



TEST REPORT

Test Report # 21H-020863 Date of Report Issue: September 17, 2021

Date of Sample Received: September 13, 2021 Pages: Page 1 of 54

CLIENT INFORMATION:

Company: ITW Trans Tech
Recipient: Prasanth Bijjam

Recipient Email: pbijjam@itwids.com

SAMPLE INFORMATION:

Description: INK-P series pad printing inks

Assortment: - Purchase Order Number: -

SKU/style No.: - Toy Co./Agency: -

Factory/Supplier/Vendor: - Country of Origin: Germany

Country of Distribution: Worldwide Labeled Age Grade: -

Quantity Submitted: 1 lot Recommended Age Grade: -

Testing Period: 09/13/2021 – 09/17/2021 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, HKSAR, China • 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 score of accreditation (Certificate # AT-1500.) Test(s) marked with '#' is fare not covered under the score of accreditation.

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 '\psi' 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 Report #: 21H-020863 Page 2 of 54

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 F2923-20 Consumer Product Safety for Children's Jewelry, Clause 8 Total Elements Screening in Paint and Surface Coatings
PASS	ASTM F2999-19 Adult Jewelry, Clause 5 & 7 Total Elements Screening in Paint and Surface Coatings
PASS	ASTM F2923-20 Consumer Product Safety for Children's Jewelry, Clause 5 Total Lead in Paint and Surface Coatings
PASS	CPSIA Section 101 & 16 CFR 1303, Total Lead in Paints and Surface Coatings
PASS	Washington Revised Code Section 70.240.020, Cadmium in Paints and Surface Coatings of Children's Product#
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



Test Report #: 21H-020863 Page 3 of 54

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	10+11+12	13+14+15	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	50	160	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	ND	60
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	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, HKSAR, China • 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.

CS-HK-RE005

Ver.16



Test Report #: 21H-020863 Page 4 of 54

DETAILED RESULTS:

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

ASTM F963-17 Clause 8.3.1 Test Method:

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	ND	ND	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	27	60
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	PASS	PASS	PASS	

Note:

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

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, HKSAR, China • 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 Report #: 21H-020863 Page 5 of 54

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.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	ND	ND	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	ND	60
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	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, HKSAR, China • 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 '\psi' 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 Report #: 21H-020863 Page 6 of 54

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.	46+47	48+49				Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND				60
Total Arsenic (As)	ND	ND				25
Total Barium (Ba)	ND	ND				1000
Total Cadmium (Cd)	ND	ND				75
Total Chromium (Cr)	ND	ND				60
Total Lead (Pb)	ND	ND				90
Total Mercury (Hg)	ND	ND				60
Total Selenium (Se)	ND	ND				500
Conclusion	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, HKSAR, China • 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)

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.

Ver.16

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. CS-HK-RF005



Test Report #: 21H-020863 Page 7 of 54

DETAILED RESULTS:

ASTM F2923-20 Consumer Product Safety for Children's Jewelry, Clause 8 Total Elements Screening in Paint 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	10+11+12	13+14+15	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	50	160	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	ND	60
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	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, HKSAR, China • 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 Report #: 21H-020863 Page 8 of 54

DETAILED RESULTS:

ASTM F2923-20 Consumer Product Safety for Children's Jewelry, Clause 8 Total Elements Screening in Paint and **Surface Coatings**

ASTM F963-17 Clause 8.3.1 Test Method:

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	ND	ND	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	27	60
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	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, HKSAR, China • 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.



Test Report #: 21H-020863 Page 9 of 54

DETAILED RESULTS:

ASTM F2923-20 Consumer Product Safety for Children's Jewelry, Clause 8 Total Elements Screening in Paint and Surface Coatings

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	ND	ND	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	ND	60
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	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, HKSAR, China • 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 '\psi' 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.



Test Report #: 21H-020863 Page 10 of 54

DETAILED RESULTS:

ASTM F2923-20 Consumer Product Safety for Children's Jewelry, Clause 8 Total Elements Screening in Paint and Surface Coatings

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	46+47	48+49				Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND				60
Total Arsenic (As)	ND	ND				25
Total Barium (Ba)	ND	ND				1000
Total Cadmium (Cd)	ND	ND				75
Total Chromium (Cr)	ND	ND				60
Total Mercury (Hg)	ND	ND				60
Total Selenium (Se)	ND	ND				500
Conclusion	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, HKSAR, China • 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)

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.

