

Test Report

Date : 2024-04-22 No. : SP24040177		Page 1 of 9
Applicant	:	Hayes Specialties Corporation 1761 East Genesee Saginaw, MI 48601-2407 Attn: Michael
Description of Samples	:	One (1) group of submitted samples said to be: HX4943 Medium Plush \$100 Bill- 10 Inch HX4944 Medium Rainbow Plush Dog- Sitting-10 Inch HX4945 Medium Plush Dolphin w/ Shiny Star Material-11 Inch- Asst Colors HX4946Medium Plush Duck w/ Shiny Star Material-8 Inch- Asst Colors COUNTRY OF ORIGIN:CHINA COUNTRY OF DESTINATION:USA AGE GRADING FOR TESTING:3+
Date Samples Received	:	2024-04-11
Date Tested	:	2024-04-11 to 2024-04-22

Requirements	Conclusion
 1. ASTM Standard Consumer Safety Specification For Toy Safety F 963-23 physical and mechanical test flammability test heavy metal test Phthalates test 	Pass
 2. US Consumer Product Safety Improvement Act Total Lead content in paint and surface coating in accordance with Sec. 101 (f) and 16 CFR 1303. Total Lead content in substrate in accordance with Sec. 101(a). Phthalates content in accordance with Sec 108 and 16 CFR 1307. 	Pass
3. The Total Lead content requirements according to the California Proposition 65	Pass
4.The BBP, DBP, DEHP, DnHP, DINP and DIDP content requirements according to the California Proposition 65.	Pass
5.The Total Lead content requirements according to Illinois Public Act 095-1019	Pass
6.The Phthalates content requirements according to California Assembly Bill NO.1108	Pass
7. San Francisco Health CodePhthalates content in accordance with Article 34, sec 34.2	Pass

che CHEN Lufeng, James Authorized Signatory

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The following test item(s) was/were performed on submitted sample(s) and/or components confirmed by applicant.

Item No.	Component Description			
Coating ma	iterials:			
<u>1</u>	Coating on fabric:silver* ³			
Plastic mate	erials:			
<u>2</u>	Plastic eyes:black			
Textile mat	erials:			
<u>3</u>	String:green			
<u>4</u>	String:pink			
<u>5</u>	String:yellow			
<u>6</u>	String:light blue			
<u>7</u>	Fabric:green with multicolor			
<u>8</u>	Fabric of dog body:multicolor			
<u>9</u>	Nose of dog:black			
<u>10</u>	Thread eyes of dog:white with black			
<u>11</u>	Hair of duck:white			
<u>12</u>	Fabric of duck:pink with multicolor			
<u>13</u>	Fabric of duck:light blue with multicolor			
<u>14</u>	Fabric of duck:light purple with multicolor			
<u>15</u>	Mouth of duck:yellow			
<u>16</u>	Belly of dolphin:white			
Others mate	Others materials:			
<u>17</u>	Label:white with multicolor print			

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Test Results:

1. ASTM Standard Consumer Safety Specification for Toy Safety F 963-23

AGE GRADING:

The sample was age graded with the marking of "3+"; however, it was considered appropriate for children of all ages.

AGE GRADING FOR TESTING:

All ages.

1.1 Mechanical and physical hazards of the submitted sample Ref.: ASTM F 963-23 Applicable requirements before and after use and abuse testing:

Applicable		
Section	Description	<u>Result</u>
4	Safety requirements	
4.1	Material Quality	Pass
4.2	Flammability	$Pass^{*1}$
4.3	Toxicology	
4.3.7	Stuffing Material	Pass
4.6	Small Objects	Pass
4.7	Accessible Edges	Pass
4.9	Accessible Points	Pass
4.14	Cords, Straps, and Elastics	Pass
4.27	Stuffed and Beanbag-Type Toys	Pass
5	Labeling Requirements	
5.1.2	Tracking label	Pass
5.2	Age grading labeling	*2
5.15	Promotional Materials	Pass
7	Producer's Markings	
7.1	Producer's Name and Address	Pass

 $*^{1}$ = Please refer to section 1.2 of this report for details.

