

Test Report

Date : 2019-10-25
No. : SP19100006

Page 1 of 6

Applicant : Hayes Specialties Corporation
1761 East Genesee Saginaw, MI 48601-2407

Description of Samples : One (1) group of submitted samples said to be:
16576--COWBOY HAT-CHILDRENS SIZE W/WHITE
STYLE NO.: 16576
COUNTRY OF ORIGIN: CHINA
AGE GRADING FOR TESTING: 3+

Date Samples Received : 2019-10-08, 2019-10-24

Date Tested : 2019-10-08 to 2019-10-24

Requirements	Conclusion
1. ASTM Standard Consumer Safety Specification For Toy Safety F 963-17 - physical and mechanical test - flammability test - heavy metal test	Pass
2. US Consumer Product Safety Improvement Act - 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 Code - Phthalates content in accordance with Article 34, sec 34.2	Pass

This Test Report supersedes our previous Test Report No. SP19100006 issued on 2019-10-24 which is hereby deemed null and void.



HUANG Qinglai, Owen
Authorized Signatory



STC (Shanghai) Company Limited

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Test Report

Date : 2019-10-25

Page 2 of 6

No. : SP19100006

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

Item No.	Component Description
<u>Plastic materials:</u>	
1	Plastic on rope:white ^{#1}
2	Buckle:white ^{#1}
<u>Textile materials:</u>	
3	Rope tape:white ^{#1}
<u>Metal materials:</u>	
4	Spring in buckle:silver ^{#1}
<u>Others materials:</u>	
5	Fabric:pink with glue ^{#1}
6	Fabric:brown with glue ^{#1}
7	Fabric:red with glue ^{#1}

Remark:^{#1} denotes This Results of these test points refer to our previous Test Report, No. SP18080382 issued on 2018-08-23.

Test Results:

1.ASTM Standard Consumer Safety Specification for Toy Safety F 963-17

AGE GRADING:

The sample did not contain an age grade; however, the applicant requested it be tested according to the age grade of 36 months and up.

AGE GRADING FOR TESTING:

36 months and up.

1.1 Mechanical and physical hazards of the submitted sample

Ref.: ASTM F 963-17

Applicable requirements before and after use and abuse testing:

<u>Applicable</u> Section	<u>Description</u>	<u>Result</u>
4	<u>Safety requirements</u>	----
4.1	Material Quality	Pass
4.2	Flammability	Pass* ¹
4.6	Small Objects	Pass
4.7	Accessible Edges	Pass
4.9	Accessible Points	Pass
5	<u>Labeling Requirements</u>	----
5.1	Federal Government Requirements	Pass
5.2	Age grading labeling	* ²
5.3	Safety Labeling Requirements	Pass
5.11	Small objects, Small Balls, Marbles and Balloons	Pass
7	<u>Producer's Markings</u>	----
7.1	Producer's Name and Address	Pass

*¹ = Please refer to section 1.2 of this report for details.

*² = See age grading.

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Test Report

Date : 2019-10-25
No. : SP19100006

Page 3 of 6

Test Results:

Use and abuse testing:

<u>Applicable Section</u>	<u>Description</u>	<u>Test Condition</u>
8.5	Normal Use Testing	
8.6	Abuse Testing	
8.7	Drop Tests	4 drops at 3 ft.
8.8	Torque Tests	4 in-lbs or ±180°
8.9	Tension Tests	15 lbs.
8.10	Compression Tests	30 lbs.

1.2 Flammability test for solids and soft toys

Ref.: ASTM F963-17 Section 4.2
Method used: FHSA 16CFR 1500.44
Result: pass

<u>Sample</u>	<u>Burn rate (in/sec.)</u>
CHILD HAT	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 F963-17 Section 4.3.5
Method: ASTM F963-17 Section 8.3
Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer & Inductively Coupled Plasma Mass Spectrometry

4.3.5.2 Toys Substrate Materials

Total lead analysis

<u>Sample</u>	<u>Result</u>	<u>Limit</u>
<u>1+2</u>	<10ppm	100ppm
<u>4</u>	<10ppm	100ppm
<u>5+6+7</u>	<10ppm	100ppm

Soluble metals test

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Limit</u>
Soluble lead.....	<5ppm	<5ppm	<5ppm	<5ppm	90ppm
Soluble cadmium.....	<5ppm	<5ppm	<5ppm	<5ppm	75ppm
Soluble chromium.....	<5ppm	<5ppm	<5ppm	11ppm	60ppm
Soluble barium.....	<5ppm	<5ppm	<5ppm	<5ppm	1000ppm
Soluble antimony.....	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble arsenic.....	<2ppm	<2ppm	<2ppm	<2ppm	25ppm
Soluble mercury.....	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble selenium.....	<5ppm	<5ppm	<5ppm	<5ppm	500ppm

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Test Report

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No. : SP19100006

Page 4 of 6

Test Results:

	<u>5</u>	<u>6</u>	<u>7</u>	<u>Limit</u>
Soluble lead.....	<5ppm	<5ppm	<5ppm	90ppm
Soluble cadmium.....	<5ppm	<5ppm	<5ppm	75ppm
Soluble chromium.....	<5ppm	<5ppm	<5ppm	60ppm
Soluble barium.....	<5ppm	<5ppm	7ppm	1000ppm
Soluble antimony.....	<5ppm	<5ppm	<5ppm	60ppm
Soluble arsenic.....	<2ppm	<2ppm	<2ppm	25ppm
Soluble mercury.....	<5ppm	<5ppm	<5ppm	60ppm
Soluble selenium.....	<5ppm	<5ppm	<5ppm	500ppm

Note: < denotes less than.

