

Dated: 2019-06-26



Applicant : Spector & Co

Address : /

Sample Description : BALLPOINT PEN

Product Type / End Use : WRITING INSTRUMENT

Item No. : G4051

Style No. : LUIGI

Supplier : USC043

Country of Origin : China

Exported to : Canada & U.S.A

Test Sample Receipt Date, Location : 2019-06-12, Shenzhen

Test Period, Location : From 2019-06-12 to 2019-06-26, Shenzhen

Test Result(s) : Refer to Section 3

Dated: 2019-06-26



Purpose Of Examination / Conclusion:

No.	Test Item(s)	Conclusion
1.	US California Proposition 65 - Total Cadmium Content Test - Substrate	Pass*
'.	Materials	F d 5 5
2.	US California Proposition 65 - Total Cadmium Content Test - Paint and	Pass*
۷.	Similar Surface-Coating Materials	r a55
3.	US California Proposition 65 - Total Lead Content Test - Substrate	Pass*
J.	Materials	r a55
4.	US California Proposition 65 - Total Lead Content Test - Paint and Similar	Pass*
	Surface-Coating Materials	1 033
5.	Canadian Consumer Products Containing Lead Regulations SOR/2018-	Pass
J.	83 - Total Lead Content Test	1 433
6.	Canadian Surface Coating Materials Regulations SOR/2016-193 - Total	Pass
	Lead Content Test	1 433
7.	Phthalates Content	Pass*
8.	US California Proposition 65 - Phthalates Content	Pass*
9.	U.S. CFR Title 16 Part 1307 - Phthalates Content	Pass
10.	Tungsten 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

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

Prepared by:

Reviewed by:

<Cara Xiang>

<Senior Project Coordinator>

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Disclaimer Measurement Uncertainty:

Unless otherwise agreed upon, Pass or Fail verdicts are given based on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC

Laboratory:

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 $TUV^{\mathbb{B}}$

Dated: 2019-06-26



17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as PASS nor as FAIL.

No extract, abridgment or abstraction from a test report may be published or used to advertise a product without the written consent of the Director of TUV SUD Certification and Testing (China) Co., Ltd. Shenzhen Branch. The results contained herein apply only to the particular sample tested and to the specific test carried out and not to samples of the current production line.

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.

The conclusion of test result was drawn according to corresponding regulation or standard method and / or client's requirement



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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	Silver coating (Pen body)	
T2	002	Silvery metal (Pen body)	
Т3	003	Silvery metal (Top & end)	
T4	004	Silvery metal (Clip)	
T5	005	Silvery metal (Spring)	
Т6	006	Transparent plastic (Tube inner body)	
Т7	007	Black ink	
Т8	800	Silvery metal (Tip)	
Т9	009	Silvery metal (Ball on tip)	52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 85 1
T10	010	Red plated silvery metal (Pen body)	
T11	011	Blue plated silvery metal (Pen body)	
T12	012	Black plated silvery metal (Pen body)	
T13	013	Silvery-grey metal (Pen body)	

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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]

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

		Results [mg/kg]		
Test item	Sample 005	Sample 006	Sample 008	Specification [mg/kg]
Cadmium	N.D.	N.D.	N.D.	<75
Conclusion	Pass	Pass	Pass	-

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

	Results	Client's	
Test item	Sample 012	Sample 013	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

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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 001	Sample 007	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



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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 002	Sample 003	Sample 004	Specification [mg/kg]
Lead	N.D.	N.D.	N.D.	<100
Conclusion	Pass	Pass	Pass	-

		Results [mg/kg]		
Test Item	Sample 005	Sample 006	Sample 008	Specification [mg/kg]
Lead	N.D.	N.D.	24.2	<100
Conclusion	Pass	Pass	Pass	-

		Client's		
Test Item	Sample 009	Sample 010	Sample 011	Specification [mg/kg]
Lead	17.0	N.D.	N.D.	<100
Conclusion	Pass	Pass	Pass	-

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

Note:

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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	Results [mg/kg]		
Test Item	Sample Sample 001 007		Specification [mg/kg]	
Lead	12.8	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



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3.5 Total Lead

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
Lead	12.8	N.D.	N.D.
Limit		<90	
Conclusion	Pass	Pass	Pass

,	/	Result [mg/kg]]			
Analyte	Sample	Sample Sample				
	004	005	006			
Lead	N.D.	N.D.	N.D.			
Limit		<90				
Conclusion	Pass	Pass	Pass			

		Result [mg/kg]					
Analyte	Sample 007						
Lead	N.D.	24.2	17.0				
Limit		<90					
Conclusion	Pass	Pass Pass Pass					

		Result [mg/kg]				
Analyte	Sample	Sample				
	010	011	012			
Lead	N.D.	N.D.	N.D.			
Limit	<90					
Conclusion	Pass	Pass	Pass			

	Result [mg/kg]
Analyte	Sample
	013
Lead	N.D.
Limit	<90
Conclusion	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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3.6 Total Lead

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

	Result [mg/kg]			
Analyte	Sample	Sample			
	001	007			
Lead	12.8	N.D.			
Limit	<9	<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



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3.7 **Phthalates Content**

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	Sample	Sample	Specification
		001	006	007	[%]
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

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

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^{2. &}quot;<" denotes less than

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3.8 US California Proposition 65 - Phthalates Content

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

		F	Results [%	b]	Client's	
Test Items	CAS No.	Sample 001	Sample 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		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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3.9 U.S. CFR Title 16 Part 1307 - Phthalates Content

CPSC-CH-C1001-09.4 – Standard Operating Procedure for Determination of Phthalates [Reporting Limit = 0.005%]

		F	Results [%	b]	Limit
Phthalates	CAS No.	Sample 001	Sample 006	Sample 007	[%]
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

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^{2. &}quot;<" denotes less than

^{3. &}quot;N.D." denotes Not Detected with Detection Limit 0.005%

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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 010	Specification [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

-- END OF TEST REPORT--



