



# Test Report

No.: 68.431.23.3629.01

Date: 2023-10-10

**Applicant:** Spector & Co  
**Address:** /  
**Product Name:** PUSH ACTION ALUMINUM BALLPOINT PEN. ALUMINUM  
**Product Type / End use:** Writing instrument  
**Item No.:** G3111  
**Style No.:** VICTOR  
**Supplier:** USX006  
**Country of Origin:** China  
**Country of Destination:** CANADA & U.S.A.  
**Receipt Date of Sample:** 2023-09-12, 2023-09-22  
**Date of Testing:** From 2023-09-13 to 2023-10-10  
**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. US California Proposition 65 - Total Cadmium Content Test - Paint and Similar Surface-Coating Materials	Pass*
2. US California Proposition 65 - Total Cadmium Content Test - Substrate Materials	Pass*
3. US California Proposition 65 - Total lead Content Test - Paint and Similar Surface-Coating Materials	Pass*
4. US California Proposition 65 - Total Lead Content Test - Substrate Materials	Pass*
5. Phthalates Content (11P)	Pass*
6. Tungsten Content Test	Report As Is
7. Canada Consumer Product Safety Act (S.C. 2010, c. 21), Surface Coating Materials Regulations SOR/2016-193 and SOR/2022-122 - Total Mercury	Pass
8. Canada Consumer Product Safety Act (S.C. 2010, c. 21), Surface Coating Materials Regulations SOR/2016-193 and SOR/2022-122 - Total Lead	Pass
9. Canadian Consumer Products Containing Lead Regulations SOR/2018-83 - Total Lead Content Test	Pass
10. Total Nickel Content Test	Report As Is
11. U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates Content (8P)	Pass
12. US California Proposition 65 - Phthalates Content (6P)	Pass*

Remarks: 1. MDL = Method Detection Limit  
2. N.D. = Not Detected (<MDL)  
3. ≤ Less than  
4. 1 mg/kg = 1 ppm = 0.0001%  
5. NA=Not Applicable  
6. The test samples were specified by the applicant.

Regd. Office: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
Shenzhen, Guangdong, China

Phone: +86 755 8828 6998  
Fax: +86 755 8828 5299  
E-mail: info@tuv sud.com  
Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test: Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

# Test Report

No.: 68.431.23.3629.01

Date: 2023-10-10



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

Prepared by:

Authorized by:



**Gianna Gao**  
Project Manager

**Eva Liang**  
Project Manager

## 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) If relevant standards do not specify decision rule(s), follow decision rule as below:
  - "Pass" means that the measured result is within the limits, even when extended by expanded uncertainty at a level of confidence of 95%.
  - "Fail" means that the measured result is beyond the limit, even when extended by expanded uncertainty at a level of confidence of 95%.
- (5) The test item and sample were specified by the client.
- (6) "" denotes the conclusion was drawn according to the client's specification.

Regd. Office:

Tüv Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
Shenzhen, Guangdong, China

Phone: +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: [info@tuvsud.com](mailto:info@tuvsud.com)

Web : <http://www.tuvsud.cn>

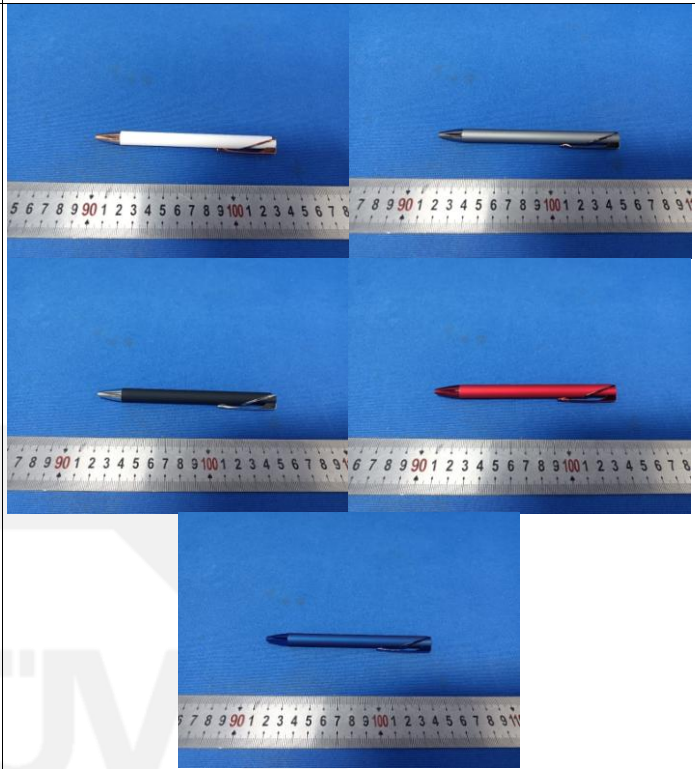
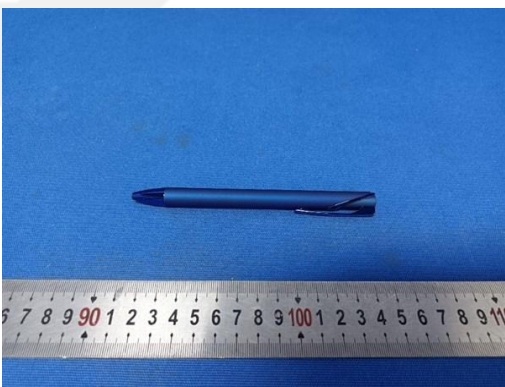
Lab 1 - Chemical testing and part of  
electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