 $*^2$ = See age grading.

Use and abuse testing:

Applicable		
Section	<u>Description</u>	Test Condition
8.5	Normal Use Testing	
8.6	Abuse Testing	
8.7	Drop Tests	10 drops at $4\frac{1}{2}$ ft.
8.8	Torque Tests	4 in-lbs or $\pm 180^{\circ}$
8.9	Tension Tests	15 lbs.
8.10	Compression Tests	30 lbs.

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Test Results:

1.2 Flammability test for solids and soft toys

Ref.: ASTM F963-23 Section 4.2 Method used: FHSA 16CFR 1500.44 Result: Pass

Sample	Burn rate (in/sec.)
HX4943 Medium Plush \$100 Bill	DNI
HX4944 Medium Rainbow Plush Dog	DNI
HX4945 Medium Plush Dolphin w	DNI
HX4946Medium Plush Duck w	DNI

DNI = Did not ignite Note: In accordance with the FHSA, the burn rate should not be greater than 0.1 in. per second.

1.3 Heavy metal test

Ref.: ASTM F963-23 Section 4.3.5 Method: ASTM F963-23 Section 8.3 Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

4.3.5.1 Paint and similar surface-coating

Total lead test

Sample	<u>Result</u>	Limit
<u>1</u>	<10ppm	90ppm

Soluble metals test

 $*^3$ = There were insufficient materials to produce the test portion of 100 mg in one sample. According to the Standard, the quantities of the elements were calculated as if 100 mg of test portion had been used. The actual weight of the specified materials used for analysis were shown below :

<u>1</u> Coating on fabric:silver (39.7mg)

Soluble lead Soluble cadmium Soluble chromium Soluble barium Soluble antimony Soluble arsenic Soluble mercury	<u>1</u> <5ppm <5ppm <5ppm <5ppm <2ppm <5ppm	Limit 90ppm 75ppm 60ppm 1000ppm 60ppm 25ppm 60ppm
Soluble mercury Soluble selenium	<5ppm <5ppm	

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Test Results:

4.3.5.2 Toys Substrate Materials

Total lead analysis

Sample	Result	<u>Limit</u>
2	<10ppm	$1\overline{00ppm}$
<u>17</u>	<10ppm	100ppm

Soluble metals test

Soluble lead Soluble cadmium Soluble chromium Soluble barium Soluble antimony Soluble arsenic Soluble mercury Soluble selenium	2 <5ppm <5ppm <5ppm <5ppm <2ppm <5ppm <5ppm	<u>3</u> <5ppm <5ppm <5ppm <5ppm <2ppm <5ppm <5ppm	<u>4</u> <5ppm <5ppm <5ppm <5ppm <2ppm <5ppm <5ppm	<u>5</u> <5ppm <5ppm <5ppm <5ppm <2ppm <5ppm <5ppm	Limit 90ppm 75ppm 60ppm 1000ppm 60ppm 25ppm 60ppm 500ppm
Soluble lead Soluble cadmium Soluble chromium Soluble barium Soluble antimony Soluble arsenic Soluble mercury Soluble selenium.	<u>6</u> <5ppm <5ppm <5ppm <5ppm <2ppm <5ppm <5ppm	<u>7</u> <5ppm <5ppm <5ppm 27ppm <2ppm <5ppm <5ppm	<u>8</u> <5ppm <5ppm <5ppm <5ppm <2ppm <5ppm <5ppm	<u>9</u> <5ppm <5ppm <5ppm <5ppm <5ppm <5ppm	Limit 90ppm 75ppm 60ppm 1000ppm 60ppm 25ppm 60ppm 500ppm
Soluble lead Soluble cadmium Soluble chromium Soluble barium Soluble antimony Soluble arsenic Soluble mercury Soluble selenium	<u>10</u> <5ppm <5ppm <5ppm <5ppm <2ppm <5ppm <5ppm	<u>11</u> <5ppm <5ppm <5ppm <5ppm <2ppm <5ppm <5ppm	<u>12</u> <5ppm <5ppm <5ppm 21ppm <2ppm <5ppm <5ppm	<u>13</u> <5ppm <5ppm <5ppm 25ppm <5ppm <5ppm <5ppm	<u>Limit</u> 90ppm 75ppm 60ppm 1000ppm 60ppm 500ppm 500ppm

