QIMA
YOUR EYES IN THE SUPPLY CHAIN

# TEST REPORT

| | | | |
|---|---|---|---|
| Test Report # | 22W-018622 | Date of Report Issue: | November 29, 2022 |
| Date of Sample Received: | November 16, 2022 | Pages: | Page 1 of 23 |

**CLIENT INFORMATION:**

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

**SAMPLE INFORMATION:**

| | |
|---|---|
| Description: | Stainless steel 10pcs barbecue cool set |
| Assortment: | BLK/BRN |
| PO No.: | - |
| Item No./Name: | SH301 |
| Item Class: | FABRIZIO |
| Factory/Supplier: | USC056 |
| Country of Origin: | China |
| Country of Distribution: | Canada,United States |
| Testing Period: | 11/22/2022-11/29/2022 |

**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

**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 Paints and Surface Coatings |
| 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 | Client's requirement, Bisphenol A 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 |
| PASS | FDA 21 CFR 177.1350, Ethylene-Vinyl Acetate Copolymers |
| PASS | FDA 21 CFR 177.1520, Polyethylene Copolymer |
| PASS | FDA 21 CFR 177.1520, Polypropylene Homopolymers |
| PASS | FDA GRAS Specifications, Total Chromium in Stainless Steel Food Contact Utensils |

**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. | 5 | --- | --- | --- | --- | **Limit (mg/kg)** |
|---|---|---|---|---|---|---|
| Test Item | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | |
| Total Lead (Pb) | 21 | --- | --- | --- | --- | **90** |
| **Conclusion** | 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+2 | 3+10+12 | 4 | 6 | 7 | **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 | ND | 20 | ND | **100** |
| **Conclusion** | PASS | PASS | PASS | PASS | PASS | |

| Specimen No. | 8 | 9 | 11+16 | 13 | 14 | **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 | ND | ND | ND | **100** |
| **Conclusion** | PASS | PASS | PASS | PASS | PASS | |

| Specimen No. | 15 | 17 | 18 | 19 | --- | **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 | ND | ND | --- | **100** |
| **Conclusion** | 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.

Data Consolidation Reference:

| Specimen No. | Transferred from | | Date of Issue |
|---|---|---|---|
| | Report No. | Specimen No. | |
| 1+2 | 22W-015152 | 1+2 | September 28, 2022 |

**DETAILED RESULTS:**

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

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

| Specimen No. | 5 | --- | --- | --- | --- | **Total** |
|---|---|---|---|---|---|---|
| Test Item | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | **Limit (mg/kg)** |
| Total Lead (Pb) | 21 | --- | --- | --- | --- | **90** |
| Total Mercury (Hg) | ND | --- | --- | --- | --- | **10** |
| **Conclusion** | PASS | --- | --- | --- | --- | |

*Note:*
mg/kg=Milligrams per kilogram
LT = Less than
ND = Not detected (Reporting Limit: Pb=15 mg/kg; Hg = 10 mg/kg)

**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+2 | 3+10+12 | 4 | 5 | 6 | **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 | ND | 21 | 20 | **90** |
| **Conclusion** | PASS | PASS | PASS | PASS | PASS | |

| Specimen No. | 7 | 8 | 9 | 11+16 | 13 | **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 | ND | ND | ND | **90** |
| **Conclusion** | PASS | PASS | PASS | PASS | PASS | |

| Specimen No. | 14 | 15 | 17 | 18 | 19 | **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 | ND | ND | ND | **90** |
| **Conclusion** | PASS | PASS | PASS | PASS | PASS | |

| Specimen No. | 20 | --- | --- | --- | --- | **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** |
| **Conclusion** | 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.

Data Consolidation Reference:

| Specimen No. | Transferred from | | Date of Issue |
|---|---|---|---|
| | Report No. | Specimen No. | |
| 1+2 | 22W-015152 | 1+2 | September 28, 2022 |

**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. | 5 | --- | --- | --- | --- | **Limit (mg/kg)** |
|---|---|---|---|---|---|---|
| Test Item | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | |
| Total Cadmium (Cd) | ND | --- | --- | --- | --- | **75** |
| **Conclusion** | PASS | --- | --- | --- | --- | |

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

*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+2 | 3+10+12 | 4 | 6 | 7 | **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** |
| **Conclusion** | PASS | PASS | PASS | PASS | PASS | |

| Specimen No. | 8 | 9 | 11+16 | 13 | 14 | **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** |
| **Conclusion** | PASS | PASS | PASS | PASS | PASS | |

| Specimen No. | 15 | 17 | 18 | 19 | --- | **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 | --- | **75** |
| **Conclusion** | 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.

