

TEST REPORT

Test Report # 19H-006506 Date of Report Issue: September 9, 2019
Date of Sample Received: August 29, 2019 Pages: Page 1 of 17

CLIENT INFORMATION:

Company: Boston Industrial Solutions, Inc.
Recipient: Ephraim Wahiga
Recipient Email: ephraim.w@bostonindustrialsolutions.com



SAMPLE INFORMATION:

Description: Samples labelled SE
Assortment: - Purchase Order Number: -
SKU/style No.: - Toy Co./Agency: -
Factory/Supplier/Vendor: Boston Industrial Solutions, Inc. Country of Origin: United States
Country of Distribution: World Wide Labeled Age Grade: -
Quantity Submitted: 1 lot per style Recommended Age Grade: -
Testing Period: 09/03/2019 – 09/09/2019 Tested Age Grade: -

OVERALL RESULT:

 **PASS**

Refer to page 2 for test result summary and appropriate notes.

QIMA Testing (HK) Limited



Loska Yeung Lok Ka
Assistant Manager, Chemical Laboratory

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
The above test(s) is/are accredited under the laboratory's ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with '#' is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.
Test(s) marked with 'φ' was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.
If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).
This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

TEST RESULTS SUMMARY:

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

CONCLUSION	TEST(S) CONDUCTED
PASS	CPSIA Section 106 & ASTM F963-17 Toy Safety, Clause 4.3.5 Total Elements Screening in Paint and Similar Surface Coatings
PASS	ASTM F2923-14 Consumer Product Safety for Children’s Jewelry, Clause 8 Total Elements Screening in Paint and Surface Coatings
PASS	CPSIA Section 101 & 16 CFR 1303, Total Lead in Paints and Surface Coatings
PASS	The Illinois Lead Poisoning Prevention Act (LPPA) (410 ILCS 45/6), Total Lead in Paints and Surface Coatings of Children’s Jewelry and Childcare Articles
PASS	Connecticut Public Act 10-113 (Substituted House Bill 5314), Total Cadmium Content in Children's Jewelry
PASS	Maryland Chapter 578 (House Bill 145), Total Cadmium in Children’s Jewelry
PASS	Minnesota Chapter 347-S.F. No. 2510, Total Cadmium Screening in Children’s Jewelry
PASS	California Proposition 65, Phthalates (DBP, BBP, DEHP, DINP, DIDP, DnHP)
PASS	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	Washington Revised Code Section 70.240.020, Phthalates in Children’s Product
PASS	Canadian Toys Regulations SOR/2011-17 as Amended, Item 23 – Total Elements Screening in Paints and Surface Coatings
PASS	Canadian Surface Coating Materials Regulations SOR/2016-193, Total Lead and Mercury in Paints and Surface Coatings
PASS	Mexican Environmental Health NOM-252-SSA1-2011, Total Elements Screening from Toys and School Supplies

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
 The above test(s) is/are accredited under the laboratory’s ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with ‘#’ is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with ‘φ’ was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

DETAILED RESULTS:

CPSIA Section 106 & ASTM F963-17 Toy Safety, Clause 4.3.5 Total Elements Screening in Paint and Similar Surface Coatings

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

Specimen No.	1+2+3	4+5+6	7+8+9	---	---	Soluble Limit (ppm)
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Antimony (Sb)	ND	ND	ND	---	---	60
Total Arsenic (As)	ND	ND	ND	---	---	25
Total Barium (Ba)	83	ND	ND	---	---	1000
Total Cadmium (Cd)	ND	ND	ND	---	---	75
Total Chromium (Cr)	ND	ND	ND	---	---	60
Total Lead (Pb)	ND	ND	ND	---	---	90
Total Mercury (Hg)	ND	ND	ND	---	---	60
Total Selenium (Se)	ND	ND	ND	---	---	500
Conclusion	PASS	PASS	PASS	---	---	

Note:

ppm (Parts per million) = mg/kg (Milligrams per kilogram)

LT = Less than

ND = Not detected (Reporting Limit: Sb, As, Ba, Cd, Cr, Pb, Hg = 20ppm; Se = 50ppm)

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

Remark:

The total heavy metals screening results do not exceed the soluble heavy metal limits, therefore, further soluble analyses were not conducted.

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
 The above test(s) is/are accredited under the laboratory's ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with '#' is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with 'φ' was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

DETAILED RESULTS:

ASTM F2923-14 Consumer Product Safety for Children’s Jewelry, Clause 8 Total Elements Screening in Paint and Surface Coatings

Test Method: ASTM F963-11 Clause 8.3.1
 Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	---	---	Soluble Limit (ppm)
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Antimony (Sb)	ND	ND	ND	---	---	60
Total Arsenic (As)	ND	ND	ND	---	---	25
Total Barium (Ba)	83	ND	ND	---	---	1000
Total Cadmium (Cd)	ND	ND	ND	---	---	75
Total Chromium (Cr)	ND	ND	ND	---	---	60
Total Mercury (Hg)	ND	ND	ND	---	---	60
Total Selenium (Se)	ND	ND	ND	---	---	500
Conclusion	PASS	PASS	PASS	---	---	

Note:

ppm (Parts per million) = mg/kg (Milligrams per kilogram)

LT = Less than

ND = Not detected (Reporting Limit: Sb, As, Ba, Cd, Cr, Hg = 20 ppm; Se = 50 ppm)

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

Remark:

The total heavy metals screening results do not exceed the soluble heavy metal limits, therefore, further soluble analyses were not conducted.

