Dated: 2021-06-18



Applicant Spector & Co

Address

Sample Description BALLPOINT PEN

EC121 Item No.

Style No. **PANDA**

Supplier USN006

Country of Origin CANADA

Country of Destination CANADA & U.S.A.

Test Sample Receipt Date, Location 2021-03-25, Shenzhen

Test Period, Location From 2021-03-31 to 2021-05-14, Shenzhen

Refer to Section 3 Test Result(s)

Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.

China

Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com

Web: http://www.tuvsud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R. China

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Purpose Of Examination / Conclusion:

No.	Test Item(s)	Conclusion
1.	US California Proposition 65 - Total Cadmium Content Test - Substrate	Pass*
١.	Materials	F a 5 5
2.	US California Proposition 65 - Total Cadmium Content Test - Paint and	Pass*
	Similar Surface-Coating Materials	1 433
3.	US California Proposition 65 - Total Lead Content Test - Substrate	Pass*
<u> </u>	Materials	1 433
4.	US California Proposition 65 - Total Lead Content Test - Paint and Similar	Pass*
<u> </u>	Surface-Coating Materials	
5.	Canadian Consumer Products Containing Lead Regulations SOR/2018-	Pass
	83 - Total Lead Content Test	
6.	Canadian Surface Coating Materials Regulations SOR/2016-193 –	Pass
<u> </u>	Total Lead Content Test	1 400
7.	Phthalates Content (11P)	Pass*
8.	US California Proposition 65 - Phthalates Content (6P)	Pass*
9.	U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates	Door
9.	Content (8P)	Pass
10.	Tungsten Content Test	Report As Is
11.	Canadian Surface Coating Materials Regulations SOR/2016-193 -	Pass
' ' '	Total Mercury Content Test	F d 3 3
12.	Nickel Content Test	Report As Is

Remarks:

- (1) The results relate only to the items tested.
- (2) Samples are tested as received.
- (3) "*" denotes the conclusion was drawn according to the client's specification.
- (4) The test item and samples were specified by the client
- (5) "Pass" means the measured result is within a limit, even when extended by expanded uncertainty. "Fail" means the measured result is beyond a limit, even when extended by expanded uncertainty. "Inconclusive" means the measured result can be within or beyond a limit when extended by expanded uncertainty. The confidence level of the expended uncertainty for "pass", "Fail" and "Inconclusive" is 95%.
- (6) This report supersedes previous report 68.431.21.01998.01 issued on 2021-05-18.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch TÜV SÜD Group

Prepared by: Reviewed by:

Laboratory:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.

China

Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com

Web: http://www.tuvsud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.

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Dated: 2021-06-18



Carra



Ken

<Cara Xiang>
<Senior Project Coordinator>

<Ken Chen>
<Project Manager>

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Laboratory:

China

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, 518052, P. R. Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com Web : http://www.tuvsud.cn Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R. China Page 3 of 21



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1. Description of the Test Sample:

Sample Description	BALLPOINT PEN

2. List of Materials as identified by the Laboratory:

T. No.	Sample No.	Colour and Description	Photograph
T1	001	Blue plastic (Top of pen)	
T2	002	Blue plastic (Barrel)	
Т3	003	Black plastic (Top of pen)	8.8.8
T4	004	Black plastic (Barrel)	
T5	005	Green plastic (Top of pen)	
Т6	006	Green plastic (Barrel)	V V
T7	007	Brown bamboo (Barrel)	7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3
Т8	800	Transparent coating (Bamboo)	
Т9	009	White plastic (Parts)	
T10	010	Silvery metal (Short spring)	THE RESERVE OF THE PERSON OF T
T11	011	Silvery metal (Long spring)	
T12	012	Silvery metal (Tip of refill)	
T13	013	Silvery metal (Ball of refill)	
T14	014	White plastic (Refill)	
T15	015	Blue ink (Ink)	

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Nantou Checkpoint Road 2, 518052, P. R. China

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TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