Data Consolidation Reference:

| Specimen No. | Transferred from | | Date of Issue |
|---|---|---|---|
| | Report No. | Specimen No. | |
| 1+2 | 22W-015152 | 1+2 | September 28, 2022 |

**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. | 6+7 | 13+14+15 | 17+18+19 | --- | --- | **Limit (mg/kg)** |
|---|---|---|---|---|---|---|
| Test Item | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | |
| Total Nickel(Ni) | 24 | 1124 | 1192 | --- | --- | |
| **Conclusion** | Information only | Information only | 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. | 6+7 | 13+14+15 | 17+18+19 | --- | --- | **Limit (mg/kg)** |
|---|---|---|---|---|---|---|
| Test Item | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | |
| Total Tungsten (W) | ND | 20 | ND | --- | --- | |
| **Conclusion** | Information only | Information only | 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:**

**Client's requirement, Bisphenol A content**

Test Method: In-House Method
Analytical Method: Liquid Chromatography-Mass Spectrometer Mass Spectrometer (LC-MS/MS)

| Specimen No. | | 4 | 11 | 16 | --- | **Client's limit (mg/kg)** |
|---|---|---|---|---|---|---|
| Test Item | CAS No. | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | Result (mg/kg) | |
| Bisphenol A (BPA) | 80-05-7 | ND | ND | ND | --- | **Not Detected** |
| **Conclusion** | | PASS | PASS | PASS | --- | |

*Note:*
mg/kg=milligram per kilogram
ND=Not Detected (Reporting limit = 1.0mg/kg)

**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+2 | 3+10+12 | 4 | 5 | **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** |
| **Conclusion** | | 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.

Data Consolidation Reference:

| Specimen No. | Transferred from | | Date of Issue |
|---|---|---|---|
| | Report No. | Specimen No. | |
| 1+2 | 22W-015152 | 1+2 | September 28, 2022 |

**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. | | 8 | 9 | 11+16 | --- | 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 | --- | **1000** |
| Benzyl butyl phthalate (BBP) | 85-68-7 | ND | ND | ND | --- | **1000** |
| Di-(2-ethylhexyl) phthalate (DEHP) | 117-81-7 | ND | ND | ND | --- | **1000** |
| Diisononyl phthalate (DINP) | 28553-12-0 68515-48-0 | ND | ND | ND | --- | **1000** |
| Di-n-hexyl phthalate (DHEXP / DnHP) | 84-75-3 | ND | ND | ND | --- | **1000** |
| Dicyclohexyl phthalate (DCHP) | 84-61-7 | ND | ND | ND | --- | **1000** |
| Diisobutyl phthalate (DIBP) | 84-69-5 | ND | ND | ND | --- | **1000** |
| Di-n-pentyl phthalate (DPENP) | 131-18-0 | ND | ND | ND | --- | **1000** |
| **Conclusion** | | 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+2 | 3+10+12 | 4 | 5 | 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<br>68515-48-0 | ND | ND | ND | ND | **1000** |
| Diisodecyl phthalate (DIDP) | 26761-40-0<br>68515-49-1 | ND | ND | ND | ND | **1000** |
| Di-n-hexyl phthalate (DnHP) | 84-75-3 | ND | ND | ND | ND | **1000** |
| **Conclusion** | | 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.