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
 The above test(s) is/are accredited under the laboratory’s ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with ‘#’ is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with ‘φ’ was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

DETAILED RESULTS:

CPSIA Section 101 & 16 CFR 1303, Total Lead in Paints and Surface Coatings

Test Method: CPSC-CH-E-1003-09.1
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	---	---	Total Limit (ppm)
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Lead (Pb)	ND	ND	ND	---	---	90
Conclusion	PASS	PASS	PASS	---	---	

Note:

ppm (Parts per million) = mg/kg (Milligrams per kilogram)

LT = Less than

ND = Not detected (Reporting Limit = 20 ppm)

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

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
The above test(s) is/are accredited under the laboratory's ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with '#' is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with 'φ' was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

DETAILED RESULTS:

The Illinois Lead Poisoning Prevention Act (LPPA) (410 ILCS 45/6), Total Lead in Paints and Surface Coatings of Children’s Jewelry and Childcare Articles

Test Method: CPSC-CH-E-1003-09.1
 Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	---	---	Total Limit (ppm)
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Lead (Pb)	ND	ND	ND	---	---	40
Conclusion	PASS	PASS	PASS	---	---	

Note:

ppm (Parts per million) = mg/kg (Milligrams per kilogram)

LT = Less than

ND = Not detected (Reporting Limit = 20 ppm)

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

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
 The above test(s) is/are accredited under the laboratory’s ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with ‘#’ is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with ‘ϕ’ was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

DETAILED RESULTS:

Connecticut Public Act 10-113 (Substituted House Bill 5314), Total Cadmium Content in Children's Jewelry

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

Specimen No.	1+2+3	4+5+6	7+8+9	---	---	Total Limit (ppm)
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Cadmium (Cd)	ND	ND	ND	---	---	75
Conclusion	PASS	PASS	PASS	---	---	

Note:

ppm (Parts per million) = mg/kg (Milligrams per kilogram)

LT = Less than

ND = Not detected (Reporting Limit = 20 ppm)

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

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
 The above test(s) is/are accredited under the laboratory's ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with '#' is/are not covered under the scope of accreditation.
 ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with 'φ' was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

DETAILED RESULTS:

Maryland Chapter 578 (House Bill 145), Total Cadmium in Children’s Jewelry

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

Specimen No.	1+2+3	4+5+6	7+8+9	---	---	Total Limit (ppm)
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Cadmium (Cd)	ND	ND	ND	---	---	75
Conclusion	PASS	PASS	PASS	---	---	

Note:
 ppm (Parts per million) = mg/kg (Milligrams per kilogram)
 LT = Less than
 ND = Not detected (Reporting Limit = 20 ppm)
 Composite results are based on specimen of least mass resulting in highest potential concentration.

DETAILED RESULTS:

Minnesota Chapter 347-S.F. No. 2510, Total Cadmium Screening in Children’s Jewelry

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

Specimen No.	1+2+3	4+5+6	7+8+9	---	---	Soluble Limit (ppm)
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Cadmium (Cd)	ND	ND	ND	---	---	75
Conclusion	PASS	PASS	PASS	---	---	

Note:

ppm (Parts per million) = mg/kg (Milligrams per kilogram)

LT = Less than

ND = Not detected (Reporting Limit = 20 ppm)

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

Remark:

The total cadmium screening results did not exceed the soluble cadmium limit, therefore, further soluble analyses were not conducted.

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
 The above test(s) is/are accredited under the laboratory’s ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with ‘#’ is/are not covered under the scope of accreditation.
 ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with ‘ϕ’ was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

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	4+5+6	7+8+9	---	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
Diisodecyl phthalate (DIDP)	26761-40-0 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) = ppm (Parts per million) = 0.0001 % m/m (Percent by mass)
 LT = Less than
 ND = Not detected (Reporting Limit = 300 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:

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	4+5+6	7+8+9	---	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) = ppm (Parts per million) = 0.0001 % m/m (Percent by mass)
 LT = Less than
 ND = Not detected (Reporting Limit = 300 mg/kg)
 Composite results are based on specimen of least mass resulting in highest potential concentration.

