



Test Report

Date : 2020-05-11
No. : SP20050002

Page 1 of 7

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

Supplier : UNION GRAND

Buyer : HAYES SPECIALTIES CORP

Description of Samples : One (1) group of submitted samples said to be:
ROBOTIC DINOSAUR GRABBER
DUCK WHISTLE ON LANYARD W/BREAKAWAY YELLOW
STYLE NO.: #17841/#16909
P/O NO.: 342039/342039
COUNTRY OF ORIGIN: CN
COUNTRY OF DESTINATION: USA
AGE GRADING FOR APPLICANT: 3+

Date Samples Received : 2020-05-06

Date Tested : 2020-05-06 to 2020-05-09

Requirements	Conclusion
1. ASTM Standard Consumer Safety Specification For Toy Safety F 963-17 - physical and mechanical test(Apart from clause 7.1) - flammability test - heavy metal 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. Total cadmium content requirements according to the California Proposition 65.	Pass
6. The Total Lead content requirements according to Illinois Public Act 095-1019	Pass
7. The Phthalates content requirements according to California Assembly Bill NO.1108	Pass
8. San Francisco Health Code - Phthalates content in accordance with Article 34, sec 34.2	Pass


HUANG Qinglai, Owen
Authorized Signatory



STC (Shanghai) Company Limited

130 Huashen Road, Waigaoqiao Pilot Free Trade Zone, Shanghai, China. Zip Code: 200131
Tel: +86 21 5219 8248 Fax: +86 21 5219 8249 Email: shstc@shstc.org Website: www.stc-group.org
This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

Instead of certified for the society, it is used for internal reference only.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

Test Report

Date : 2020-05-11
No. : SP20050002

Page 2 of 7

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>	
<u>1</u>	(17841)body: green
<u>2</u>	(17841)body: brown
<u>3</u>	(16909)body: yellow
<u>4</u>	(16909)plastic sheet: transparent
<u>5</u>	(16909)buckle: red
<u>Metal materials:</u>	
<u>6</u>	(17841)axis: silver* ³
<u>Textile materials:</u>	
<u>7</u>	(16909)rope: yellow

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 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 Section</u>	<u>Description</u>	<u>Result</u>
4	<u>Safety requirements</u>	----
4.1	Material Quality	Pass
4.2	Flammability	Pass* ¹
4.7	Accessible Edges	Pass
4.9	Accessible Points	Pass
4.11	Nails and Fasteners	Pass
4.18	Holes, clearance and Accessibility of Mechanisms	Pass
5	<u>Labeling Requirements</u>	----
5.2	Age grading labeling	* ²
7	<u>Producer's Markings</u>	----
7.1	Producer's Name and Address	* ³

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

*² = See age grading.

*³ = There were no producer's/distributor's name and address on the submitted sample.

STC (Shanghai) Company Limited

130 Huashen Road, Waigaoqiao Pilot Free Trade Zone, Shanghai, China. Zip Code: 200131

Tel: +86 21 5219 8248 Fax: +86 21 5219 8249 Email: shstc@shstc.org Website: www.stc-group.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

Instead of certified for the society, it is used for internal reference only.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



Test Report

Date : 2020-05-11
No. : SP20050002

Page 3 of 7

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 $\pm 180^\circ$
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>
Dragon	DNI
Duck	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>
1+2	<10ppm	100ppm
3+5	<10ppm	100ppm
4	<10ppm	100ppm
6	<10ppm	100ppm

Soluble metals test

*3 = According to requirement of ASTM F963-17, materials such as metal, glass, and ceramic are exempted if they are not small parts.

