

## TEST REPORT

Test Report # 23W-001689 Date of Report Issue: February 24, 2023  
Date of Sample Received: February 20, 2023 Pages: Page 1 of 15

### CLIENT INFORMATION:

Company: Spector & Co.  
Address: testing@spectorandco.com



### SAMPLE INFORMATION:

Description: Ecologist Ballpoint Pen  
Assortment: BLK/BLU/GRN/ORG/RED/DBL  
PO No.: -  
Item No./Name: EC1090  
Item Class: Writing instrument  
Factory/Supplier: USN015  
Country of Origin: China  
Country of Distribution: Canada, United States  
Testing Period: 02/21/2023-02/24/2023

### OVERALL RESULT:

**🔍 PASS with information**

Please refer to the following pages for test result summary and appropriate notes.

QIMA (HANGZHOU) TESTING CO., LTD.

Jeremy Xu  
Chemical Laboratory Supervisor



Hangzhou) Testing Co., Ltd. ♦ Room 401,4-5/F, Building 1, No.1213 Huoju South Road, Puyan Subdistrict, Binjiang District, Hangzhou, China

Email: [Labtesting@qima.com](mailto:Labtesting@qima.com) ♦ Tel: (86) 571 8999 7158.

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**TEST RESULTS SUMMARY:**

At the request of the client, the following tests were conducted:

CONCLUSION	TEST(S) CONDUCTED
PASS	California Proposition 65, Total Lead in Paints and Surface Coatings
PASS	California Proposition 65, Total Lead in Substrate Materials
PASS	Canadian Surface Coating Materials Regulations SOR/2016-193, Total Lead and Mercury in Stickers, Films and Surface Coating Materials
PASS	Canadian Consumer Products Containing Lead Regulations (SOR/2018-83), Total Lead Content
PASS	California Proposition 65, Total Cadmium in Paints and Surface Coatings
PASS	California Proposition 65, Total Cadmium in Substrate Materials
Information only	Client's requirement, Total Nickel content
Information only	Client's Requirement, Total Tungsten content
PASS	CPSC 16 CFR 1307 Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates (DBP, BBP, DEHP, DINP, DHEXP / DnHP, DCHP, DIBP, DPENP)
PASS	California Proposition 65, Phthalates (DBP, BBP, DEHP, DINP, DIDP, DnHP)
PASS	Client's Requirement, Phthalates content



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**DETAILED RESULTS:**

**California Proposition 65, Total Lead in Paints and Surface Coatings**

Test Method: CPSC-CH-E1003-09.1  
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	2+12	---	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	---	---	---	---	90
<b>Conclusion</b>	PASS	---	---	---	---	

*Note:*  
mg/kg = Milligrams per kilogram  
LT = Less than  
ND = Not detected (Reporting Limit = 15mg/kg)

*Remark:*  
The specification is quoted from client's requirement.



**DETAILED RESULTS:**

**California Proposition 65, Total Lead in Substrate Materials**

Test Method: CPSC-CH-E1001-08.3 (Metal), CPSC-CH-E1002-08.3 (Non-Metal)  
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+5	3	4	6+7+8	9+10+11	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	31	ND	ND	ND	100
<b>Conclusion</b>	PASS	PASS	PASS	PASS	PASS	

*Note:*

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected (Reporting Limit =15 mg/kg)

Composite results are based on specimen of least mass resulting in highest potential concentration.

*Remark:*

The specification is quoted from client's requirement.



**DETAILED RESULTS:**

**Canadian Surface Coating Materials Regulations SOR/2016-193, Total Lead and Mercury in Stickers, Films and Surface Coating Materials**

Test Method: ASTM F963-17 Clause 8.3.1  
 Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	2+12	---	---	---	---	Total Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	---	---	---	---	90
Total Mercury (Hg)	ND	---	---	---	---	10
<b>Conclusion</b>	PASS	---	---	---	---	

*Note:*  
 mg/kg=Milligrams per kilogram  
 LT = Less than  
 ND = Not detected (Reporting Limit: Pb=15 mg/kg; Hg = 10 mg/kg)  
 Composite results are based on specimen of least mass resulting in highest potential concentration.