Data Consolidation Reference:

| Specimen No. | Transferred from | | Date of Issue |
|---|---|---|---|
| | Report No. | Specimen No. | |
| 1+2 | 22W-015152 | 1+2 | September 28, 2022 |

**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. | | 8 | 9 | 11+16 | --- | 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 | --- | **1000** |
| Benzyl butyl phthalate (BBP) | 85-68-7 | ND | ND | ND | --- | **1000** |
| Di-(2-ethylhexyl) phthalate (DEHP) | 117-81-7 | ND | ND | ND | --- | **1000** |
| Diisononyl phthalate (DINP) | 28553-12-0<br>68515-48-0 | ND | ND | ND | --- | **1000** |
| Diisodecyl phthalate (DIDP) | 26761-40-0<br>68515-49-1 | ND | ND | ND | --- | **1000** |
| Di-n-hexyl phthalate (DnHP) | 84-75-3 | ND | ND | ND | --- | **1000** |
| **Conclusion** | | 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+2 | 3+10+12 | 4 | 5 | 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<br>68515-48-0 | ND | ND | ND | ND | **1000** |
| Diisodecyl phthalate (DIDP) | 26761-40-0<br>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** |
| **Conclusion** | | 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.
Data Consolidation Reference:

| Specimen No. | Transferred from | | Date of Issue |
|---|---|---|---|
| | Report No. | Specimen No. | |
| 1+2 | 22W-015152 | 1+2 | September 28, 2022 |

**DETAILED RESULTS:**

**Client's Requirement, Phthalates content**

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

| Specimen No. | | 8 | 9 | 11+16 | --- | 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 | --- | **1000** |
| Benzyl butyl phthalate (BBP) | 85-68-7 | ND | ND | ND | --- | **1000** |
| Di-(2-ethylhexyl) phthalate (DEHP) | 117-81-7 | ND | ND | ND | --- | **1000** |
| Diisononyl phthalate (DINP) | 28553-12-0<br>68515-48-0 | ND | ND | ND | --- | **1000** |
| Diisodecyl phthalate (DIDP) | 26761-40-0<br>68515-49-1 | ND | ND | ND | --- | **1000** |
| Di-n-hexyl phthalate (DHEXP / DnHP) | 84-75-3 | ND | ND | ND | --- | **1000** |
| Di-n-octyl phthalate (DNOP) | 117-84-0 | ND | ND | ND | --- | **1000** |
| Diethyl phthalate (DEP) | 84-66-2 | ND | ND | ND | --- | **1000** |
| Diisobutyl phthalate (DIBP) | 84-69-5 | ND | ND | ND | --- | **1000** |
| Dicyclohexyl phthalate (DCHP) | 84-61-7 | ND | ND | ND | --- | **1000** |
| Di-n-pentyl phthalate (DPENP/DnPP) | 131-18-0 | ND | ND | ND | --- | **1000** |
| **Conclusion** | | 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:**

**FDA 21 CFR 177.1350, Ethylene-Vinyl Acetate Copolymers**

Test Method: FDA 21 CFR 177.1350

| Specimen No. | | | 4 | RL | Limit |
|---|---|---|---|---|---|
| Test Item | Test Condition | | Result | | |
| | Temp. | Duration | | | |
| Distilled water extractive (mg/in$^2$) | 150°F | 2 hours | ND | **0.1** | **0.5** |
| n-Heptane extractive (mg/in$^2$) | 100°F | 0.5 hours | ND | **0.1** | **0.5** |
| 8% Ethanol extractive (mg/in$^2$) | 150°F | 2 hours | ND | **0.1** | **0.5** |
| 50% Ethanol extractive (mg/in$^2$) | 150°F | 2 hours | ND | **0.1** | **0.5** |
| **Conclusion** | | | PASS | | |

*Note:*
Temp. = Temperature
°F = Degree Fahrenheit
mg/in$^2$= Milligrams per square inch
LT = Less than
ND = Not detected. Result value is less than reporting limit (RL).

*Remark:*
The specification is quoted from 21 CFR 177.1350 (b) (1).

**DETAILED RESULTS:**

**FDA 21 CFR 177.1520, Polyethylene Copolymer**

Test Method: FDA 21 CFR 177.1520

| Specimen No. | | | 4 | --- | | |
|---|---|---|---|---|---|---|
| Test Item | Temp. | Duration | Result | Result | **RL** | **Limit** |
| Density (g/cc) | NA | NA | 0.88 | --- | **NA** | **0.85-1.00** |
| n-Hexane Extractive (%) | 50°C | 2 Hours | ND | --- | **0.4** | **5.5** |
| Xylene Extractive (%) | Reflux | 2 Hours | 5.5 | --- | **1.0** | **30** |
| | | **Conclusion** | PASS | --- | | |

*Note:*
Temp. = Temperature
°C = Degree Celsius
g/cc = Grams per cubic centimeter
% = Percent by weight
NA = Not applicable
LT = Less than
ND = Not detected. Result value is less than reporting limit (RL).