Ver.16

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.

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

CS-HK-RF005



Test Report #: 21H-020863 Page 11 of 54

DETAILED RESULTS:

ASTM F2999-19 Adult Jewelry, Clause 5 & 7 Total Elements Screening in Paint 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	10+11+12	13+14+15	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	50	160	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	ND	60
Total Lead (Pb)	ND	ND	ND	ND	ND	600*
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	PASS	PASS	PASS	

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:

*Total limit

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



Test Report #: 21H-020863 Page 12 of 54

DETAILED RESULTS:

ASTM F2999-19 Adult Jewelry, Clause 5 & 7 Total Elements Screening in Paint and Surface Coatings

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	ND	ND	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	27	60
Total Lead (Pb)	ND	ND	ND	ND	ND	600*
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	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:

*Total limit

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, HKSAR, China * 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.

Ver.16

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.

This test report may not be reproduced in whole of in part, without written approval of qinila resting (mk) Limited.

CS-HK-RF005



Test Report #: 21H-020863 Page 13 of 54

DETAILED RESULTS:

ASTM F2999-19 Adult Jewelry, Clause 5 & 7 Total Elements Screening in Paint and Surface Coatings

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	ND	ND	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	ND	60
Total Lead (Pb)	ND	ND	ND	ND	ND	600*
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	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:

*Total limit

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, HKSAR, China * 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 Report #: 21H-020863 Page 14 of 54

DETAILED RESULTS:

ASTM F2999-19 Adult Jewelry, Clause 5 & 7 Total Elements Screening in Paint and Surface Coatings

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	46+47	48+49				Soluble
Test Item	Result	Result	Result	Result	Result	Limit
	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Total Antimony (Sb)	ND	ND				60
Total Arsenic (As)	ND	ND				25
Total Barium (Ba)	ND	ND				1000
Total Cadmium (Cd)	ND	ND				75
Total Chromium (Cr)	ND	ND				60
Total Lead (Pb)	ND	ND				600*
Total Mercury (Hg)	ND	ND				60
Total Selenium (Se)	ND	ND				500
Conclusion	PASS	PASS				

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:

*Total limit

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, HKSAR, China • 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 Report #: 21H-020863 Page 15 of 54

DETAILED RESULTS:

ASTM F2923-20 Consumer Product Safety for Children's Jewelry, Clause 5 Total Lead in Paint 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	10+11+12	13+14+15	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	46+47	48+49				Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND				90
Conclusion	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, HKSAR, China * 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 Report #: 21H-020863 Page 16 of 54

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	10+11+12	13+14+15	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	46+47	48+49				Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND				90
Conclusion	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, HKSAR, China • 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 Report #: 21H-020863 Page 17 of 54

DETAILED RESULTS:

Washington Revised Code Section 70.240.020, Cadmium in Paints and Surface Coatings of Children's Product

Test Method: CPSC-CH-E-1003-09.1 (Modified)#

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	10+11+12	13+14+15	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	40
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	40
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	40
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	46+47	48+49				Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND				40
Conclusion	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, HKSAR, China * 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.

Ver.16

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.

CS-HK-RE005



Test Report #: 21H-020863 Page 18 of 54

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	10+11+12	13+14+15	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	40
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	40
Conclusion	PASS	PASS	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.

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.



Test Report #: 21H-020863 Page 19 of 54

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.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	40
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	46+47	48+49				Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND				40
Conclusion	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.

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.



Test Report #: 21H-020863 Page 20 of 54

DETAILED RESULTS:

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

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	10+11+12	13+14+15	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Conclusion	PASS	PASS	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.

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 Report #: 21H-020863 Page 21 of 54

DETAILED RESULTS:

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

Test Method: ASTM F963-11 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	46+47	48+49				Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND				75
Conclusion	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.

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 Report #: 21H-020863 Page 22 of 54

DETAILED RESULTS:

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

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	10+11+12	13+14+15	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Conclusion	PASS	PASS	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.