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3. Test Result

3.1 US California Proposition 65 - Total Cadmium Content Test - Substrate Materials

Test method: Acid digestion/Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	F	Client's		
Test item	Sample Sample Sample 001+002+003 004+005+006 007		Specification [mg/kg]	
Cadmium	N.D.	N.D.	N.D.	<75
Conclusion	Pass	Pass	Pass	-

	Results [mg/kg]			Client's
Test item	Sample 009	Sample 010	Sample 011	Specification [mg/kg]
Cadmium	N.D.	N.D.	N.D.	<75
Conclusion	Pass	Pass	Pass	-

		Client's		
Test item	Sample 012	Sample 013	Sample 014	Specification [mg/kg]
Cadmium	N.D.	N.D.	N.D.	<75
Conclusion	Pass	Pass	Pass	-

Note:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than
- "N.D." denotes Not Detected with Detection Limit 10.0mg/kg

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

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.

China

Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com Web : http://www.tuvsud.cn Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.
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3.2 US California Proposition 65 - Total Cadmium Content Test - Paint and Similar Surface-Coating Materials

Test method: Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	Results	Results [mg/kg]		
Test Item	Sample 008	Sample 015	Specification [mg/kg]	
Cadmium	N.D.	N.D.	<75	
Conclusion	Pass	Pass	-	

Note:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than
- "N.D." denotes Not Detected with Detection Limit 10.0mg/kg



Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, 518052, P. R. China Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com
Web : http://www.tuvsud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.
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3.3 US California Proposition 65 - Total Lead Content Test - Substrate Materials

Test method: Acid digestion or Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	F	Client's		
Test Item	Sample 001+002+003	Sample 004+005+006	Sample 007	Specification [mg/kg]
Lead	N.D.	N.D.	N.D.	<100
Conclusion	Pass	Pass	Pass	-

	Results [mg/kg]			Client's
Test Item	Sample 009	Sample 010	Sample 011	Specification [mg/kg]
Lead	N.D.	N.D.	N.D.	<100
Conclusion	Pass	Pass	Pass	-

		Client's		
Test Item	Sample 012	Sample 013	Sample 014	Specification [mg/kg]
Lead	24.9	N.D.	N.D.	<100
Conclusion	Pass	Pass	Pass	-

Note:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than
- "N.D." denotes Not Detected with Detection Limit 10.0mg/kg

Laboratory:

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

Building 12&13, Zhiheng Wisdomland Business Park,

Nambar Obsalm

Nantou Checkpoint Road 2, 518052, P. R.

China

Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com Web : http://www.tuvsud.cn Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R. China Page 7 of 2



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3.4 US California Proposition 65 - Total Lead Content Test - Paint and Similar Surface-Coating Materials

Test method: Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission

Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	Results	Client's	
Test Item	Sample 008	Sample 015	Specification [mg/kg]
Lead	N.D.	N.D.	<90
Conclusion	Pass	Pass	-

Note:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than
- "N.D." denotes Not Detected with Detection Limit 10.0mg/kg



Laboratory:

China

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, 518052, P. R. Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com Web : http://www.tuvsud.cn Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.
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3.5 Total Lead Content Test

Consumer Products Containing Lead Regulations SOR/2018-83
Acid digestion / Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	Result [mg/kg]				
Analyte	Sample Sample		Sample		
	001+002+003	004+005+006	007		
Lead	N.D.	N.D.	N.D.		
Limit	<90				
Conclusion	Pass Pass Pass				

	Result [mg/kg]				
Analyte	Sample 008	Sample 009	Sample 010		
Lead	N.D.	N.D.	N.D.		
Limit		<90			
Conclusion	Pass	Pass	Pass		

		Result [mg/kg]					
Analyte	Sample 011						
Lead	N.D.	24.9	N.D.				
Limit		<90					
Conclusion	Pass	Pass	Pass				

	Result	[mg/kg]		
Analyte	Sample	Sample		
	014	015		
Lead	N.D.	N.D.		
Limit	<	90		
Conclusion	Pass	Pass		

Note 1. "mg/kg" denotes milligram per kilogram

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 10.0mg/kg

Laboratory:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.

