

**Test Report No.: 68.431.19.04486.01**

**Dated: 2019-10-18**



**Applicant** : Spector & Co  
**Address** : /  
**Sample Description** : Plastic twist-action ballpoint/stylus 2in1  
**Product Type / End Use** : WRITING INSTRUMENT  
**Item No.** : I135  
**PO / Order No.** : N/A  
**Style No.** : KILE  
**Supplier** : USS049  
**Country of Origin** : China  
**Exported to** : Canada & U.S.A.  
**Test Sample Receipt Date, Location** : 2019-09-06, 2019-09-18, Shenzhen  
**Test Period, Location** : From 2019-09-09 to 2019-09-25, 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:

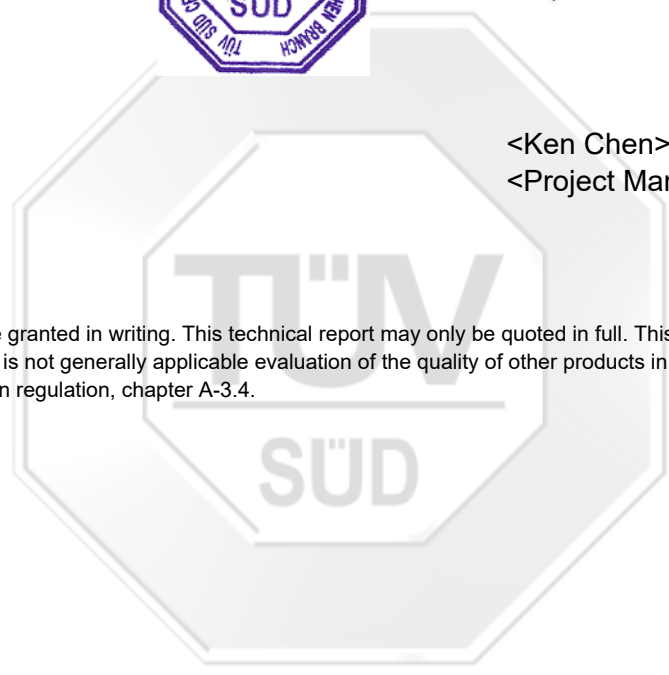
Reviewed by:



<Cara Xiang>  
<Senior Project Coordinator>

<Ken Chen>  
<Project Manager>

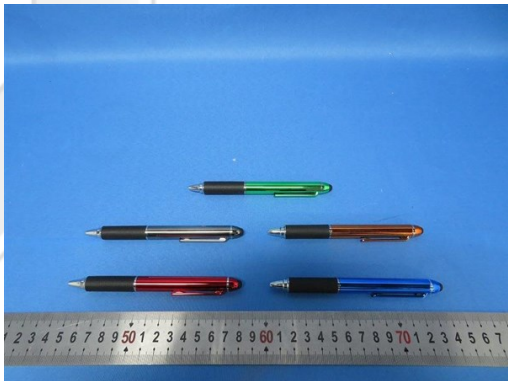
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1. Description of the Test Sample:

|                           |  |
|---------------------------|--|
| <b>Sample Description</b> | Plastic twist-action ballpoint/stylus 2in1 |
|---------------------------|--|

2. List of Materials as identified by the Laboratory:

| T. No. | Sample No. | Colour and Description                               | Photograph   |
|--------|------------|--|--|
| T1     | 001        | Dark grey plastic w/ shiny golden coating (Pen body) |  |
| T2     | 002        | Black soft plastic (End of pen)                      |  |
| T3     | 003        | Matt black soft plastic (Handle of pen)              |  |
| T4     | 004        | Black plastic (Pen body)                             |  |
| T5     | 005        | Silvery metal (Ring)                                 |  |
| T6     | 006        | Silvery metal plating (Top)                          |  |
| T7     | 007        | Silvery metal (Spring)                               |  |
| T8     | 008        | Silvery metal (Tip)                                  |  |
| T9     | 009        | Silvery metal (Ball of tip)                          |  |
| T10    | 010        | Transparent plastic (Tube)                           |  |
| T11    | 011        | Dark grey plastic w/ shiny red coating (Pen body)    |  |
| T12    | 012        | Dark grey plastic w/ shiny green coating (Pen body)  |  |
| T13    | 013        | Dark grey plastic w/ shiny grey coating (Pen body)   |  |
| T14    | 014        | Dark grey plastic w/ shiny blue coating (Pen body)   |  |



**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 002+003  | Sample 004+010 | Sample 005 |                                |
| Cadmium           | N.D.            | 14.2           | N.D.       | <75                            |
| <b>Conclusion</b> | Pass            | Pass           | Pass       | -                              |

| Test item         | Results [mg/kg] |            |            | Client's Specification [mg/kg] |
|-------------------|-----------------|------------|------------|--------------------------------|
|                   | Sample 006      | Sample 007 | Sample 008 |                                |
| Cadmium           | N.D.            | N.D.       | N.D.       | <75                            |
| <b>Conclusion</b> | Pass            | Pass       | Pass       | -                              |

| Test item         | Results [mg/kg] | Client's Specification [mg/kg] |
|-------------------|-----------------|--------------------------------|
|                   | Sample 009      |                                |
| Cadmium           | N.D.            | <75                            |
| <b>Conclusion</b> | 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**