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 Report #: 21H-020863 Page 23 of 54

DETAILED RESULTS:

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

Test Method: ASTM F963-11 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	46+47	48+49				Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND				75
Conclusion	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.

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 '\phi' 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 Report #: 21H-020863 Page 24 of 54

DETAILED RESULTS:

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

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	10+11+12	13+14+15	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Conclusion	PASS	PASS	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.

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 Report #: 21H-020863 Page 25 of 54

DETAILED RESULTS:

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

Test Method: ASTM F963-11 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	46+47	48+49				Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Cadmium (Cd)	ND	ND				75
Conclusion	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.

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 '#' was subcontracted to external laboratory.



Test Report #: 21H-020863 Page 26 of 54

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	10+11+12	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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
Diisodecyl phthalate (DIDP)	26761-40-0 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) = 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.

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.



Test Report #: 21H-020863 Page 27 of 54

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 N	Specimen No.		16+17+18	19+20+21	22+23+24	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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
Diisodecyl phthalate (DIDP)	26761-40-0 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) = 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.

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 Report #: 21H-020863 Page 28 of 54

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 N	Specimen No.		28+29+30	31+32+33	34+35+36	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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
Diisodecyl phthalate (DIDP)	26761-40-0 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) = 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.

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.



Page 29 of 54 Test Report #: 21H-020863

DETAILED RESULTS:

California Proposition 65, Phthalates (DBP, BBP, DEHP, DINP, DIDP, DnHP)

Test Method: CPSC-CH-C1001-09.4

Gas Chromatography with Mass Spectrometry Analytical Method:

Specimen N	Specimen No.		40+41+42	43+44+45	46+47	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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
Diisodecyl phthalate (DIDP)	26761-40-0 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) = ppm (Parts per million) = 0.0001 % m/m (Percent by mass)

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.

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 Report #: 21H-020863 Page 30 of 54

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 N	Specimen No.					
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (mg/kg)
Dibutyl phthalate (DBP)	84-74-2	ND				1000
Benzyl butyl phthalate (BBP)	85-68-7	ND				1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND				1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND				1000
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND				1000
Di-n-hexyl phthalate (DnHP)	84-75-3	ND				1000
	Conclusion	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.

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.

Ver.16



Test Report #: 21H-020863 Page 31 of 54

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 N	Specimen No.		4+5+6	7+8+9	10+11+12	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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) = 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.

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



Test Report #: 21H-020863 Page 32 of 54

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 N	lo.	13+14+15	16+17+18	19+20+21	22+23+24	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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) = 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.

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



Test Report #: 21H-020863 Page 33 of 54

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.		25+26+27	28+29+30	31+32+33	34+35+36	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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) = 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.

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 $'\phi'$ 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.



Page 34 of 54 Test Report #: 21H-020863

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.		37+38+39	40+41+42	43+44+45	46+47	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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) = 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, HKSAR, China • 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.

CS-HK-RF005



Test Report #: 21H-020863 Page 35 of 54

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 N	0.	48+49				
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (mg/kg)
Dibutyl phthalate (DBP)	84-74-2	ND				1000
Benzyl butyl phthalate (BBP)	85-68-7	ND				1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND				1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND				1000
Di-n-hexyl phthalate (DHEXP / DnHP)	84-75-3	ND				1000
Dicyclohexyl phthalate (DCHP)	84-61-7	ND				1000
Diisobutyl phthalate (DIBP)	84-69-5	ND				1000
Di-n-pentyl phthalate (DPENP)	131-18-0	ND				1000
	Conclusion	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.



Test Report #: 21H-020863 Page 36 of 54

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	10+11+12	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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
Di-n-octyl phthalate (DnOP)	117-84-0	ND	ND	ND	ND	1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	ND	1000
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	ND	1000
	Sum	ND	ND	ND	ND	1000
	Conclusion	PASS	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.

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.



Test Report #: 21H-020863 Page 37 of 54

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	Specimen No.		16+17+18	19+20+21	22+23+24	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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
Di-n-octyl phthalate (DnOP)	117-84-0	ND	ND	ND	ND	1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	ND	1000
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	ND	1000
	Sum	ND	ND	ND	ND	1000
	Conclusion	PASS	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.

nd IAAC as a signatory of multilateral recognition arrangements that facilitate acceptance of te. Test(s) marked with ' ϕ ' was subcontracted to external laboratory.



