

TEST REPORT

APPLICANT

: JinJiang Nobel Star Toys Co., Ltd.

ADDRESS

: No.3 of Quan Yuan Road, WuLi District, JinJiang Economic Development Zone, JinJiang City, Fujian, China

SAMPLE DESCRIPTION: Toy car (tractor+digger),
Toy car (tractor+digger+trailer),
TOY CAR (TRADTOR + DUMPER),
TOY CAR (TRADTOR + DUMPER + TRAILER),
TOY CAR (TRACTOR + TRAILER),
TOY CAR (TRACTOR),
TOY CAR (TRACTOR + LOADER),
TOY CAR (TRACTOR + LOADER + TRAILER),
Toy car (tractor+backhoe),
Toy car (tractor+backhoe+trailer),
Toy car (tractor+loader + backhoe),
Toy car (tractor+loader + backhoe+trailer)**ITEM NO.**: 5001、
5002、
5003、
5005、
3001 RED、 3001 GREEN、 3001 YELLOW、
3002 RED、 3002 GREEN、 3002 YELLOW、
3003 RED、 3003 GREEN、 3003 YELLOW、
3005 RED、 3005 GREEN、 3005 YELLOW、
3006 RED、 3006 GREEN、 3006 YELLOW、
3007 RED、 3007 GREEN、 3007 YELLOW、
3008 RED、 3008 GREEN、 3008 YELLOW、
3009 RED、 3009 GREEN、 3009 YELLOW**AGE REQUESTED ON APPLICATION FORM**

: 3+

LABELED AGE GRADE

: 3+

AGE GRADE APPLIED IN TESTING

: Over 3 Years

LAB RECOMMENDED AGE GRADE

: Over 3 Years

SAMPLE RECEIVED DATE

: 13-Oct-2023

FURTHER INFORMATION DATE

: 02-Nov-2023

TURN AROUND TIME

: 13-Oct-2023 to 02-Nov-2023



REVISED DATE

: 06-Feb-2024

The following test item(s) was/were performed on submitted sample(s) and/or component(s) confirmed by applicant

TEST REQUESTED	TEST METHOD/REGULATION	RESULT
Heavy Metals	ASTM F963-17	Pass
Physical and Mechanical Hazards	ASTM F963-17	Pass
Flammability of Toys	ASTM F963-17	Pass
Total Lead Content	US 16 CFR 1303	Pass
Total Lead Content in Paint / Surface Coating	US CPSIA, Section 101	Pass
Phthalates Content	US CPSIA, Section 108	Pass
Phthalates Content	CPSC 16 CFR part 1307	Pass
Total Lead Content in Substrate	US CPSIA, Section 101	Pass
Phthalates Content	ASTM F963-23	Pass
Flammability of Toys	ASTM F963-23	Pass
Heavy Metals	ASTM F963-23	Pass
Mechanical and Physical Properties	ASTM F963-23	Pass

Note : This report cancels and supersedes report number EFSH23100450-CG-03 issued on Nov 02nd, 2023.
Modification description: as per client's request, add ASTM F963-23 tests in the revised report

***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

Signed for and on behalf of
Eurofins MTS Consumer Product Testing (Shanghai) Co., Ltd.



Gao Jian, David
Senior Manager, Toy Division



Samples are obtained by express delivery. Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins MTS Consumer Product Testing (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to infosh@cpt.eurofinscn.com and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Shanghai) Co., Ltd. If you happen to have any complaints, please do it by sending email to chinacomplaint@eurofins.com and referring to this report number.

