14	Green coating	Metal sheet	Α
15	Light green coating	Metal sheet	Α
16	Soft black coating	Logo	Α
17	Black plastic	Accessory	Α
18	Yellow plastic	Accessory	Α
19	White foam sticker	Back of logo	Α
20	Grey plastic	Inner nut	Α
21	Bright black plastic	Cap nut	Α

Maximum Limit: Each Phthalate 0.1%

Took Hom/o)	Resu	lt	11:4	Canalysian
Test Item(s)	Detected Analyte(s)	Conc.	Unit	Conclusion
1 + 2 + 3	ND	ND	%	PASS
4 + 5 + 6	ND	ND	%	PASS
7 + 8 + 9	ND	ND	%	PASS
10 + 11 + 12	ND	ND	%	PASS
13 + 14	ND	ND	%	PASS
15 + 16	ND	ND	%	PASS
17 + 18 + 19	ND	ND	%	PASS
20 + 21	ND	ND	%	PASS



Technical Report: **(8524)320-0174(Revision)**Report Date: November 26, 2024
Revision Date: December 04, 2024
Page 12 of 13

Results reported in percentage Detection Limit: Each Phthalate (0.005%) ND = None detected

	LIST OF RESTRICTED PHTHALATES				
Number	Chemical Name	CAS Number			
1.	Butyl benzyl phthalate (BBP)	85-68-7			
2.	Dibutyl phthalate (DBP)	84-74-2			
3.	Di(2-ethylhexyl) phthalate (DEHP)	117-81-7			
4.	Di-iso-nonyl phthalate (DINP)	28553-12-0 & 68515-48-0			
5.	Di-iso-butyl phthalate (DIBP)	84-69-5			
6.	Di-n-pentyl phthalate (DPENP or DnPP)	131-18-0			
7.	Di-n-hexyl phthalate (DHEXP or DnHP)	84-75-3			
8.	Dicyclohexyl phthalate (DCHP)	84-61-7			



Technical Report: **(8524)320-0174(Revision)**Report Date: November 26, 2024
Revision Date: December 04, 2024

Page 13 of 13

(*)RESULTS:



END OF REPORT