





## **TEST REPORT**

Test Report # 19H-000992 Date of Report Issue: March 4, 2019

Date of Sample Received: February 26, 2019 Pages: Page 1 of 22

**CLIENT INFORMATION:** 

Company: Nazdar Ink Technologies

Recipient: Tom Hill

Recipient Email: thill@nazdar.com

19H-000992

**SAMPLE INFORMATION:** 

Description: VF Series Inks

Assortment/Colors: See Table on pg.3 Purchase Order Number: -

Style/Batch No.: See Table on pg.3 Country of Distribution: United States
Supplier: - Country of Origin: United States

Quantity Submitted: 2 fluid oz./sample Labeled Age Grade: 
Date Received: 02/26/2019 Recommended Age Grade: -

Testing Period: 02/26/2019 – 03/04/2019 Tested Age Grade: -

**OVERALL RESULT:** 

**PASS** 

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

QIMA Testing (HK) Limited



Loska Yeung Lok Ka Assistant Manager, Chemical Laboratory

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## **TEST RESULTS SUMMARY:**

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

CONCLUSION	TEST(S) CONDUCTED
PASS	CPSIA Section 106 & ASTM F963-17 Toy Safety, Clause 4.3.5 Total Elements Screening in Paint and Similar Surface Coatings
PASS	ASTM F2923-14 Consumer Product Safety for Children's Jewelry, Clause 8 Total Elements Screening in Paint and Surface Coatings
PASS	ASTM F2999-14 Adult Jewelry, Clause 5 & 7 Total Elements Screening 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

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## **SPECIMEN DESCRIPTION:**

Specimen No.	Specimen Description	Location
1	Yellow ink	VFLF134 Medium Yellow
2	Green ink	VFLF146 Cyanine Green
3	Transparent ink	VF170 Clear
4	Dark Blue ink	VF156 Brilliant Ultra Blue
5	Blue ink	VF422 Reflex Blue
6	Magenta ink	VF433 Purple
7	Light blue ink	VF440 Process Blue
8	White ink	VF122 Opaque White
9	Red ink	VFLF104 Bright Red
10	Black ink	VF121 Non Arcing Black
11	Light yellow ink	VFLF130 Primrose Yellow
12	Dull black ink	VF111 Black
13	Orange ink	VFLF124 Orange
14	Dull red ink	VFLF103 Brilliant Red
15	Red orange ink	VF411 Warm Red

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#### **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)	650	240	ND	760	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	23	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.

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#### **DETAILED RESULTS:**

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

Test Method: ASTM F963-11 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	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)	650	240	ND	760	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	23	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.

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#### **DETAILED RESULTS:**

## ASTM F2999-14 Adult Jewelry, Clause 5 & 7 Total Elements Screening in Paint and Surface Coatings

Test Method: ASTM F963-11 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	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)	650	240	ND	760	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	23	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.

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## **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	

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.

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#### **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	

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.

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## **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-E1003-09.1

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	

#### 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.

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#### **DETAILED RESULTS:**

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

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	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	

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.

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#### **DETAILED RESULTS:**

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

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	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	

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.

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#### **DETAILED RESULTS:**

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

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	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	

#### 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.

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#### **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	lo.	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.

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#### **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.		13+14+15				
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.

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#### **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.	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
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.

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#### **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.	13+14+15				
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.

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### **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.

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#### **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.		13+14+15				
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.

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#### **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)	650	240	ND	760	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.

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#### **DETAILED RESULTS:**

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

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	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	

#### 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.

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## **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)	650	240	ND	760	ND	1000
Total Cadmium (Cd)	ND	ND	ND	ND	ND	75
Total Chromium (Cr)	ND	23	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.

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## **SAMPLE PHOTO:**



-End Report-

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