SAMPLE PHOTO(S)



A-5001



B-5002



C-5003



D-5005



E-3001 RED



F-3001 GREEN

EFW524020174-CG-01

TO BE CONTINUED

SAMPLE PHOTO(S)



G-3001 YELLOW



H-3002 RED



I-3002 GREEN



J-3002 YELLOW



K-3003 RED



L-3003 GREEN

EFW524020174-CG-01

TO BE CONTINUED

SAMPLE PHOTO(S)



M-3003 YELLOW



N-3005 RED



O-3005 GREEN



P-3005 YELLOW



Q-3006 RED



R-3006 GREEN

EFW524020174-CG-01

TO BE CONTINUED

SAMPLE PHOTO(S)



S-3006 YELLOW



T-3007 RED



U-3007 GREEN



V-3007 YELLOW



W-3008 RED



X-3008 GREEN

EFW524020174-CG-01

TO BE CONTINUED

SAMPLE PHOTO(S)



EFW524020174-CG-01

TO BE CONTINUED

COMPONENT LIST

Component No.	Component	Sample No.
1	White paper with multi-color coating (instruction)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
2	White paper sticker with black/red coating (car seat)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
3	Black coating on metal (black long rod)	AA,AB,K,L,M,N,O,P,W,X,Y,Z
4	White paper sticker with transparent plastic film and underlying multi-color coating	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
5	Red plastic (car shovel)	L,O,W,Z
6	Red plastic (large body)	F,J,L,O,R,T,V,W
7	Black plastic (steering wheel)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
8	White plastic (wheels)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
9	Deep red plastic (steering wheel)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
10	Black plastic (large body)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
11	Black plastic (wheels)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
12	Black plastic (foot pedal)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
13	Black plastic (car seat)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
14	Yellow plastic (body)	A,AA,AB,B,C,D,E,H,K,P,Q,R,S,T,U,V,W,X,Y,Z
15	Red plastic (small shovel)	AB,B,D,E,P,V,W
16	Black plastic (railing)	AA,AB,B,D,E,F,N,O,P,T,U,V,Z
17	Yellow plastic (small shovel)	AA,F,G,J,L,M,N,O,R,T,U,X,Y,Z
18	Green plastic (body)	AA,G,I,M,N,S,U,X
19	Green plastic (car shovel)	AA,M,N,X
20	Yellow plastic (shovel)	AB,K,P,Y
21	Silver metal (foot pedal)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
22	Silver metal (large wheel screws)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
23	Silver metal (screw)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
24	Silver metal (nut)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
25	Silver metal (long rod)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
26	Gold plated metal (steering wheel fixed long screw)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
27	Silver metal (gasket)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
28	Silver metal removal coating (black long rod)	AA,AB,K,L,M,N,O,P,W,X,Y,Z

TO BE CONTINUED

TEST RESULT

Heavy Metals

1) ASTM F963-17- Heavy Elements – Total Lead in Paint and Similar Surface-Coating Material (Clause 4.3.5.1(1))
Test Method: ASTM International Standard ASTM F963-17, Section 8.3.1 and Annex A7.

Tested Item(s)	Unit	Limit	MDL	Result		
				1	2	3
Total Lead in Paint	mg/kg	90	10	ND	ND	ND

2) ASTM F963-17- Heavy Elements – Total Lead in Substrate Material (Clause 4.3.5.2(2) (a))
Test Method: ASTM International Standard ASTM F963-17, Section 8.3.1 and Annex A7.

Tested Item(s)	Unit	Limit	MDL	Result				
				4	5	6	7	8
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				9	10	11	12	13
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				14	15	16	17	18
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				19	20	21	22	23
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				24	25	26	27	28
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

3) ASTM F963-17- Heavy Elements – Soluble Migrated Elements Content in Surface Coatings and Substrates Other Than Modeling Clay (Clause 4.3.5.1(2) and 4.3.5.2(2)(b))

Test Method: ASTM International Standard ASTM F963-17, Section 8.3.2 to 8.3.5 (excluding 8.3.5.5(3))

Tested Item(s)	Unit	Limit	MDL	Result				
				1	2	3	4	5
Soluble Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Soluble Barium	mg/kg	1000	10	12	ND	142	ND	ND
Soluble Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Soluble Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Soluble Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Tested Item(s)	Unit	Limit	MDL	Result				
				6	7	8	9	10
Soluble Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Soluble Barium	mg/kg	1000	10	ND	ND	ND	ND	ND
Soluble Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Soluble Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Soluble Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				11	12	13	14	15
Soluble Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Soluble Barium	mg/kg	1000	10	ND	ND	ND	ND	ND
Soluble Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Soluble Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Soluble Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				16	17	18	19	20
Soluble Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Soluble Barium	mg/kg	1000	10	ND	ND	ND	ND	ND
Soluble Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Soluble Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Soluble Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

The analytical results were adjusted by subtracting analytical correction factor.