China

Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com

Web: http://www.tuvsud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

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3.6 Total Lead Content Test

Surface Coating Materials Regulations SOR/2016-193 Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	Result [mg/kg]				
Analyte	Sample	Sample			
	008	015			
Lead	N.D.	N.D.			
Limit	<90)			
Conclusion	Pass	Pass			

Note 1. "mg/kg" denotes milligram per kilogram

2. "<" denotes less than

3. "N.D." denotes Not Detected with Detection Limit 10.0mg/kg



Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, 518052, P. R. China Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com Web : http://www.tuvsud.cn Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

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3.7 Phthalates Content (11P)

Test method: In-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.005%]

		Results [%]			Client's
Test Items	CAS No.	Sample 001+002 +003	Sample 004+005 +006	Sample 007	Specification [%]
Di-(2-ethylhexyl)-phthalat (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Dibutylbenzylphthalat (DBP)	84-74-2	N.D.	N.D.	N.D.	<0.1
Diethyl phthalate (DEP)	84-66-2	N.D.	N.D.	N.D.	<0.1
Butylbenzylphthalat (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Di-iso-butylphthalat (DIBP)	84-69-5	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate (DINP)	28553-12-0 , 68515-48-0	N.D.	N.D.	N.D.	<0.1
Di-isodecylphthalat (DIDP)	26761-40-0 , 68515-49-1	N.D.	N.D.	N.D.	<0.1
Di-n-octylphthalat (DNOP)	117-84-0	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DnHP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Dicyclohexyl phthalate (DCHP)	84-61-7	N.D.	N.D.	N.D.	<0.1
Di-n-pentyphthalat (DNPP)	131-18-0	N.D.	N.D.	N.D.	<0.1
Conclusion		Pass	Pass	Pass	-

Note 1. "%" denotes percentage by weight

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 0.005%

Laboratory:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.

China

Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

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Web: http://www.tuvsud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R. China Page 11 of 2

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3.7 Phthalates Content (11P)

Test method: In-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.005%]

		Results [%]			Client's
Test Items	CAS No.	Sample	Sample	Sample	Specification
		800	009	014	[%]
Di-(2-ethylhexyl)-phthalat (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Dibutylbenzylphthalat (DBP)	84-74-2	N.D.	N.D.	N.D.	<0.1
Diethyl phthalate (DEP)	84-66-2	N.D.	N.D.	N.D.	<0.1
Butylbenzylphthalat (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Di-iso-butylphthalat (DIBP)	84-69-5	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate (DINP)	28553-12-0 , 68515-48-0	N.D.	N.D.	N.D.	<0.1
Di-isodecylphthalat (DIDP)	26761-40-0 , 68515-49-1	N.D.	N.D.	N.D.	<0.1
Di-n-octylphthalat (DNOP)	117-84-0	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DnHP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Dicyclohexyl phthalate (DCHP)	84-61-7	N.D.	N.D.	N.D.	<0.1
Di-n-pentyphthalat (DNPP)	131-18-0	N.D.	N.D.	N.D.	<0.1
Conclusion		Pass	Pass	Pass	-

Note 1. "%" denotes percentage by weight

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 0.005%

Laboratory:

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

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.

China

Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com Web : http://www.tuvsud.cn Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.
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3.7 **Phthalates Content (11P)**

Test method: In-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.005%]

		Results [%]	Client's	
Test Items	CAS No.	Sample	Specification	
		015	[%]	
Di-(2-ethylhexyl)-phthalat (DEHP)	117-81-7	N.D.	<0.1	
Dibutylbenzylphthalat (DBP)	84-74-2	N.D.	<0.1	
Diethyl phthalate (DEP)	84-66-2	N.D.	<0.1	
Butylbenzylphthalat (BBP)	85-68-7	N.D.	<0.1	
Di-iso-butylphthalat (DIBP)	84-69-5	N.D.	<0.1	
Di-isononyl phthalate (DINP)	28553-12-0 , 68515-48-0	N.D.	<0.1	
Di-isodecylphthalat (DIDP)	26761-40-0 , 68515-49-1	N.D.	<0.1	
Di-n-octylphthalat (DNOP)	117-84-0	N.D.	<0.1	
Di-n-hexyl phthalate (DnHP)	84-75-3	N.D.	<0.1	
Dicyclohexyl phthalate (DCHP)	84-61-7	N.D.	<0.1	
Di-n-pentyphthalat (DNPP)	131-18-0	N.D.	<0.1	
Conclusion		Pass	-	

Note 1. "%" denotes percentage by weight

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 0.005%

Laboratory:

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

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.