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**DETAILED RESULTS:**

**Canadian Consumer Products Containing Lead Regulations (SOR/2018-83), Total Lead Content**

Test Method: ASTM F963-17 Clause 8.3.1  
 Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+5	2+12	3	4	6+7+8	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	ND	31	ND	ND	<b>90</b>
<b>Conclusion</b>	PASS	PASS	PASS	PASS	PASS	

Specimen No.	9+10+11	---	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	---	---	---	---	<b>90</b>
<b>Conclusion</b>	PASS	---	---	---	---	

*Note:*  
 mg/kg=Milligrams per kilogram)  
 LT = Less than  
 ND = Not detected (Reporting Limit = 15 mg/kg)  
 Composite results are based on specimen of least mass resulting in highest potential concentration.



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**DETAILED RESULTS:**

**California Proposition 65, Total Cadmium in Paints and Surface Coatings**

Test Method: ASTM F963-17 Clause 8.3.1  
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	2+12	---	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Cadmium (Cd)	ND	---	---	---	---	<b>75</b>
<b>Conclusion</b>	PASS	---	---	---	---	

*Note:*  
mg/kg = Milligrams per kilogram  
LT = Less than  
ND = Not detected (Reporting Limit = 15 mg/kg)  
Composite results are based on specimen of least mass resulting in highest potential concentration.

*Remark:*  
The specification is quoted from client's requirement.



**DETAILED RESULTS:**

**California Proposition 65, Total Cadmium in Substrate Materials**

Test Method: ASTM F963-17 Clause 8.3.1  
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+5	3	4	6+7+8	9+10+11	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
<b>Conclusion</b>	PASS	PASS	PASS	PASS	PASS	

*Note:*

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected (Reporting Limit = 15 mg/kg)

Composite results are based on specimen of least mass resulting in highest potential concentration.

*Remark:*

The specification is quoted from client's requirement.





**DETAILED RESULTS:**

**Client's requirement, Total Nickel content**

Test Method: US EPA 3052:1996 & US EPA 6010D:2014  
 Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	3+4	---	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Nickel(Ni)	104	---	---	---	---	
<b>Conclusion</b>	Information only	---	---	---	---	

*Note:*  
 mg/kg = Milligrams per kilogram  
 ND = Not detected (report limit = 30 mg/kg)  
 Composite results are based on specimen of least mass resulting in highest potential concentration.



**DETAILED RESULTS:**

**Client's Requirement, Total Tungsten content**

Test Method: US EPA 3052:1996 & US EPA 6010D:2014  
 Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	3+4	---	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Tungsten (W)	ND	---	---	---	---	
<b>Conclusion</b>	Information only	---	---	---	---	

*Note:*  
 mg/kg = Milligrams per kilogram  
 LT = Less than  
 ND = Not detected (Reporting Limit = 15 mg/kg)  
 Composite results are based on specimen of least mass resulting in highest potential concentration.



**DETAILED RESULTS:**

**CPSC 16 CFR 1307 Prohibition of Children’s Toys and Child Care Articles Containing Specified Phthalates (DBP, BBP, DEHP, DINP, DHEXP / DnHP, DCHP, DIBP, DPENP)**

Test Method: CPSC-CH-C1001-09.4  
 Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		1+5	2+12	6+7+8	9+10+11	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Dibutyl phthalate (DBP)	84-74-2	ND	ND	ND	ND	1000
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	ND	ND	1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	ND	ND	ND	1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	ND	1000
Di-n-hexyl phthalate (DHEXP / DnHP)	84-75-3	ND	ND	ND	ND	1000
Dicyclohexyl phthalate (DCHP)	84-61-7	ND	ND	ND	ND	1000
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	ND	ND	1000
Di-n-pentyl phthalate (DPENP)	131-18-0	ND	ND	ND	ND	1000
<b>Conclusion</b>		PASS	PASS	PASS	PASS	

*Note:*  
 mg/kg = Milligrams per kilogram  
 LT = Less than  
 ND = Not detected (Reporting Limit = 150 mg/kg)  
 Composite results are based on specimen of least mass resulting in highest potential concentration.