TO BE CONTINUED

TEST RESULT

Physical and Mechanical Hazards

Test Request: As specified in Consumer Safety Specification ASTM F963-17

Section	Description	Result
4.1	Material Quality	P
4.3.7	Stuffing Materials	N/A
4.5	Sound-Producing Toys	N/A
4.6	Small Objects	N/A
4.6.1	Toys that are intended for children under 36 months of age	N/A
4.6.2	Mouth-Actuated Toys	N/A
4.6.3	Toys that are intended for children over 36 months but less than 72 months	N/A
4.7	Accessible Edges	P
4.8	Projections	P
4.8.1	Bath Toy Projections	N/A
4.9	Accessible Points	P
4.10	Wires or Rods	P
4.11	Nails and Fasteners	P
4.12	Plastic Film	N/A
4.13	Folding Mechanisms and Hinges	N/A
4.14	Cords, Straps and Elastics	N/A
4.15	Stability and Over-Load Requirements	P
4.16	Confined Spaces	N/A
4.17	Wheels, Tires, and Axles	P
4.18	Holes, Clearances, and Accessibility of Mechanisms	P
4.19	Simulated Protective Devices	N/A
4.20	Pacifiers	N/A
4.21	Projectile Toys	N/A
4.22	Teethers and Teething Toys	N/A
4.23	Rattles	N/A
4.24	Squeeze Toys	N/A
4.25	Battery-Operated Toys (exclude section 4.25.10 Battery-powered ride-on toys and section 4.25.11 Toys contain secondary cells or secondary batteries)	N/A
4.26	Toys Intended to be Attached to a Crib or Playpen	N/A
4.27	Stuffed and Beanbag-Type Toys	N/A
4.28	Stroller and Carriage Toys	N/A
4.30	Toy Gun Marking	N/A
4.31	Balloons	N/A
4.32	Certain Toys with Nearly Spherical Ends	N/A
4.33	Marbles	N/A
4.34	Balls	N/A
4.35	Pompoms	N/A
4.36	Hemispheric-Shaped Objects	N/A
4.37	Yo Yo Elastic Tether Toys	N/A
4.38	Magnets	N/A
4.39	Jaw Entrapment in Handles and Steering Wheels	N/A
4.40	Expanding material	N/A
4.41	Toy Chests	N/A

TO BE CONTINUED

TEST RESULT

Section	Description	Result
5	Labeling Requirements	
5.2	Age Grading Labeling	P
5.3	Safety Labeling Requirements	P
5.4	Aquatic Toys	N/A
5.5	Crib and Playpen Toys	N/A
5.6	Mobiles	N/A
5.7	Stroller and Carriage Toys	N/A
5.8	Toys Intended to be Assembled by an Adult	P
5.9	Simulated Protective Devices	N/A
5.10	Toys with Functional Sharp Edges and Sharp Points	N/A
5.11	Small Objects, Small Balls, Marbles and Balloons (16 CFR 1500.19)	N/A
5.12	Toy Caps (16 CFR 1500.86 for Required Labeling)	N/A
5.13	Art Materials (16 CFR 1500.14(b)(8))	N/A
5.14	Electric Toys	N/A
5.15	Battery-Operated Toys	N/A
5.15.1	Battery-Powered Ride-On Toys	N/A
5.15.2	Button or Coin Cell Batteries	N/A
5.16	Promotional Materials	P
5.17	Magnets	N/A
6	Instructional Literature	
6.1	Definition and Description	P
6.2	Crib and Playpen Toys	N/A
6.3	Mobiles	N/A
6.4	Toys Intended to be Assembled by an Adult	P
6.5	Battery-Operated Toys	N/A
6.6	Battery-Powered Ride-On Toys	N/A
6.7	Toys in Contact with Food	N/A
6.8	Toy Chests	N/A
7	Producer's Markings	
7.1	Producer's or Distributor's Name and Address	P
7.2	Battery-Powered Ride-on Toys	N/A
7.3	Toy Chests	N/A

Remark:

P-Pass, F- Fail, N/A-Not Applicable, N/C-Not conduct as per client's request

TO BE CONTINUED

TEST RESULT

Flammability of Toys

Test Request: As specified in ASTM F963-17, Section 4.2, testing procedure for materials other than textiles (excluding paper) used in toys is contained in Annex A5.