China

Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com Web: http://www.tuvsud.cn

Regd. Office: TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R. China Page 13 of 21



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3.8 US California Proposition 65 - Phthalates Content (6P)

Test method: In-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.005%]

		F	Results [%	Client's	
Test Items	CAS No.	Sample 001+002 +003	Sample 004+005 +006	Sample 007	Specification [%]
Dibutyl phthalate, (DBP)	84-74-2	N.D.	N.D.	N.D.	<0.1
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Benzyl butyl phthalate, (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DNHP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	N.D.	N.D.	N.D.	<0.1
Conclusion	Clill	Pass	Pass	Pass	-

	/	F	Results [%	b]	Client's
Test Items	CAS No.	Sample 008	Sample 009	Sample 014	Specification [%]
Dibutyl phthalate, (DBP)	84-74-2	N.D.	N.D.	N.D.	<0.1
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Benzyl butyl phthalate, (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DNHP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	N.D.	N.D.	N.D.	<0.1
Conclusion		Pass	Pass	Pass	-

Note 1. "%" denotes percentage by weight

2. "<" denotes less than

3. "N.D." denotes Not Detected with Detection Limit 0.005%

Laboratory:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.

China

Phone: +86 755 8828 6998 Fax: +86 755 8828 5299 T

E-mail: toys_hardline@tuvsud.com

Web: http://www.tuvsud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

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3.8 US California Proposition 65 - Phthalates Content (6P)

Test method: In-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.005%]

Test Items	CAS No.	Results [%] Sample 015	Client's Specification [%]
Dibutyl phthalate, (DBP)	84-74-2	N.D.	<0.1
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	N.D.	<0.1
Benzyl butyl phthalate, (BBP)	85-68-7	N.D.	<0.1
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	N.D.	<0.1
Di-n-hexyl phthalate (DNHP)	84-75-3	N.D.	<0.1
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	N.D.	<0.1
Conclusion		Pass	-

Note 1. "%" denotes percentage by weight

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 0.005%

Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, 518052, P. R. China Phone: +86 755 8828 6998
Fax: +86 755 8828 5299
E-mail: toys_hardline@tuvsud.com

Web : http://www.tuvsud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

Nantou Checkpoint Road 2, 518052, P. R.
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U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates Content (8P) 3.9 CPSC-CH-C1001-09.4 - Standard Operating Procedure for Determination of Phthalates [Reporting Limit = 0.005%]

		F	Results [%]		
Phthalates	CAS No.	Sample 001+002 +003	Sample 004+005 +006	Sample 007	Limit [%]
Dibutyl phthalate, (DBP)	84-74-2	N.D.	N.D.	N.D.	<0.1
Benzyl butyl phthalate, (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Diisobutylphthalate, (DIBP)	84-69-5	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DHEXP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Dicyclohexyl phthalate (DCHP)	84-61-7	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	N.D.	N.D.	N.D.	<0.1
Di-n-pentyl phthalates (DPENP)	131-18-0	N.D.	N.D.	N.D.	<0.1
Conclusion		Pass	Pass	Pass	-

Note 1. "%" denotes percentage by weight

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 0.005%

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Phone: +86 755 8828 6998 Fax: +86 755 8828 5299 E-mail: toys_hardline@tuvsud.com

Web: http://www.tuvsud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

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Dated: 2021-06-18



3.9 U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates Content (8P) CPSC-CH-C1001-09.4 – Standard Operating Procedure for Determination of Phthalates [Reporting Limit = 0.005%]