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Test Results:

	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>Limit</u>
Soluble lead	<5ppm	<5ppm	<5ppm	<5ppm	90ppm
Soluble cadmium	<5ppm	<5ppm	<5ppm	<5ppm	75ppm
Soluble chromium	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble barium	<5ppm	<5ppm	<5ppm	<5ppm	1000ppm
Soluble antimony	19ppm	<5ppm	12ppm	<5ppm	60ppm
Soluble arsenic	<2ppm	<2ppm	<2ppm	<2ppm	25ppm
Soluble mercury	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble selenium	<5ppm	<5ppm	<5ppm	<5ppm	500ppm

Note: < denotes less than.

1.4 Phthalates content

Ref.: ASTM F963-23, Section 4.3.8 and 16 CFR 1307 Determined by: Gas Chromatography with Mass Selective Detector

Test Item	CAS No.	Result(ppm)			<u>Limit</u>
<u>rest item</u>	<u>CAS NO.</u>	<u>1</u>	<u>2</u>	<u>17</u>	<u>(ppm)</u>
Di-n-butyl phthalate (DBP)	84-74-2	<100	<100	<100	1000
Benzyl-n-butyl phthalate (BBP)	85-68-7	<100	<100	<100	1000
Di (2-ethylhexyl) phthalate (DEHP)	117-81-7	<100	<100	<100	1000
Diisononyl phthalate (DINP)	28553-12-0	<100	<100	<100	1000
Di-n-Hexyl phthalate (DnHP)	84-75-3	<100	<100	<100	1000
Di-isobutyl phthalate(DIBP)	84-69-5	<100	<100	<100	1000
Di-n-penty1 phthalate(DPENP)	131-18-0	<100	<100	<100	1000
Di-cyclohexyl phthalate(DCHP)	84-61-7	<100	<100	<100	1000

Note: < denotes less than.

2. US Consumer Product Safety Improvement Act

2.1 Children's products containing lead - Total Lead content in paint and surface coating Ref.: CPSIA Sec 101(f) and 16 CFR 1303

Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

Sample	Result	Limit
<u>1</u>	<10ppm	90ppm

Note: < denotes less than.

2.2 Children's products containing lead - Total Lead content in substrate Ref.: CPSIA Sec 101(a) Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

Sample	Result	Limit
2	<10ppm	$1\overline{00ppm}$
17	<10ppm	100ppm
Nota: <u> </u>	ee than	11

Note: < denotes less than.

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Test Results:

2.3 Phthalates content

Ref.: CPSIA Sec 108 and 16 CFR 1307 Determined by: Gas Chromatography with Mass Selective Detector

Test Item	CAS No.	Result(ppm)			Limit
<u>Test Itelli</u>	<u>CAS NO.</u>	<u>1</u>	2	<u>17</u>	<u>(ppm)</u>
Di-n-butyl phthalate (DBP)	84-74-2	<100	<100	<100	1000
Benzyl-n-butyl phthalate (BBP)	85-68-7	<100	<100	<100	1000
Di (2-ethylhexyl) phthalate (DEHP)	117-81-7	<100	<100	<100	1000
Diisononyl phthalate (DINP)	28553-12-0	<100	<100	<100	1000
Di-n-Hexyl phthalate (DnHP)	84-75-3	<100	<100	<100	1000
Di-isobutyl phthalate(DIBP)	84-69-5	<100	<100	<100	1000
Di-n-penty1 phthalate(DPENP)	131-18-0	<100	<100	<100	1000
Di-cyclohexyl phthalate(DCHP)	84-61-7	<100	<100	<100	1000

Note: < denotes less than.

