

Test Report No.: 68.431.19.04601.01

Dated: 2019-09-29



Applicant : Spector & Co

Address : /

Sample Description : Semi-translucent plastic clip-action ballpoint pen

Item No. : G1271

Style No. : Donald

Supplier : USQ008

Country of Origin : China

Exported to : Canada & U.S.A.

Test Sample Receipt Date, Location : 2019-09-16, Shenzhen

Test Period, Location : From 2019-09-17 to 2019-09-27, Shenzhen

Test Result(s) : Refer to Section 3



Purpose Of Examination / Conclusion:

No.	Test Item(s)	Conclusion
1.	US California Proposition 65 - Total Cadmium Content Test - Substrate Materials	Pass*
2.	US California Proposition 65 - Total Cadmium Content Test - Paint and Similar Surface-Coating Materials	Pass*
3.	US California Proposition 65 - Total Lead Content Test - Substrate Materials	Pass*
4.	US California Proposition 65 - Total Lead Content Test - Paint and Similar Surface-Coating Materials	Pass*
5.	Canadian Consumer Products Containing Lead Regulations SOR/2018-83 - Total Lead Content Test	Pass
6.	Canadian Surface Coating Materials Regulations SOR/2016-193 – Total Lead Content Test	Pass
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
11.	Canadian Surface Coating Materials Regulations SOR/2016-193 - Total Mercury Content Test	Pass

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 expanded uncertainty for "pass", "Fail" and "Inconclusive" is 95%.

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

Prepared by:

Reviewed by:

Cara

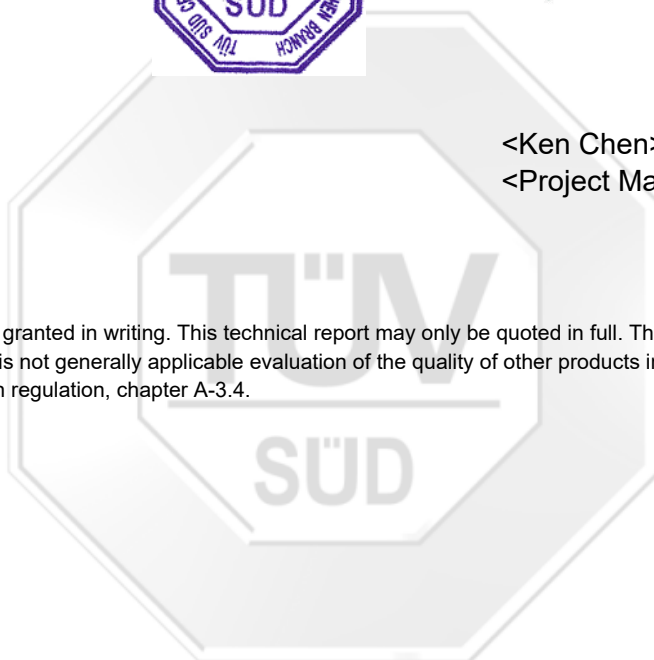


Ken

<Cara Xiang>
<Senior Project Coordinator>

<Ken Chen>
<Project Manager>

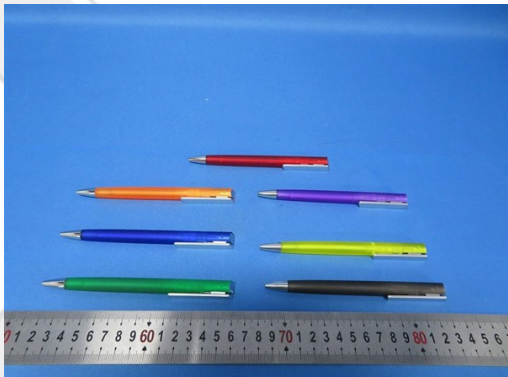
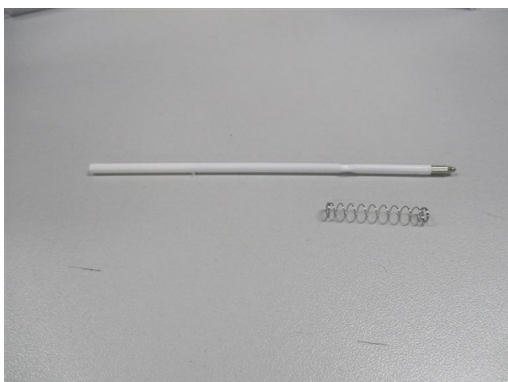
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1. Description of the Test Sample:

Sample Description	Semi-translucent plastic clip-action ballpoint pen
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2. List of Materials as identified by the Laboratory:

T. No.	Sample No.	Colour and Description	Photograph
T1	001	Silvery plated plastic (Top & collar of pen)	
T2	002	Silvery coating (Clip)	
T3	003	White plastic (Clip)	
T4	004	Translucent yellow plastic (Barrel)	
T5	005	Black plastic (Clip)	
T6	006	Translucent orange plastic (Barrel)	
T7	007	Translucent green plastic (Barrel)	
T8	008	Translucent blue plastic (Barrel)	
T9	009	Translucent purple plastic (Barrel)	
T10	010	Translucent black plastic (Barrel)	
T11	011	Translucent red plastic (Barrel)	
T12	012	Snow white plastic (Core)	
T13	013	Blue ink (Pen ink)	
T14	014	Silvery metal (Spring)	

T. No.	Sample No.	Colour and Description	Photograph
T15	015	Silvery metal (Tip)	
T16	016	Silvery metal (Ball of tip)	



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]

Test item	Results [mg/kg]			Client's Specification [mg/kg]
	Sample 001	Sample 003+004+005	Sample 006+007+008	
Cadmium	N.D.	N.D.	N.D.	<75
Conclusion	Pass	Pass	Pass	-

Test item	Results [mg/kg]			Client's Specification [mg/kg]
	Sample 009+010	Sample 011+012	Sample 014	
Cadmium	N.D.	N.D.	N.D.	<75
Conclusion	Pass	Pass	Pass	-

Test item	Results [mg/kg]		Client's Specification [mg/kg]
	Sample 015	Sample 016	
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



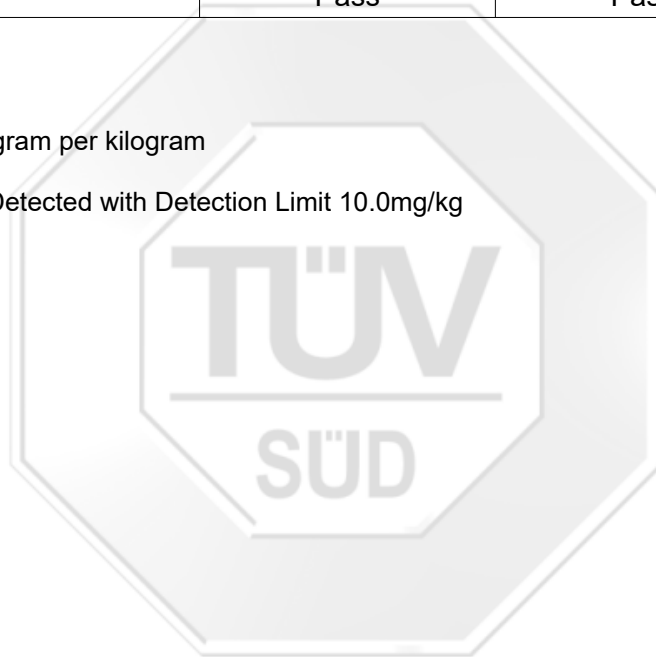
3.2 US California Proposition 65 - Total Cadmium Content Test - Paint and Similar Surface-Coating Materials

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

Test Item	Results [mg/kg]		Client's Specification [mg/kg]
	Sample 002	Sample 013	
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





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]

Test Item	Results [mg/kg]			Client's Specification [mg/kg]
	Sample 001	Sample 003+004+005	Sample 006+007+008	
Lead	N.D.	N.D.	N.D.	<100
Conclusion	Pass	Pass	Pass	-

Test Item	Results [mg/kg]			Client's Specification [mg/kg]
	Sample 009+010	Sample 011+012	Sample 014	
Lead	N.D.	N.D.	N.D.	<100
Conclusion	Pass	Pass	Pass	-

Test Item	Results [mg/kg]		Client's Specification [mg/kg]
	Sample 015	Sample 016	
Lead	N.D.	N.D.	<100
Conclusion	Pass	Pass	-

Note:

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



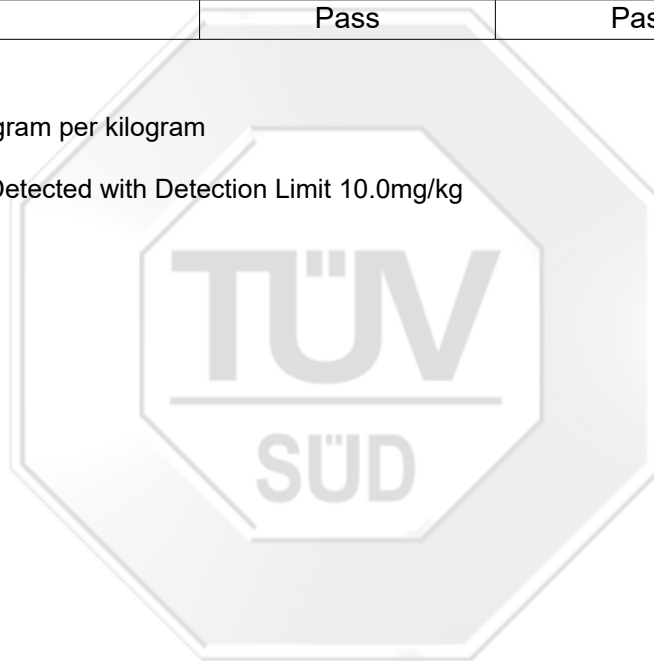
3.4 US California Proposition 65 - Total Lead Content Test - Paint and Similar Surface-Coating Materials

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

Test Item	Results [mg/kg]		Client's Specification [mg/kg]
	Sample 002	Sample 013	
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



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]

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

Analyte	Result [mg/kg]		
	Sample 006+007+008	Sample 009+010	Sample 011+012
Lead	N.D.	N.D.	N.D.
Limit	<90		
Conclusion	Pass	Pass	Pass

Analyte	Result [mg/kg]		
	Sample 013	Sample 014	Sample 015
Lead	N.D.	N.D.	N.D.
Limit	<90		
Conclusion	Pass	Pass	Pass

Analyte	Result [mg/kg]
	Sample 016
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



3.6 Total Lead Content Test

Surface Coating Materials Regulations SOR/2016-193

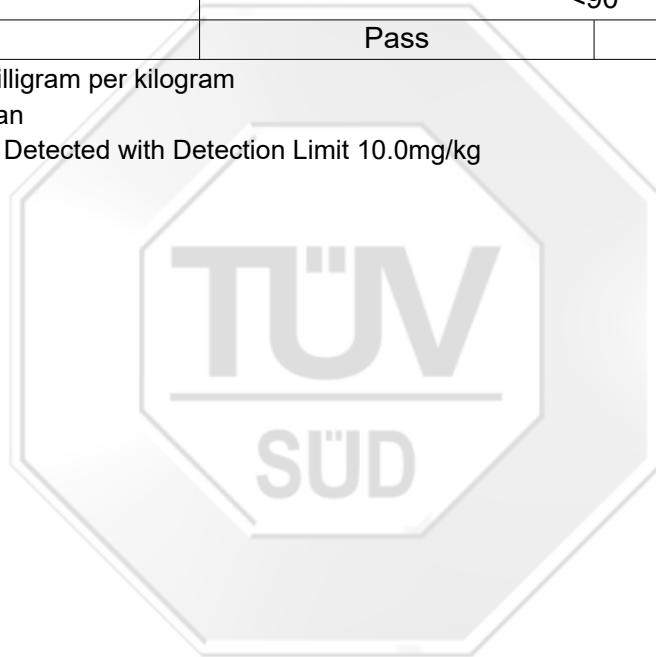
Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

Analyte	Result [mg/kg]	
	Sample 002	Sample 013
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



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%]

Test Items	CAS No.	Results [%]			Client's Specification [%]
		Sample 002	Sample 003+004 +005	Sample 006+007 +008	
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-pentylphthalat (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%

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%]

Test Items	CAS No.	Results [%]			Client's Specification [%]
		Sample 009+010	Sample 011+012	Sample 013	
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-pentylphthalat (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%

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%]

Test Items	CAS No.	Results [%]			Client's Specification [%]
		Sample 002	Sample 003+004+005	Sample 006+007+008	
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	-

Test Items	CAS No.	Results [%]			Client's Specification [%]
		Sample 009+010	Sample 011+012	Sample 013	
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%

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%]

Phthalates	CAS No.	Results [%]			Limit [%]
		Sample 002	Sample 003+004 +005	Sample 006+007 +008	
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%



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%]

Phthalates	CAS No.	Results [%]			Limit [%]
		Sample 009+010	Sample 011+012	Sample 013	
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%



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]

Test Item	Results [mg/kg]	Client's Specification [mg/kg]
	Sample 014	
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

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: 10mg/kg]

Test Item	Results [mg/kg]		Limit [mg/kg]
	Sample 002	Sample 013	
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

-- END OF TEST REPORT--