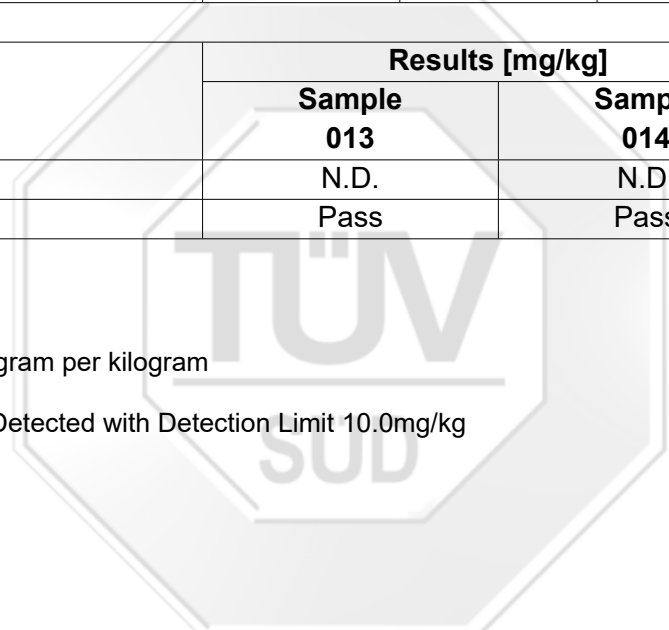
Test method: Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

| Test Item         | Results [mg/kg] |            |            | Client's Specification [mg/kg] |
|-------------------|-----------------|------------|------------|--------------------------------|
|                   | Sample 001      | Sample 011 | Sample 012 |                                |
| Cadmium           | 21.5            | N.D.       | N.D.       | <75                            |
| <b>Conclusion</b> | Pass            | Pass       | Pass       | -                              |

| Test Item         | Results [mg/kg] |            | Client's Specification [mg/kg] |
|-------------------|-----------------|------------|--------------------------------|
|                   | Sample 013      | Sample 014 |                                |
| Cadmium           | N.D.            | N.D.       | <75                            |
| <b>Conclusion</b> | 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 002+003  | Sample 004+010 | Sample 005 |                                |
| Lead              | N.D.            | N.D.           | 49.5       | <100                           |
| <b>Conclusion</b> | Pass            | Pass           | Pass       | -                              |

| Test Item         | Results [mg/kg] |            |            | Client's Specification [mg/kg] |
|-------------------|-----------------|------------|------------|--------------------------------|
|                   | Sample 006      | Sample 007 | Sample 008 |                                |
| Lead              | 33.1            | N.D.       | 76.6       | <100                           |
| <b>Conclusion</b> | Pass            | Pass       | Pass       | -                              |

| Test Item         | Results [mg/kg] | Client's Specification [mg/kg] |
|-------------------|-----------------|--------------------------------|
|                   | Sample 009      |                                |
| Lead              | N.D.            | <100                           |
| <b>Conclusion</b> | 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**

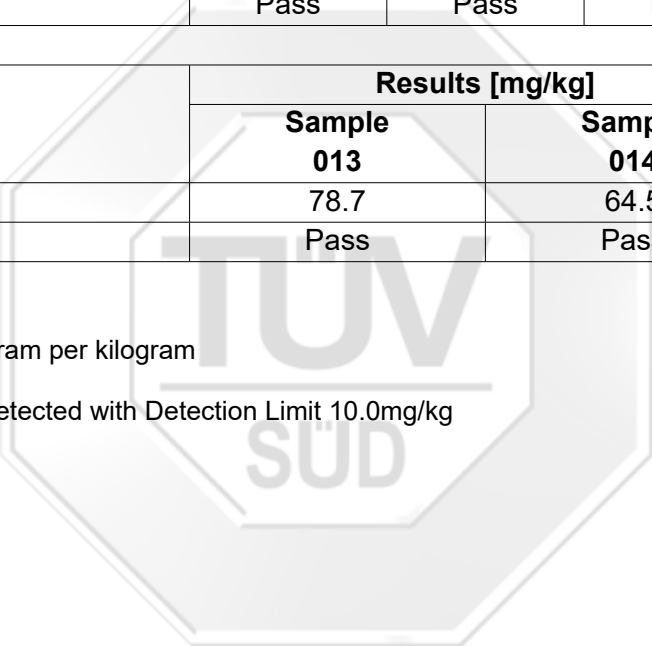
Test method: Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

| Test Item         | Results [mg/kg] |            |            | Client's Specification [mg/kg] |
|-------------------|-----------------|------------|------------|--------------------------------|
|                   | Sample 001      | Sample 011 | Sample 012 |                                |
| Lead              | N.D.            | 40.7       | 33.2       | <90                            |
| <b>Conclusion</b> | Pass            | Pass       | Pass       | -                              |