Description of Tested Subject:

Sample	Description	Photo
A	Whole product	
001	Matt blue coating (On metal body)	
003	Bright blue/ matt blue coating (On plastic head & press part)	
004	Off-white plastic (Head)	
005	Cream white plastic (Press part)	

Regd. Office:

TüV Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
 Shenzhen, Guangdong, China

Phone: +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuvsud.com





Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

Sample	Description	Photo	
006	Silver color metal (Body)		
007	Silver color metal (Clip)		
008	Dak blue ink (In core)		
009	Silver color metal (Nib)		
010	Silver color metal (Spring)		
011	Silver-grey plastic (Core)		
012	Blue plastic (Part)		
013	Dark grey plastic (Lining)		
014	Dak silver color metal (Spring)		
015	White coating (On metal body)		
017	Rose golden/ white coating (On plastic head & press part)		
018	Grey coating (On metal body)		
020	Dark silver/ grey coating (On plastic head & press part)		
021	Red coating (On metal body)		
023	Bright red/ red coating (On plastic head & press part)		

Regd. Office:

TüV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
 Shenzhen, Guangdong, China

Phone: +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuv sud.com

Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

# Test Report

No.: 68.431.23.3629.01

Date: 2023-10-10



Sample	Description	Photo
024	Black coating (On metal body)	
025	Bright silver metal film (On plastic head)	
026	Black coating (On press part)	
027	Bright blue plated metal (Metal clip)	
028	Rose golden plated metal (Metal clip)	
029	Dark silver plated metal (Metal clip)	

Regd. Office:

TüV Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
 Shenzhen, Guangdong, China

Phone: +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuvsud.com



Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

Sample	Description	Photo
030	Bright red plated metal (Metal clip)	
031	Bright red/ red coated plastic (Plastic head & press part)	
032	Black coated plastic (Press part)	

T. No	Sample	Description
T1	001	Matt blue coating (On metal body)
T2	003	Bright blue/ matt blue coating (On plastic head & press part)
T3	004	Off-white plastic (Head)
T4	005	Cream white plastic (Press part)
T5	006	Silver color metal (Body)
T6	007	Silver color metal (Clip)
T7	008	Dak blue ink (In core)
T8	009	Silver color metal (Nib)
T9	010	Silver color metal (Spring)
T10	011	Silver-grey plastic (Core)
T11	012	Blue plastic (Part)
T12	013	Dark grey plastic (Lining)
T13	014	Dak silver color metal (Spring)
T14	015	White coating (On metal body)
T15	017	Rose golden/ white coating (On plastic head & press part)
T16	018	Grey coating (On metal body)
T17	020	Dark silver/ grey coating (On plastic head & press part)
T18	021	Red coating (On metal body)
T19	023	Bright red/ red coating (On plastic head & press part)
T20	024	Black coating (On metal body)

Regd. Office: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
 Shenzhen, Guangdong, China

Phone: +86 755 8828 6998  
 Fax: +86 755 8828 5299  
 E-mail: info@tuvsud.com  
 Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test: Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

# Test Report

No.: 68.431.23.3629.01

Date: 2023-10-10



T. No	Sample	Description
T21	025	Bright silver metal film (On plastic head)
T22	026	Black coating (On press part)
T23	027	Bright blue plated metal (Metal clip)
T24	028	Rose golden plated metal (Metal clip)
T25	029	Dark silver plated metal (Metal clip)
T26	030	Bright red plated metal (Metal clip)
T27	031	Bright red/ red coated plastic (Plastic head & press part)
T28	032	Black coated plastic (Press part)



**Regd. Office:**

TüV Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
Shenzhen, Guangdong, China

Phone: +86 755 8828 6998  
Fax: +86 755 8828 5299  
E-mail: [info@tuvsud.com](mailto:info@tuvsud.com)  
Web : <http://www.tuvsud.cn>