2. US Consumer Product Safety Improvement Act

2.1 Children's products containing lead - Total Lead content in substrate

Ref.: CPSIA Sec 101(a)

Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

<u>Sample</u>	<u>Result</u>	<u>Limit</u>
<u>1+2</u>	<10ppm	100ppm
<u>4</u>	<10ppm	100ppm
<u>5+6+7</u>	<10ppm	100ppm

Note: < denotes less than.

2.2 Phthalates content

Ref.: CPSIA Sec 108 and 16 CFR PART 1307

Determined by: Gas Chromatography with Mass Selective Detector

<u>Test Item</u>	<u>CAS No.</u>	<u>Result(ppm)</u>		<u>Limit (ppm)</u>
		<u>1+2</u>	<u>5+6+7</u>	
Di-n-butyl phthalate (DBP)	84-74-2	<100	<100	1000
Benzyl-n-butyl phthalate (BBP)	85-68-7	<100	<100	1000
Di (2-ethylhexyl) phthalate (DEHP)	117-81-7	<100	<100	1000
Diisononyl phthalate (DINP)	28553-12-0	<100	<100	1000
Di-n-Hexyl phthalate (DnHP)	84-75-3	<100	<100	1000
Di-isobutyl phthalate(DIBP)	84-69-5	<100	<100	1000
Di-n-pentyl phthalate(DPENP)	131-18-0	<100	<100	1000
Di-cyclohexyl phthalate(DCHP)	84-61-7	<100	<100	1000

Note: < denotes less than.

3. The Total Lead Content

Ref.: California Proposition 65

Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

<u>Sample</u>	<u>Result</u>	<u>Limit</u>
<u>1+2</u>	<10ppm	100ppm
<u>4</u>	<10ppm	100ppm
<u>5+6+7</u>	<10ppm	100ppm

Note: < denotes less than.

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Test Report

Date : 2019-10-25
No. : SP19100006

Page 5 of 6

Test Results:

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

Ref.: California Proposition 65

Determined by: Gas Chromatography with Mass Selective Detector

	<u>1+2</u>	<u>5+6+7</u>
- Di-n-butyl phthalate (DBP)	<100ppm	<100ppm
- Benzyl-n-butyl phthalate (BBP)	<100ppm	<100ppm
- Di (2-ethylhexyl) phthalate (DEHP)	<100ppm	<100ppm
- Di-n-Hexyl phthalate (DnHP)	<100ppm	<100ppm
- Di-iso-nonyl phthalate(DINP)	<100ppm	<100ppm
- Di-iso-decyl phthalate(DIDP)	<100ppm	<100ppm

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

Note: < denotes less than.

5. The Total Lead Content requirements according to Illinois Public Act 095-1019

Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

<u>Sample</u>	<u>Result</u>	<u>Limit</u>
<u>1+2</u>	<10ppm	40ppm
<u>4</u>	<10ppm	40ppm
<u>5+6+7</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

<u>Test Item</u>	<u>CAS No.</u>	<u>Result(ppm)</u>		<u>Limit(ppm)</u>
		<u>1+2</u>	<u>5+6+7</u>	
Dibutyl phthalate(DBP)	84-74-2	<100	<100	1000
Butyl benzyl phthalate (BBP)	85-68-7	<100	<100	1000
Di -2-ethylhexyl phthalate (DEHP)	117-81-7	<100	<100	1000

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

<u>Test Item</u>	<u>CAS No.</u>	<u>Result(ppm)</u>		<u>Limit(ppm)</u>
		<u>1+2</u>	<u>5+6+7</u>	
Di-n-octyl phthalate(DNOP)	117-84-0	<100	<100	1000
Di-iso-decyl phthalate(DIDP)	26761-40-0	<100	<100	1000
Di-iso-nonyl phthalate(DINP)	28553-12-0	<100	<100	1000

Note: < denotes less than.

7. Phthalates content

Ref.: San Francisco Health Code Article 34, sec 34.2

Determined by: Gas Chromatography with Mass Selective Detector

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Test Report

Date : 2019-10-25
No. : SP19100006

Page 6 of 6

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	<u>1+2</u>	<u>5+6+7</u>
- Di-n-butyl phthalate (DBP)	<100ppm	<100ppm
- Benzyl-n-butyl phthalate (BBP)	<100ppm	<100ppm
- Di (2-ethylhexyl) phthalate (DEHP)	<100ppm	<100ppm
- Di-n-Hexyl phthalate (DnHP)	<100ppm	<100ppm
- Di-iso-nonyl phthalate(DINP)	<100ppm	<100ppm
- Di-iso-decyl phthalate(DIDP)	<100ppm	<100ppm

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

Note: < denotes less than.

The photo of submitted samples



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

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5. The results in Report apply only to the sample as received and do not apply to the bulk, unless the sampling has been carried out by the Company and is stated as such in the Report.
6. When a statement of conformity to a specification or standard is provided, the ILAC-G8 Guidance document (and/or IEC Guide 115 in the electrotechnical sector) will be adopted as a decision rule for the determination of conformity unless it is inherent in the requested specification or standard, or otherwise specified in the Report.
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