*Remark:*
The specification is quoted from 21 CFR 177.1520 (c) 3.1a.

**DETAILED RESULTS:**

**FDA 21 CFR 177.1520, Polypropylene Homopolymers**

Test Method: FDA 21 CFR 177.1520

| Specimen No. | | | 11 | RL | Limit |
|---|---|---|---|---|---|
| Test Item | Test Condition | | Result | | |
| | Temp. | Duration | | | |
| Density (g/cc) | NA | NA | 0.889 | **NA** | **0.880 – 0.913** |
| Melting point (°C) | NA | NA | 162 | **NA** | **150 – 180** |
| n-Hexane extractive (% w/w) | Reflux | 2 hours | 0.8 | **0.1** | **6.4** |
| Xylene extractive (% w/w) | Reflux | 2 hours | 3.3 | **0.5** | **9.8** |
| **Conclusion** | | | PASS | | |

| Specimen No. | | | 16 | RL | Limit |
|---|---|---|---|---|---|
| Test Item | Test Condition | | Result | | |
| | Temp. | Duration | | | |
| Density (g/cc) | NA | NA | 0.900 | **NA** | **0.880 – 0.913** |
| Melting point (°C) | NA | NA | 171 | **NA** | **150 – 180** |
| n-Hexane extractive (% w/w) | Reflux | 2 hours | 5.0 | **0.1** | **6.4** |
| Xylene extractive (% w/w) | Reflux | 2 hours | 8.5 | **0.5** | **9.8** |
| **Conclusion** | | | PASS | | |

*Note:*
Temp. = Temperature
°C = Degree Celsius
g/cc = Grams per cubic centimeter
% w/w = Percent by weight
NA = Not applicable
LT = Less than
ND = Not detected. Result value is less than reporting limit (RL).

*Remark:*
The specification is quoted from 21 CFR 177.1520 (c) 1.1.

**DETAILED RESULTS:**

**FDA GRAS Specifications, Total Chromium in Stainless Steel Food Contact Utensils**

Test Method: SN/T 2718-2010
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

| Specimen No. | 17 | --- | --- | --- | --- | |
|---|---|---|---|---|---|---|
| Test Item | Result (% m/m) | Result (% m/m) | Result (% m/m) | Result (% m/m) | Result (% m/m) | **Limit (% m/m)** |
| Total Chromium (Cr) | 13.48 | --- | --- | --- | --- | **GT 10.5** |
| **Conclusion** | PASS | --- | --- | --- | --- | |

*Note:*
% m/m = Percent by mass
GT = Greater than

**SPECIMEN DESCRIPTION:**

| Specimen No. | Specimen Description | Location |
|---|---|---|
| 1 | Brown synthetic leather | Main body (brown style) |
| 2 | Black synthetic leather | Main body (black style) |
| 3 | Black plastic | Main zipper teeth (brown style) |
| 4 | Grey soft plastic | Lining (brown style) |
| 5 | Black coating | Zipper head (all styles) |
| 6 | Silvery metal | Zipper puller (brown style) |
| 7 | Silvery metal | Zipper slider (brown style) |
| 8 | White foam | Filler of front pocket (brown style) |
| 9 | Dark grey soft plastic | Elastic (brown style) |
| 10 | Black plastic | Adjustable buckle (brown style) |
| 11 | White plastic | Cutting board (brown style) |
| 12 | Black plastic | Velcro hook (brown style) |
| 13 | Silvery metal | Spiral opener (brown style) |
| 14 | Silvery metal | Axis of bottle opener (brown style) |
| 15 | Silvery metal | Pepper shaker (brown style) |
| 16 | Black plastic | Pepper shaker (brown style) |
| 17 | Silvery metal | Shovel (brown style) |
| 18 | Silvery metal | Handle of shovel (brown style) |
| 19 | Silvery metal | Hook of shovel (brown style) |
| 20 | White non-woven textile | Filler of glove (brown style) |

**SAMPLE PHOTO:**



-End Report-