**Lab 1 - Chemical testing and part of electrical testing**

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

**Lab 2 - Physical & Mechanical Test:**

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China



**Test Result(s):**

**1. US California Proposition 65 - Total Cadmium Content Test - Paint and Similar Surface-Coating Materials**

Test with reference to microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
001+015+018	mg/kg	10	75	N.D.	Pass
003+017+020	mg/kg	10	75	N.D.	Pass
008	mg/kg	10	75	N.D.	Pass
021+024	mg/kg	10	75	N.D.	Pass

**2. US California Proposition 65 - Total Cadmium Content Test - Substrate Materials**

Test with reference to acid digestion or microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
004+005+011	mg/kg	10	75	N.D.	Pass
006	mg/kg	10	75	N.D.	Pass
007	mg/kg	10	75	N.D.	Pass
009	mg/kg	10	75	N.D.	Pass
010	mg/kg	10	75	N.D.	Pass
012+013	mg/kg	10	75	N.D.	Pass
014	mg/kg	10	75	N.D.	Pass
025	mg/kg	10	75	N.D.	Pass
027	mg/kg	10	75	N.D.	Pass
028	mg/kg	10	75	N.D.	Pass
029	mg/kg	10	75	N.D.	Pass
030	mg/kg	10	75	N.D.	Pass
031+032	mg/kg	10	75	N.D.	Pass

**3. US California Proposition 65 - Total Lead Content Test - Paint and Similar Surface-Coating Materials**

Test with reference to microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
001+015+018	mg/kg	10	90	N.D.	Pass
003+017+020	mg/kg	10	90	N.D.	Pass
008	mg/kg	10	90	N.D.	Pass
021+024	mg/kg	10	90	N.D.	Pass

Regd. Office:

Tüv Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
 Shenzhen, Guangdong, China

Phone: +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuvsud.com

Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China



# Test Report

No.: 68.431.23.3629.01

Date: 2023-10-10



## 4. US California Proposition 65 - Total Lead Content Test - Substrate Materials

Test with reference to acid digestion or microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
004+005+011	mg/kg	10	100	N.D.	Pass
006	mg/kg	10	100	N.D.	Pass
007	mg/kg	10	100	N.D.	Pass
009	mg/kg	10	100	36.3	Pass
010	mg/kg	10	100	N.D.	Pass
012+013	mg/kg	10	100	N.D.	Pass
014	mg/kg	10	100	N.D.	Pass
025	mg/kg	10	100	17.9	Pass
027	mg/kg	10	100	N.D.	Pass
028	mg/kg	10	100	N.D.	Pass
029	mg/kg	10	100	N.D.	Pass
030	mg/kg	10	100	N.D.	Pass
031+032	mg/kg	10	100	N.D.	Pass

## 5. Phthalates Content (11P)

Test with reference to in-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					001+015+018	003+017+020
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	0.006	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
<b>Conclusion</b>					<b>Pass</b>	<b>Pass</b>

Regd. Office:

TüV Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
Shenzhen, Guangdong, China

Phone: +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuv sud.com

Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

# Test Report

No.: 68.431.23.3629.01

Date: 2023-10-10



Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					004+005+011	008
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
<b>Conclusion</b>					<b>Pass</b>	<b>Pass</b>

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					012+013	021+024
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
<b>Conclusion</b>					<b>Pass</b>	<b>Pass</b>

Regd. Office:

TüV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
 Shenzhen, Guangdong, China

Phone: +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuv sud.com

Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

# Test Report

No.: 68.431.23.3629.01

Date: 2023-10-10



Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)
					031+032
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0	%	0.005	0.1	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.
<b>Conclusion</b>					<b>Pass</b>

## 6. Tungsten Content Test

Test with reference to acid digestion and determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES)

Test items	Unit	MDL	Maximum Permissible Limit	Result(s)
				006
Tungsten(W)	mg/kg	10.0	-	N.D.
<b>Conclusion</b>				<b>Report As Is</b>

Regd. Office: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Phone: +86 755 8828 6998  
 Fax: +86 755 8828 5299  
 E-mail: info@tuv sud.com  
 Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test: Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China



**7. Canada Consumer Product Safety Act (S.C. 2010, c. 21), Surface Coating Materials Regulations SOR/2016-193 and SOR/2022-122 - Total Mercury**

Test with reference to microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Limit	Result(s)	Conclusion
001	mg/kg	10	10.0	N.D.	Pass
003	mg/kg	10	10.0	N.D.	Pass
015	mg/kg	10	10.0	N.D.	Pass
017	mg/kg	10	10.0	N.D.	Pass
018	mg/kg	10	10.0	N.D.	Pass
020	mg/kg	10	10.0	N.D.	Pass
021	mg/kg	10	10.0	N.D.	Pass
023	mg/kg	10	10.0	N.D.	Pass
024	mg/kg	10	10.0	N.D.	Pass
026	mg/kg	10	10.0	N.D.	Pass