Sample	Limit	Result
A	0.1 inch/second	P
B	0.1 inch/second	P
C	0.1 inch/second	P
D	0.1 inch/second	P
E	0.1 inch/second	P
F	0.1 inch/second	P
G	0.1 inch/second	P
H	0.1 inch/second	P
I	0.1 inch/second	P
J	0.1 inch/second	P
K	0.1 inch/second	P
L	0.1 inch/second	P
M	0.1 inch/second	P
N	0.1 inch/second	P
O	0.1 inch/second	P
P	0.1 inch/second	P
Q	0.1 inch/second	P
R	0.1 inch/second	P
S	0.1 inch/second	P
T	0.1 inch/second	P
U	0.1 inch/second	P
V	0.1 inch/second	P
W	0.1 inch/second	P
X	0.1 inch/second	P
Y	0.1 inch/second	P
Z	0.1 inch/second	P
AA	0.1 inch/second	P
AB	0.1 inch/second	P

Remark:

P-Pass, F- Fail, N/A-Not Applicable

TO BE CONTINUED

TEST RESULT

Total Lead Content

Test Request: Total lead content as specified in US 16 CFR 1303

Test Method: CPSC-CH-E1003-09.1

The sample was acid digested, and total lead content was determined by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result		
				1	2	3
Total Lead (Pb)	mg/kg	90	10	ND	ND	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

Total Lead Content in Paint / Surface Coating

Test Request: Total lead in paint/ similar surface coatings as specified in US Consumer Product Safety Improvement Act 2008 (CPSIA), Section 101

Test Method: CPSC-CH-E1003-09.1

The sample was acid digested, and total lead content was determined by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result		
				1	2	3
Total Lead (Pb)	mg/kg	90	10	ND	ND	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Phthalates Content

Test Request: Phthalates Content as specified in US Consumer Product Safety Improvement Act 2008 (CPSIA), Section 108

Test Method: CPSC-CH-C1001-09.3

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					1	2	3	4
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND	ND	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	0.1	0.005	ND	ND	ND	ND
Diisononylphthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND	ND	ND
Diisodecylphthalate (DIDP)	26761-40-0	%	0.1	0.005	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					5+6+7	8+9+10	11+12+13	14+15+16
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND	ND	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	0.1	0.005	ND	ND	ND	ND
Diisononylphthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND	ND	ND
Diisodecylphthalate (DIDP)	26761-40-0	%	0.1	0.005	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Test Item(s)	CAS No.	Unit	Limit	MDL	Result	
					17+18+19	20
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	0.1	0.005	ND	ND
Diisononylphthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND
Diisodecylphthalate (DIDP)	26761-40-0	%	0.1	0.005	ND	ND

Remarks:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Phthalates Content

Test Request: Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates as specified in CPSC 16 CFR part 1307.

Test Method: CPSC-CH-C1001-09.4

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					1	2	3	4
Diisononylphthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND	ND	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND	ND	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					5+6+7	8+9+10	11+12+13	14+15+16
Diisononylphthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND	ND	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND	ND	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Test Item(s)	CAS No.	Unit	Limit	MDL	Result	
					17+18+19	20
Diisononylphthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND

Remarks:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Total Lead Content in Substrate

Test Request: Total lead in substrate as specified in US Consumer Product Safety Improvement Act 2008 (CPSIA), Section 101

Test Method: CPSC-CH-E1001-08.3 for metal product, CPSC-CH-E1002-08.3 for nonmetal product.
The sample was acid digested, and total lead content was determined by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result			
				4	5+6+7	8+9+10	11+12+13
Total Lead (Pb)	mg/kg	100	10	ND	ND	ND	ND

Test Item(s)	Unit	Limit	MDL	Result			
				14+15+16	17+18+19	20	21+22+23
Total Lead (Pb)	mg/kg	100	10	ND	ND	ND	ND