3. The Total Lead Content

Ref.: California Proposition 65

Determined by: Inductively Coupled Plasma Optical Emission Spectrophotometer

Sample Sample	Result	<u>Limit</u>
<u>1</u>	<10ppm	90ppm
<u>2</u>	<10ppm	100ppm
<u>17</u>	<10ppm	100ppm

Note: < denotes less than.

4. The BBP, DBP, DEHP, DnHP, DINP and DIDP content

Ref.: California Proposition 65

Determined by: Gas Chromatography with Mass Selective Detector

		<u>1</u>	<u>2</u>	<u>17</u>
-	Di-n-butyl phthalate (DBP)	<100ppm	<100ppm	<100ppm
-	Benzyl-n-butyl phthalate (BBP)	<100ppm	<100ppm	<100ppm
-	Di (2-ethylhexyl) phthalate (DEHP)	<100ppm	<100ppm	<100ppm
-	Di-n-Hexyl phthalate (DnHP)	<100ppm	<100ppm	<100ppm
-	Di-iso-nonyl phthalate(DINP)	<100ppm	<100ppm	<100ppm
-	Di-iso-decyl phthalate(DIDP)	<100ppm	<100ppm	<100ppm

Requirement: Each of the above phthalates shall not be greater than 1000ppm by mass of the tested material.

Note: < denotes less than.

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5. The Total Lead Content requirements according to Illinois Public Act 095-1019 Test method: CPSC-CH-E1003-09.1 & CPSC-CH-E1002-08.3 Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

Sample	Result	<u>Limit</u>
<u>1</u>	<10ppm	40ppm
<u>2</u>	<10ppm	40ppm
<u>17</u>	<10ppm	40ppm

Note: < denotes less than.

6. Phthalates content

Ref.: California Assembly Bill NO.1108 Determined by: Gas Chromatography with Mass Selective Detector

A. Any toy or children article

Test Item	CASNO	Result(ppm)			Limit(nnm)
<u>Test Item</u>	<u>CAS No.</u>	<u>1</u>	<u>2</u>	<u>17</u>	Limit(ppm)
Dibutyl phthalate(DBP)	84-74-2	<100	<100	<100	1000
Butyl benzyl phthalate (BBP)	85-68-7	<100	<100	<100	1000
Di -2-ethylhexyl phthalate (DEHP)	117-81-7	<100	<100	<100	1000

B. Any toys and children articles which can be placed in mouth for children under 3 years

Test Item	CACNE	Result(ppm)			
<u>Test Item</u>	CAS No.	<u>1</u>	<u>2</u>	<u>17</u>	Limit(ppm)
Di-n-octyl phthalate(DNOP)	117-84-0	<100	<100	<100	1000
Di-iso-decyl phthalate(DIDP)	26761-40-0	<100	<100	<100	1000
Di-iso-nonyl phthalate(DINP)	28553-12-0	<100	<100	<100	1000

Note: < denotes less than.

<u>7. Phthalates content</u> Ref.: San Francisco Health Code Article 34, sec 34.2

Determined by: Gas Chromatography with Mass Selective Detector

<u>Test Item</u>	<u>1</u>	<u>2</u>	<u>17</u>
Di-n-butyl phthalate (DBP)	<100ppm	<100ppm	<100ppm
Benzyl-n-butyl phthalate (BBP)	<100ppm	<100ppm	<100ppm
Di (2-ethylhexyl) phthalate(DEHP)	<100ppm	<100ppm	<100ppm
Di-n-octyl phthalate(DNOP)	<100ppm	<100ppm	<100ppm
Di-iso-nonyl phthalate(DINP)	<100ppm	<100ppm	<100ppm
Di-iso-decyl phthalate(DIDP)	<100ppm	<100ppm	<100ppm
Di-iso-decyl phthalate(DIDP)	<100ppm	<100ppm	<100ppm

Requirement: Each of the above phthalates shall not be greater than 1000ppm by mass of the tested material.

Note: < denotes less than.

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The photo of submitted samples



***** End of Test Report *****

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