**8. Canada Consumer Product Safety Act (S.C. 2010, c. 21), Surface Coating Materials Regulations SOR/2016-193 and SOR/2022-122 - Total Lead**

Test with reference to microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Limit	Result(s)	Conclusion
001+015+018	mg/kg	10	90	N.D.	Pass
003+017+020	mg/kg	10	90	N.D.	Pass
008	mg/kg	10	90	N.D.	Pass
021+024	mg/kg	10	90	N.D.	Pass

Regd. Office: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Phone: +86 755 8828 6998  
 Fax: +86 755 8828 5299  
 E-mail: info@tuvsud.com  
 Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China  
 Lab 2 - Physical & Mechanical Test: Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China



**9. Canadian Consumer Products Containing Lead Regulations SOR/2018-83 - Total Lead Content Test**

Test with reference to acid digestion or microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Limit	Result(s)	Conclusion
001+015+018	mg/kg	10	90	N.D.	Pass
003+017+020	mg/kg	10	90	N.D.	Pass
004+005+011	mg/kg	10	90	N.D.	Pass
006	mg/kg	10	90	N.D.	Pass
007	mg/kg	10	90	N.D.	Pass
008	mg/kg	10	90	N.D.	Pass
009	mg/kg	10	90	36.3	Pass
010	mg/kg	10	90	N.D.	Pass
012+013	mg/kg	10	90	N.D.	Pass
014	mg/kg	10	90	N.D.	Pass
021+024	mg/kg	10	90	N.D.	Pass
025	mg/kg	10	90	17.9	Pass
027	mg/kg	10	90	N.D.	Pass
028	mg/kg	10	90	N.D.	Pass
029	mg/kg	10	90	N.D.	Pass
030	mg/kg	10	90	N.D.	Pass
031+032	mg/kg	10	90	N.D.	Pass

**10. Total Nickel Content Test**

Test with reference to acid digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
006	mg/kg	5	-	268.924	Report As Is
007	mg/kg	5	-	7935.859	Report As Is
009	mg/kg	5	-	14.088	Report As Is
010	mg/kg	5	-	87.525	Report As Is
014	mg/kg	5	-	30.643	Report As Is
025	mg/kg	5	-	43884.100	Report As Is
027	mg/kg	5	-	9232.500	Report As Is
028	mg/kg	5	-	70.055	Report As Is
029	mg/kg	5	-	11974.147	Report As Is
030	mg/kg	5	-	23632.331	Report As Is

Regd. Office:

TüV Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
 Shenzhen, Guangdong, China

Phone: +86 755 8828 6998  
 Fax: +86 755 8828 5299  
 E-mail: info@tuv sud.com  
 Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

# Test Report

No.: 68.431.23.3629.01

Date: 2023-10-10



## 11. U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates Content (8P)

Test with reference to in-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					001+015+018	003+017+020
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	0.006	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
<b>Conclusion</b>					<b>Pass</b>	<b>Pass</b>

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					004+005+011	008
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
<b>Conclusion</b>					<b>Pass</b>	<b>Pass</b>

Regd. Office:

TüV Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
 Shenzhen, Guangdong, China

Phone: +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuv sud.com

Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

# Test Report

No.: 68.431.23.3629.01

Date: 2023-10-10



Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					012+013	021+024
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
<b>Conclusion</b>					<b>Pass</b>	<b>Pass</b>

Parameter	CAS No.	Unit	MDL	Limit	Result(s)
					031+032
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.
<b>Conclusion</b>					<b>Pass</b>

Regd. Office:

TüV Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
 Shenzhen, Guangdong, China

Phone: +86 755 8828 6998  
 Fax: +86 755 8828 5299  
 E-mail: info@tuv sud.com  
 Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China



12. US California Proposition 65 - Phthalates Content (6P)

Test with reference to in-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					001+015+018	003+017+020
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	0.006	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.	N.D.
<b>Conclusion</b>					<b>Pass</b>	<b>Pass</b>

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					004+005+011	008
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.	N.D.
<b>Conclusion</b>					<b>Pass</b>	<b>Pass</b>

Regd. Office:

TüV Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
 Shenzhen, Guangdong, China

Phone: +86 755 8828 6998  
 Fax: +86 755 8828 5299  
 E-mail: info@tuvsud.com  
 Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China



# Test Report

No.: 68.431.23.3629.01

Date: 2023-10-10



Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					012+013	021+024
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.	N.D.
<b>Conclusion</b>					<b>Pass</b>	<b>Pass</b>

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)
					031+032
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0	%	0.005	0.1	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0	%	0.005	0.1	N.D.
<b>Conclusion</b>					<b>Pass</b>

-End of Test Report-

Regd. Office:

TüV Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,  
Shenzhen, Guangdong, China

Phone: +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuvsud.com

Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China