Test Item(s)	Unit	Limit	MDL	Result		
				24+25	26	27+28
Total Lead (Pb)	mg/kg	100	10	ND	ND	ND

Remark:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Phthalates Content

Test Request: Phthalates Content in Toys (including pacifiers, rattles, and teethers) Material (ASTM F963-23, Section 4.3.8)

Test Method: CPSC-CH-C1001-09.4

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					1	2	3	4
Diisononylphthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND	ND	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND	ND	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					5+6+7	8+9+10	11+12+13	14+15+16
Diisononylphthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND	ND	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND	ND	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Test Item(s)	CAS No.	Unit	Limit	MDL	Result	
					17+18+19	20
Diisononylphthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND

Remarks:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Flammability of Toys

Test Request: As specified in ASTM F963-23, Section 4.2, testing procedure for materials other than textiles (excluding paper) used in toys is contained in Annex A5.

Sample	Limit	Result
A	0.1 inch/second	P
B	0.1 inch/second	P
C	0.1 inch/second	P
D	0.1 inch/second	P
E	0.1 inch/second	P
F	0.1 inch/second	P
G	0.1 inch/second	P
H	0.1 inch/second	P
I	0.1 inch/second	P
J	0.1 inch/second	P
K	0.1 inch/second	P
L	0.1 inch/second	P
M	0.1 inch/second	P
N	0.1 inch/second	P
O	0.1 inch/second	P
P	0.1 inch/second	P
Q	0.1 inch/second	P
R	0.1 inch/second	P
S	0.1 inch/second	P
T	0.1 inch/second	P
U	0.1 inch/second	P
V	0.1 inch/second	P
W	0.1 inch/second	P
X	0.1 inch/second	P
Y	0.1 inch/second	P
Z	0.1 inch/second	P
AA	0.1 inch/second	P
AB	0.1 inch/second	P

Remark:

P-Pass, F- Fail, N/A-Not Applicable

TO BE CONTINUED

TEST RESULT

Heavy Metals

1) ASTM F963-23- Heavy Elements – Total Lead in Paint and Similar Surface-Coating Material (Clause 4.3.5.1(1))

Test Method: ASTM International Standard ASTM F963-23, Section 8.3.1 and Annex A7.

Tested Item(s)	Unit	Limit	MDL	Result		
				1	2	3
Total Lead in Paint	mg/kg	90	10	ND	ND	ND

2) ASTM F963-23- Heavy Elements – Total Lead in Substrate Material (Clause 4.3.5.2(2)(a))

Test Method: ASTM International Standard ASTM F963-23, Section 8.3.1 and Annex A7.

Tested Item(s)	Unit	Limit	MDL	Result				
				4	5	6	7	8
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				9	10	11	12	13
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				14	15	16	17	18
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				19	20	21	22	23
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				24	25	26	27	28
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

3) ASTM F963-23- Heavy Elements – Soluble Migrated Elements Content in Surface Coatings and Substrates Other Than Modeling Clay (Clause 4.3.5.1(2) and 4.3.5.2(2)(b))

Test Method: ASTM International Standard ASTM F963-23, Section 8.3.2 to 8.3.5 (excluding 8.3.5.5(3))

Tested Item(s)	Unit	Limit	MDL	Result				
				1	2	3	4	5
Soluble Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Soluble Barium	mg/kg	1000	10	12	ND	142	ND	ND
Soluble Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Soluble Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Soluble Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Tested Item(s)	Unit	Limit	MDL	Result				
				6	7	8	9	10
Soluble Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Soluble Barium	mg/kg	1000	10	ND	ND	ND	ND	ND
Soluble Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Soluble Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Soluble Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				11	12	13	14	15
Soluble Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Soluble Barium	mg/kg	1000	10	ND	ND	ND	ND	ND
Soluble Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Soluble Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Soluble Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				16	17	18	19	20
Soluble Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Soluble Barium	mg/kg	1000	10	ND	ND	ND	ND	ND
Soluble Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Soluble Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Soluble Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Soluble Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

The analytical results were adjusted by subtracting analytical correction factor.