Test Report #: 21H-020863 Page 38 of 54

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).	25+26+27	28+29+30	31+32+33	34+35+36	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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
Di-n-octyl phthalate (DnOP)	117-84-0	ND	ND	ND	ND	1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	ND	1000
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	ND	1000
	Sum	ND	ND	ND	ND	1000
	Conclusion	PASS	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.

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.



Test Report #: 21H-020863 Page 39 of 54

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).	37+38+39	40+41+42	43+44+45	46+47	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (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
Di-n-octyl phthalate (DnOP)	117-84-0	ND	ND	ND	ND	1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	ND	1000
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	ND	1000
	Sum	ND	ND	ND	ND	1000
	Conclusion	PASS	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.

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



Test Report #: 21H-020863 Page 40 of 54

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).	48+49				
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Limit (mg/kg)
Dibutyl phthalate (DBP)	84-74-2	ND				1000
Benzyl butyl phthalate (BBP)	85-68-7	ND				1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND				1000
Di-n-octyl phthalate (DnOP)	117-84-0	ND				1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND				1000
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND				1000
	Sum	ND				1000
	Conclusion	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.

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.



Test Report #: 21H-020863 Page 41 of 54

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	10+11+12	13+14+15	Leachable
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	1000
Total Arsenic (As)	ND	ND	ND	ND	ND	1000
Total Barium (Ba)	50	160	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	1000
Total Lead (Pb)	ND	ND	ND	ND	ND	90*
Total Mercury (Hg)	ND	ND	ND	ND	ND	10*
Total Selenium (Se)	ND	ND	ND	ND	ND	1000
Conclusion	PASS	PASS	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, HKSAR, China • 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 Report #: 21H-020863 Page 42 of 54

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.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Leachable
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	1000
Total Arsenic (As)	ND	ND	ND	ND	ND	1000
Total Barium (Ba)	ND	ND	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	1000
Total Lead (Pb)	ND	ND	ND	ND	ND	90*
Total Mercury (Hg)	ND	ND	ND	ND	ND	10*
Total Selenium (Se)	ND	ND	ND	ND	ND	1000
Conclusion	PASS	PASS	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, HKSAR, China • 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 Report #: 21H-020863 Page 43 of 54

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

Inductively Coupled Plasma-Optical Emission Spectrometry Analytical Method:

Specimen No.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Leachable
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	1000
Total Arsenic (As)	ND	ND	ND	ND	ND	1000
Total Barium (Ba)	ND	ND	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	1000
Total Lead (Pb)	ND	ND	ND	ND	ND	90*
Total Mercury (Hg)	ND	ND	ND	ND	ND	10*
Total Selenium (Se)	ND	ND	ND	ND	ND	1000
Conclusion	PASS	PASS	PASS	PASS	PASS	

Note:

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

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, HKSAR, China • 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.



Test Report #: 21H-020863 Page 44 of 54

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.	46+47	48+49				Leachable
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND				1000
Total Arsenic (As)	ND	ND				1000
Total Barium (Ba)	ND	ND				1000
Total Cadmium (Cd)	ND	ND				1000
Total Lead (Pb)	ND	ND				90*
Total Mercury (Hg)	ND	ND				10*
Total Selenium (Se)	ND	ND				1000
Conclusion	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 \bullet 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, HKSAR, China \bullet 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.



Test Report #: 21H-020863 Page 45 of 54

DETAILED RESULTS:

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

Test Method: ASTM F963-16 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	10+11+12	13+14+15	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Total Mercury (Hg)	ND	ND	ND	ND	ND	10
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Total Mercury (Hg)	ND	ND	ND	ND	ND	10
Conclusion	PASS	PASS	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.

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.



Page 46 of 54 Test Report #: 21H-020863

DETAILED RESULTS:

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

Test Method: ASTM F963-16 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Total
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Total Mercury (Hg)	ND	ND	ND	ND	ND	10
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	46+47	48+49				Total
Test Item	Result	Result	Result	Result	Result	Limit
	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Total Lead (Pb)	ND	ND				90
Total Mercury (Hg)	ND	ND				10
Conclusion	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.