		F	Results [%]		
Phthalates	CAS No.	Sample 008	Sample 009	Sample 014	Limit [%]
Dibutyl phthalate, (DBP)	84-74-2	N.D.	N.D.	N.D.	<0.1
Benzyl butyl phthalate, (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Diisobutylphthalate, (DIBP)	84-69-5	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DHEXP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Dicyclohexyl phthalate (DCHP)	84-61-7	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	N.D.	N.D.	N.D.	<0.1
Di-n-pentyl phthalates (DPENP)	131-18-0	N.D.	N.D.	N.D.	<0.1
Conclusion		Pass	Pass	Pass	-

Note 1. "%" denotes percentage by weight

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 0.005%

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TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

Business Park,

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3.9 U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates Content (8P) CPSC-CH-C1001-09.4 - Standard Operating Procedure for Determination of Phthalates

[Reporting Limit = 0.005%]

Phthalates	CAS No.	Results [%] Sample 015	Limit [%]
Dibutyl phthalate, (DBP)	84-74-2	N.D.	<0.1
Benzyl butyl phthalate, (BBP)	85-68-7	N.D.	<0.1
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	N.D.	<0.1
Diisobutylphthalate, (DIBP)	84-69-5	N.D.	<0.1
Di-n-hexyl phthalate (DHEXP)	84-75-3	N.D.	<0.1
Dicyclohexyl phthalate (DCHP)	84-61-7	N.D.	<0.1
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	N.D.	<0.1
Di-n-pentyl phthalates (DPENP)	131-18-0	N.D.	<0.1
Conclusion		Pass	-

Note 1. "%" denotes percentage by weight

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 0.005%

Laboratory:

TÜV SÜD Certification and Testing (China)
Co., Ltd. Shenzhen Branch
Building 12&13, Zhiheng Wisdomland
Business Bark

Business Park, Nantou Checkpoint Road 2, 518052, P. R.

China

Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com Web : http://www.tuvsud.cn Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland

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3.10 Tungsten Content Test

Test method: EPA 3050B:1996, analyzed by Inductively Coupled Plasma Optical Emission

Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	Results [mg/kg]	Client's
Test Item	Sample	Specification
	011	[mg/kg]
Tungsten	N.D.	-
Conclusion	Report As Is	-

Note:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than
- "N.D." denotes Not Detected with Detection Limit 10.0mg/kg



Laboratory:

China

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, 518052, P. R. Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

E-mail: toys_hardline@tuvsud.com Web : http://www.tuvsud.cn Regd. Office:

TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

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Dated: 2021-06-18



3.11 Total Mercury Content Test

Surface Coating Materials Regulations SOR/2016-193 Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	Results	Limit	
Test Item	Sample 008	Sample 015	[mg/kg]
Mercury	N.D.	N.D.	<10
Conclusion	Pass	Pass	-

Note 1. "mg/kg" denotes milligram per kilogram

2. "<" denotes less than

3. "N.D." denotes Not Detected with Detection Limit 10.0mg/kg



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TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, 518052, P. R. China Phone: +86 755 8828 6998 Fax: +86 755 8828 5299

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Co., Ltd. Shenzhen Branch

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Dated: 2021-06-18



3.12 Nickel Content Test

Test method: Acid digestion and analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 5.0mg/kg]

	Results [mg/kg]			Client's
Test Item	Sample 010	Sample 011	Sample 012	Specification [mg/kg]
Nickel	31.01	40.47	1042.11	-
Conclusion	Report As Is	Report As Is	Report As Is	-

Test Item	Results [mg/kg] Sample	Client's Specification
restitem	013	[mg/kg]
Nickel	1842.87	-
Conclusion	Report As Is	-

Note:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than
- "N.D." denotes Not Detected with Detection Limit 5.0mg/kg

-- END OF TEST REPORT--

Laboratory:

China

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, 518052, P. R.

Phone: +86 755 8828 6998 Fax: +86 755 8828 5299 E-mail: toys_hardline@tuvsud.com

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TÜV SÜD Certification and Testing (China)

Co., Ltd. Shenzhen Branch

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Business Park,

Nantou Checkpoint Road 2, 518052, P. R. China Page 21 of 21