**DETAILED RESULTS:**

**California Proposition 65, Phthalates (DBP, BBP, DEHP, DINP, DIDP, DnHP)**

Test Method: CPSC-CH-C1001-09.4  
 Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		1+5	2+12	6+7+8	9+10+11	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Dibutyl phthalate (DBP)	84-74-2	ND	ND	ND	ND	1000
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	ND	ND	1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	ND	ND	ND	1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	ND	1000
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	ND	1000
Di-n-hexyl phthalate (DnHP)	84-75-3	ND	ND	ND	ND	1000
<b>Conclusion</b>		PASS	PASS	PASS	PASS	

**Note:**  
 mg/kg (Milligrams per kilogram) = 0.0001 % w/w (Percent by weight)  
 LT = Less than  
 ND = Not detected (Reporting Limit = 150 mg/kg)  
 Composite results are based on specimen of least mass resulting in highest potential concentration.

**Remark:**  
 The specification is quoted from client's requirement.



## DETAILED RESULTS:

### Client's Requirement, Phthalates content

Test Method: CPSC-CH-C1001-09.4  
 Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		1+5	2+12	6+7+8	9+10+11	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Dibutyl phthalate (DBP)	84-74-2	ND	ND	ND	ND	1000
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	ND	ND	1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	ND	ND	ND	1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	ND	1000
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	ND	1000
Di-n-hexyl phthalate (DHEXP / DnHP)	84-75-3	ND	ND	ND	ND	1000
Di-n-octyl phthalate (DNOP)	117-84-0	ND	ND	ND	ND	1000
Diethyl phthalate (DEP)	84-66-2	ND	ND	ND	ND	1000
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	ND	ND	1000
Dicyclohexyl phthalate (DCHP)	84-61-7	ND	ND	ND	ND	1000
Di-n-pentyl phthalate (DPENP/DnPP)	131-18-0	ND	ND	ND	ND	1000
<b>Conclusion</b>		PASS	PASS	PASS	PASS	

**Note:**

mg/kg (Milligrams per kilogram) = 0.0001 % w/w (Percent by weight)

LT = Less than

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**SPECIMEN DESCRIPTION:**

Specimen No.	Specimen Description	Location
1	White plastic	Cartridge (blue style)
2	Blue ink	Cartridge (blue style)
3	Silvery metal	Nib (blue style)
4	Silvery metal	Spring (blue style)
5	White plastic	Button inner (blue style)
6	Blue plastic	Clip (blue style)
7	Red plastic	Clip (red style)
8	Orange plastic	Clip (orange style)
9	Dark lime plastic	Clip (dark lime style)
10	Black plastic	Clip (black style)
11	Light blue plastic	Clip (light blue style)
12	Black ink	Raw material



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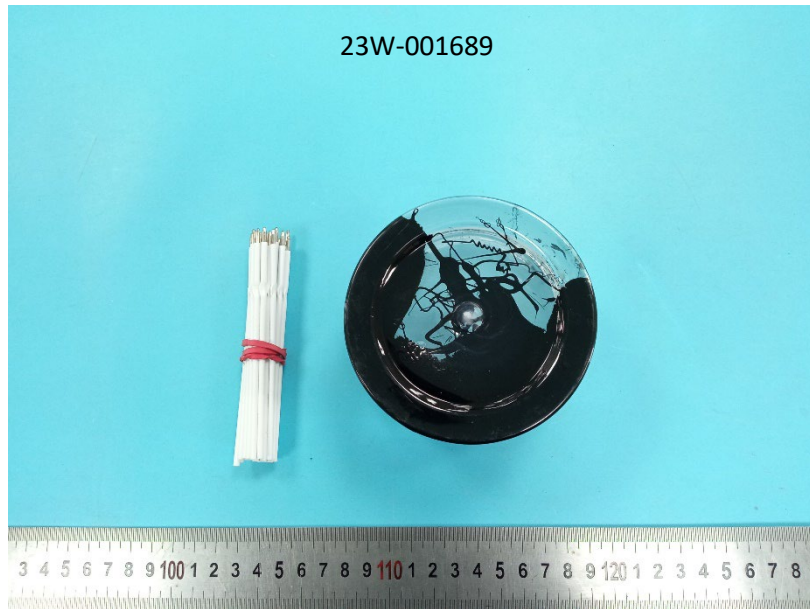
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**SAMPLE PHOTO:**



-End Report-