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
 The above test(s) is/are accredited under the laboratory’s ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with ‘#’ is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.
 Test(s) marked with ‘φ’ was subcontracted to external laboratory.
 The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.
 If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).
 This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

DETAILED RESULTS:

Washington Revised Code Section 70.240.020, Phthalates in Children’s Product

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

Specimen No.		1+2+3	4+5+6	7+8+9	---	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
Di-n-octyl phthalate (DnOP)	117-84-0	ND	ND	ND	---	1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	---	1000
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	---	1000
Sum		ND	ND	ND	---	1000
Conclusion		PASS	PASS	PASS	---	

Note:

mg/kg (Milligrams per kilogram) = ppm (Parts per million) = 0.0001 % m/m (Percent by mass)

LT = Less than

ND = Not detected (Reporting Limit = 300 mg/kg)

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

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
 The above test(s) is/are accredited under the laboratory’s ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with ‘#’ is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with ‘ϕ’ was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

DETAILED RESULTS:

Canadian Toys Regulations SOR/2011-17 as Amended, Item 23 – Total Elements Screening in Paints and Surface Coatings

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

Specimen No.	1+2+3	4+5+6	7+8+9	---	---	Leachable
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	---	---	1000
Total Arsenic (As)	ND	ND	ND	---	---	1000
Total Barium (Ba)	83	ND	ND	---	---	1000
Total Cadmium (Cd)	ND	ND	ND	---	---	1000
Total Lead (Pb)	ND	ND	ND	---	---	90*
Total Mercury (Hg)	ND	ND	ND	---	---	10*
Total Selenium (Se)	ND	ND	ND	---	---	1000
Conclusion	PASS	PASS	PASS	---	---	

Note:
 ppm (Parts per million) = mg/kg (Milligrams per kilogram)
 LT = Less than
 ND = Not detected (Reporting Limit: Pb, Hg = 10 ppm; Sb, As, Ba, Cd, Se = 50 ppm)
 Composite results are based on specimen of least mass resulting in highest potential concentration.

Remark:
 *Total limit

The results of total elements screening did not exceed the limits of leachable elements, therefore further analysis of leachable elements was not conducted.

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
 The above test(s) is/are accredited under the laboratory's ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with '#' is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.
 Test(s) marked with 'φ' was subcontracted to external laboratory.
 The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.
 If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).
 This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

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.	1+2+3	4+5+6	7+8+9	---	---	Total Limit (ppm)
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Lead (Pb)	ND	ND	ND	---	---	90
Total Mercury (Hg)	ND	ND	ND	---	---	10
Conclusion	PASS	PASS	PASS	---	---	

Note:

ppm (Parts per million) = mg/kg (Milligrams per kilogram)

LT = Less than

ND = Not detected (Reporting Limit = 10 ppm)

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

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
 The above test(s) is/are accredited under the laboratory's ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with '#' is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with 'φ' was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

DETAILED RESULTS:

Mexican Environmental Health NOM-252-SSA1-2011, Total Elements Screening from Toys and School Supplies

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

Toy Material except Modelling Clay

Specimen No.	1+2+3	4+5+6	7+8+9	---	---	Soluble Limit (ppm)
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Antimony (Sb)	ND	ND	ND	---	---	60
Total Arsenic (As)	ND	ND	ND	---	---	25
Total Barium (Ba)	83	ND	ND	---	---	1000
Total Cadmium (Cd)	ND	ND	ND	---	---	75
Total Chromium (Cr)	ND	ND	ND	---	---	60
Total Lead (Pb)	ND	ND	ND	---	---	90
Total Mercury (Hg)	ND	ND	ND	---	---	60
Total Selenium (Se)	ND	ND	ND	---	---	500
Conclusion	PASS	PASS	PASS	---	---	

Note:

ppm (Parts per million) = mg/kg (Milligrams per kilogram)

LT = Less than

ND = Not detected (Reporting Limit: Sb, As, Ba, Cd, Cr, Pb, Hg = 20 ppm; Se = 50 ppm)

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

Remark:

The total heavy metals screening results do not exceed the soluble heavy metal limits, therefore, further soluble analyses were not conducted.

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
 The above test(s) is/are accredited under the laboratory's ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with '#' is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with 'φ' was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

SPECIMEN DESCRIPTION:

Specimen No.	Specimen Description	Location
1	Black ink	SE 300 BLACK
2	White ink	SE 310 WHITE
3	Yellow ink	SE 315 YELLOW
4	Blue ink	SE 333 BLUE
5	Green ink	SE 348 GREEN
6	Red ink	SE 352 RED
7	Magenta ink	SE 355 MAGENTA
8	Golden ink	SE 371 GOLD
9	Silvery ink	SE 377 SILVER

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.

The above test(s) is/are accredited under the laboratory's ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with '#' is/are not covered under the scope of accreditation.

ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with 'φ' was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.

SAMPLE PHOTO:



-End Report-

QIMA Testing (HK) Limited ♦ 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, Hong Kong ♦ Tel: (852)3185 8000.
The above test(s) is/are accredited under the laboratory's ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board (ANAB) according to certificate and scope of accreditation (Certificate # AT-1500.) Test(s) marked with '#' is/are not covered under the scope of accreditation. ANAB is recognized by ILAC, APAC and IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of test internationally.

Test(s) marked with 'φ' was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the [QIMA decision rule](#).

This test report may not be reproduced in whole or in part, without written approval of QIMA Testing (HK) Limited.