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.



Test Report #: 21H-020863 Page 47 of 54

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	10+11+12	13+14+15	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	50	160	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	ND	60
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	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, HKSAR, China * 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 Report #: 21H-020863 Page 48 of 54

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.	16+17+18	19+20+21	22+23+24	25+26+27	28+29+30	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	ND	ND	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	27	60
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	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, HKSAR, China * 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 Report #: 21H-020863 Page 49 of 54

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.	31+32+33	34+35+36	37+38+39	40+41+42	43+44+45	Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND	ND	ND	ND	60
Total Arsenic (As)	ND	ND	ND	ND	ND	25
Total Barium (Ba)	ND	ND	ND	ND	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	ND	ND	ND	ND	60
Total Lead (Pb)	ND	ND	ND	ND	ND	90
Total Mercury (Hg)	ND	ND	ND	ND	ND	60
Total Selenium (Se)	ND	ND	ND	ND	ND	500
Conclusion	PASS	PASS	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, HKSAR, China * 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 Report #: 21H-020863 Page 50 of 54

DETAILED RESULTS:

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

ASTM F963-17 Clause 8.3.1 Test Method:

Inductively Coupled Plasma-Optical Emission Spectrometry Analytical Method:

Toy Material except Modelling Clay

Specimen No.	46+47	48+49				Soluble
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Limit (ppm)
Total Antimony (Sb)	ND	ND				60
Total Arsenic (As)	ND	ND				25
Total Barium (Ba)	ND	ND				1000
Total Cadmium (Cd)	ND	ND				75
Total Chromium (Cr)	ND	ND				60
Total Lead (Pb)	ND	ND				90
Total Mercury (Hg)	ND	ND				60
Total Selenium (Se)	ND	ND				500
Conclusion	PASS	PASS				

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, HKSAR, China • 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.



Page 51 of 54 Test Report #: 21H-020863

SPECIMEN DESCRIPTION:

Specimen No.	Specimen Description	Location
1	Red ink	Ink (136681 INK-P 181 RNT TRANSPARENT RED)
2	Translucent yellow ink	Ink (1366E50 INK-P E50 RNT C-MIX CLEAR)
3	Pink ink	Ink (136612 INK-P 12 RNT PINK)
4	Turquoise ink	Ink (136621 INK-P 21 RNT BRILLIANT GREEN)
5	Purple ink	Ink (136618 INK-P 18 RNT VIOLET BLUE)
6	Bright red ink	Ink (136609 INK-P 9 RNT BRIGHT RED)
7	Green ink	Ink (136619 INK-P 19 RNT LIGHT GEEN)
8	Dull yellow ink	Ink (136607 INK-P 7 RNT ORCHRE YELLOW)
9	Bright yellow ink	Ink (131593 INK-P 3 HD CINTRON YELLOW)
10	Brown ink	Ink (136622 INK-P 22 RNT LIGHT BROWN)
11	Orange ink	Ink (1366O50 INK-P O50 RNT C-MIX ORANGE)
12	Mango yellow ink	Ink (1366Y50 INK-P Y50 RNT C-MIX YELLOW)
13	Pale yellow ink	Ink (131594 INK-P 4 HD MEDIUM YELLOW)
14	Matt yellow ink	Ink (136604 INK-P 4 RNT MEDIUM YELLOW)
15	Navy ink	Ink (136616 INK-P 16 RNT DARK BLUE)
16	Dark green ink	Ink (1366G50 INK-P G50 RNT C-MIX GREEN)
17	Light red ink	Ink (136608 INK-P 8 RNT LIGHT RED)
18	White ink	Ink (131592 INK-P 2 HD WHITE)
19	Bright white ink	Ink (1366W50 INK-P W50 RNT C-MIX WHITE)
20	Scarlet red ink	Ink (1366R20 INK-P R20 RNT C-MIX SCARLET)

QIMA Testing (HK) Limited • 3/F Liven House, No. 61 – 63 King Yip Street, Kwun Tong, Kowloon, HKSAR, China • 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.