| Test Item         | Results [mg/kg] |            | Client's Specification [mg/kg] |
|-------------------|-----------------|------------|--------------------------------|
|                   | Sample 013      | Sample 014 |                                |
| Lead              | 78.7            | 64.5       | <90                            |
| <b>Conclusion</b> | 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+003 | Sample 004+010 |
| Lead       | N.D.           | N.D.           | N.D.           |
| Limit      | <90            |                |                |
| Conclusion | Pass           | Pass           | Pass           |

| Analyte    | Result [mg/kg] |            |            |
|------------|----------------|------------|------------|
|            | Sample 005     | Sample 006 | Sample 007 |
| Lead       | 49.5           | 33.1       | N.D.       |
| Limit      | <90            |            |            |
| Conclusion | Pass           | Pass       | Pass       |

| Analyte    | Result [mg/kg] |            |            |
|------------|----------------|------------|------------|
|            | Sample 008     | Sample 009 | Sample 011 |
| Lead       | 76.6           | N.D.       | 40.7       |
| Limit      | <90            |            |            |
| Conclusion | Pass           | Pass       | Pass       |

| Analyte    | Result [mg/kg] |            |            |
|------------|----------------|------------|------------|
|            | Sample 012     | Sample 013 | Sample 014 |
| Lead       | 33.2           | 78.7       | 64.5       |
| Limit      | <90            |            |            |
| Conclusion | Pass           | 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



**3.6 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 001     | Sample 011 | Sample 012 |
| Lead       | N.D.           | 40.7       | 33.2       |
| Limit      | <90            |            |            |
| Conclusion | Pass           | Pass       | Pass       |

| Analyte    | Result [mg/kg] |            |
|------------|----------------|------------|
|            | Sample 013     | Sample 014 |
| Lead       | 78.7           | 64.5       |
| 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 001+011 +012 | Sample 002+003 | Sample 004+010 |                            |
| Di-(2-ethylhexyl)-phthalat (DEHP) | 117-81-7                   | 0.008               | 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 ,<br>68515-48-0 | N.D.                | N.D.           | N.D.           | <0.1                       |
| Di-isodecylphthalat (DIDP)        | 26761-40-0 ,<br>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                       |
| <b>Conclusion</b>                 |                            | 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 013+014 |                            |
| Di-(2-ethylhexyl)-phthalat (DEHP) | 117-81-7                   | 0.011          | <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 ,<br>68515-48-0 | N.D.           | <0.1                       |
| Di-isodecylphthalat (DIDP)        | 26761-40-0 ,<br>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-pentylphthalat (DNPP)        | 131-18-0                   | N.D.           | <0.1                       |
| <b>Conclusion</b>                 |                            | 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 001+011 +012 | Sample 002+003 | Sample 004+010 |                            |
| Dibutyl phthalate, (DBP)             | 84-74-2                    | N.D.                | N.D.           | N.D.           | <0.1                       |
| Bis (2-ethylhexyl) phthalate, (DEHP) | 117-81-7                   | 0.008               | 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 ,<br>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 ,<br>68515-48-0 | N.D.                | N.D.           | N.D.           | <0.1                       |
| <b>Conclusion</b>                    |                            | Pass                | Pass           | Pass           | -                          |

| Test Items                           | CAS No.                    | Results [%]    | Client's Specification [%] |
|--------------------------------------|----------------------------|----------------|----------------------------|
|                                      |                            | Sample 013+014 |                            |
| Dibutyl phthalate, (DBP)             | 84-74-2                    | N.D.           | <0.1                       |
| Bis (2-ethylhexyl) phthalate, (DEHP) | 117-81-7                   | 0.011          | <0.1                       |
| Benzyl butyl phthalate, (BBP)        | 85-68-7                    | N.D.           | <0.1                       |
| Di-isodecyl phthalate, (DIDP)        | 26761-40-0 ,<br>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 ,<br>68515-48-0 | N.D.           | <0.1                       |
| <b>Conclusion</b>                    |                            | 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 001+011 +012 | Sample 002+003 | Sample 004+010 |           |
| 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                   | 0.008               | 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 ,<br>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      |
| <b>Conclusion</b>                    |                            | 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 013+014 |           |
| 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                   | 0.011          | <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 ,<br>68515-48-0 | N.D.           | <0.1      |
| Di-n-pentyl phthalates (DPENP)       | 131-18-0                   | N.D.           | <0.1      |
| <b>Conclusion</b>                    |                            | 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 005      |                                |
| Tungsten          | N.D.            | -                              |
| <b>Conclusion</b> | 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 001      | Sample 011 | Sample 012 |               |
| Mercury           | N.D.            | N.D.       | N.D.       | <10           |
| <b>Conclusion</b> | Pass            | Pass       | Pass       | -             |

| Test Item         | Results [mg/kg] |            | Limit [mg/kg] |
|-------------------|-----------------|------------|---------------|
|                   | Sample 013      | Sample 014 |               |
| Mercury           | N.D.            | N.D.       | <10           |
| <b>Conclusion</b> | 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--