TO BE CONTINUED

TEST RESULT

Mechanical and Physical Properties

Test Request: As specified in Consumer Safety Specification ASTM F963-23

Section	Description	Result
4.1	Material Quality	P
4.3.7	Stuffing Materials	N/A
4.5	Sound-producing Toys	N/A
4.6	Small Objects	N/A
4.6.1	Toys that are intended for children under 36 months of age	N/A
4.6.2	Mouth-actuated Toys	N/A
4.6.3	Toys that are intended for children over 36 months but less than 72 months	N/A
4.7	Accessible Edges	P
4.8	Projections	P
4.8.1	Bath Toy Projections	N/A
4.9	Accessible Points	P
4.10	Wires or Rods	P
4.11	Nails and Fasteners	P
4.12	Plastic Film	N/A
4.13	Folding Mechanisms and Hinges	N/A
4.14	Cords, Straps and Elastics	N/A
4.15	Stability and Over-load Requirements	P
4.16	Confined Spaces	N/A
4.17	Wheels, Tires, and Axles	P
4.18	Holes, Clearance and Accessibility of Mechanisms	P
4.19	Simulated Protective Devices	N/A
4.20	Pacifiers	N/A
4.21	Projectile Toys	N/A
4.22	Teethers and Teething Toys	N/A
4.23	Rattles	N/A
4.24	Squeeze Toys	N/A
4.25	Battery-operated Toys (exclude section 4.25.9 Battery-powered Ride-on Toys and section 4.25.10 Toys that Contain Secondary Cells or Secondary Batteries)	N/A
4.26	Toys Intended to be Attached to a Crib or Playpen	N/A
4.27	Stuffed and Beanbag-type Toys	N/A
4.28	Stroller and Carriage Toys	N/A
4.30	Toy Gun Marking	N/A
4.31	Balloons	N/A
4.32	Certain Toys with Nearly Spherical Ends	N/A
4.33	Marbles	N/A
4.34	Balls	N/A
4.35	Pompoms	N/A
4.36	Hemispheric-shaped Objects	N/A
4.37	Yo Yo Elastic Tether Toys	N/A
4.38	Magnets	N/A
4.39	Jaw Entrapment in Handles and Steering Wheels	N/A

TO BE CONTINUED

TEST RESULT

4.40	Expanding Materials	N/A
4.41	Toy Chests	N/A
5	LABELING REQUIREMENTS	
5.1	Federal Government Requirements	P
5.2	Age Grading Labeling	P
5.3	Safety Labeling Requirements	P
5.4	Aquatic Toys	N/A
5.5	Crib and Playpen Toys	N/A
5.6	Mobiles	N/A
5.7	Stroller and Carriage Toys	N/A
5.8	Toys Intended to be Assembled by an Adult	P
5.9	Simulated Protective Devices	N/A
5.10	Toys with Functional Sharp Edges or Points	N/A
5.11	Small Objects, Small Balls, Marbles and Balloons (16 CFR 1500.19)	N/A
5.12	Art Materials (16 CFR 1500.14(b)(8))	N/A
5.13	Electric Toys	N/A
5.14	Battery-operated Toys	N/A
5.14.1	Battery-powered Ride-on Toys	N/A
5.14.2	Button or Coin Cell Batteries	N/A
5.15	Promotional Materials	P
5.16	Magnets	N/A
6	INSTRUCTIONAL LITERATURE	
6.1	Definition and Description	P
6.2	Crib and Playpen Toys	N/A
6.3	Mobiles	N/A
6.4	Toys Intended to be Assembled by an Adult	P
6.5	Battery-operated Toys	N/A
6.6	Battery-powered Ride-on Toys	N/A
6.7	Toys in Contact with Food	N/A
6.8	Toy Chests	N/A
6.9	Manufacturer-supplied specialty or custom tools to access the battery(ies)	N/A
7	PRODUCER'S MARKINGS	
7.1	Producer's or Distributor's Name and Address	P
7.2	Battery-powered Ride-on Toys	N/A
7.3	Toy Chests	N/A

Remark:

P-Pass, F- Fail, N/A-Not Applicable, N/C-Not conduct as per client's request

END OF THE REPORT