Page 52 of 54 Test Report #: 21H-020863

SPECIMEN DESCRIPTION:

Specimen No.	Specimen Description	Location
21	Golden ink	Ink (136676 INK-P 76 RNT MEDIUM GOLD)
22	Light golden ink	Ink (136675 INK-P 75 RNT GOLD)
23	Sharp yellow ink	Ink (1366Y30 INK-P Y30 RNT C-MIX PRIMROSE)
24	Blue ink	Ink (136613 INK-P 13 RNT LIGHT BLUE)
25	Black ink	Ink (1366N50 INK-P N50 RNT C-MIX BLACK)
26	Deep red ink	Ink (1366R50 INK-P R50 RNT C-MIX RED)
27	Flat yellow ink	Ink (136603 INK-P 3 RNT CINTRON YELLOW)
28	Dull brown ink	Ink (136623 INK-P 23 RNT DARK BROWN)
29	Soft yellow ink	Ink (136680 INK-P 180 RNT TRANSPARENT YELLOW)
30	Dull turquoise ink	Ink (136620 INK-P 20 RNT FIR GEEN)
31	Grey ink	Ink (136679 INK-P 79 RNT SILVER)
32	Dull orange ink	Ink (136606 INK-P 6 RNT ORANGE)
33	Magenta ink	Ink (1366M50 INK-P M50 RNT C-MIX MAGENTA)
34	Dull black ink	Ink (131591 INK-P 1 HD BLACK)
35	Matt black ink	Ink (136601 INK-P 1 RNT BLACK)
36	Off yellow ink	Ink (136605 INK-P 5 RNT DARK YELLOW)
37	Matt orange ink	Ink (131596 INK-P 6 HD ORANGE)
38	Matt red ink	Ink (131598 INK-P 8 HD LIGHT RED)
39	Off red ink	Ink (131599 INK-P 9 HD BRIGHT RED)
40	Blood red ink	Ink (136610 INK-P 10 RNT CARMINE RED)



Test Report #: 21H-020863 Page 53 of 54

SPECIMEN DESCRIPTION:

Specimen No.	Specimen Description	Location
41	Wine red ink	Ink (136611 INK-P 11 RNT BORDEAUX RED)
42	Dull blue ink	Ink (136615 INK-P 15 RNT ULTRA BLUE)
43	Dull golden ink	Ink (136677 INK-P 77 RNT GOLD)
44	Deep blue ink	Ink (136682 INK-P 182 RNT TRANSPARENT BLUE)
45	Dark purple ink	Ink (1366V50 INK-P V50 RNT C-MIX VIOLET)
46	Off blue ink	Ink (1366B50 INK-P B50 RNT C-MIX BLUE)
47	Bright blue ink	Ink (136614 INK-P 14 RNT MEDIUM BLUE)
48	Sky blue ink	Ink (136617 INK-P 17 RNT TORQUOISE BLUE)
49	Sharp white ink	Ink (136602 INK-P 2 RNT WHITE)

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.

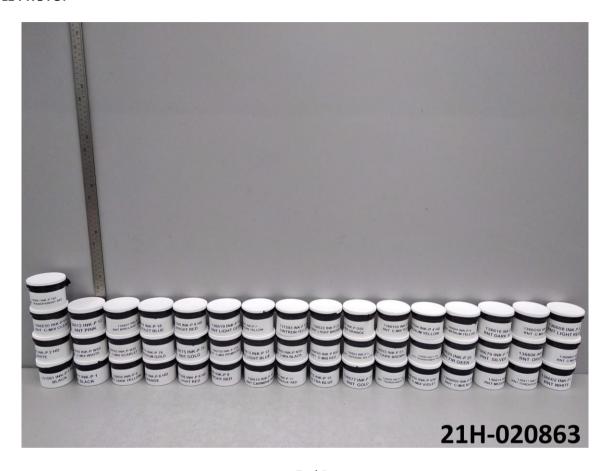
If it is not further specified in the report, the decision rule for stating conformity is based on the QIMA decision rule.

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



Test Report #: 21H-020863 Page 54 of 54

SAMPLE PHOTO:



-End Report-

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 '\phi' 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.