STC (Shanghai) Company Limited

130 Huashen Road, Waigaoqiao Pilot Free Trade Zone, Shanghai, China. Zip Code: 200131

Tel: +86 21 5219 8248 Fax: +86 21 5219 8249 Email: shstc@shstc.org Website: www.stc-group.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

Instead of certified for the society, it is used for internal reference only.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

Test Report

Date : 2020-05-11
No. : SP20050002

Page 4 of 7

Test Results:

	<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	<5ppm	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

	<u>5</u>	<u>7</u>	<u>Limit</u>
Soluble lead.....	<5ppm	<5ppm	90ppm
Soluble cadmium.....	<5ppm	<5ppm	75ppm
Soluble chromium.....	<5ppm	<5ppm	60ppm
Soluble barium.....	<5ppm	<5ppm	1000ppm
Soluble antimony.....	<5ppm	<5ppm	60ppm
Soluble arsenic.....	<2ppm	<2ppm	25ppm
Soluble mercury.....	<5ppm	<5ppm	60ppm
Soluble selenium.....	<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>3+5</u>	<10ppm	100ppm
<u>4</u>	<10ppm	100ppm
<u>6</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>
		1+2	3+5	4	
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-pentyl phthalate(DPENP)	131-18-0	<100	<100	<100	1000
Di-cyclohexyl phthalate(DCHP)	84-61-7	<100	<100	<100	1000

STC (Shanghai) Company Limited

130 Huashen Road, Waigaoqiao Pilot Free Trade Zone, Shanghai, China. Zip Code: 200131

Tel: +86 21 5219 8248 Fax: +86 21 5219 8249 Email: shstc@shstc.org Website: www.stc-group.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

Instead of certified for the society, it is used for internal reference only.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

Test Report

Date : 2020-05-11
No. : SP20050002

Page 5 of 7

Test Results:

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>3+5</u>	<10ppm	100ppm
<u>4</u>	<10ppm	100ppm
<u>6</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+2</u>	<u>3+5</u>	<u>4</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.

5. The Total cadmium 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>	<5ppm	75ppm
<u>3+5</u>	<5ppm	75ppm
<u>4</u>	<5ppm	75ppm
<u>6</u>	<5ppm	75ppm

Note: < denotes less than.

6. 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>3+5</u>	<10ppm	40ppm
<u>4</u>	<10ppm	40ppm
<u>6</u>	<10ppm	40ppm

STC (Shanghai) Company Limited

130 Huashen Road, Waigaoqiao Pilot Free Trade Zone, Shanghai, China. Zip Code: 200131

Tel: +86 21 5219 8248 Fax: +86 21 5219 8249 Email: shstc@shstc.org Website: www.stc-group.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

Instead of certified for the society, it is used for internal reference only.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

Test Report

Date : 2020-05-11
No. : SP20050002

Page 6 of 7

Test Results:

Note: < denotes less than.

7. 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>3+5</u>	<u>4</u>	
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

<u>Test Item</u>	<u>CAS No.</u>	<u>Result(ppm)</u>			<u>Limit(ppm)</u>
		<u>1+2</u>	<u>3+5</u>	<u>4</u>	
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.

8. Phthalates content

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

Determined by: Gas Chromatography with Mass Selective Detector

	<u>1+2</u>	<u>3+5</u>	<u>4</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

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

Note: < denotes less than.

STC (Shanghai) Company Limited

130 Huashen Road, Waigaoqiao Pilot Free Trade Zone, Shanghai, China. Zip Code: 200131

Tel: +86 21 5219 8248 Fax: +86 21 5219 8249 Email: shstc@shstc.org Website: www.stc-group.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

Instead of certified for the society, it is used for internal reference only.

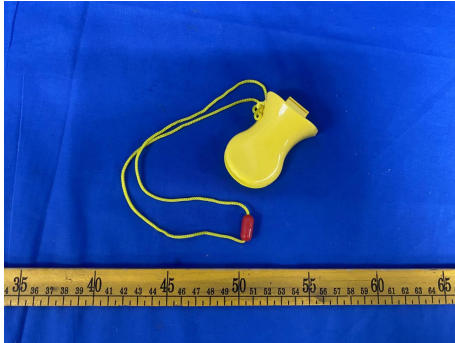
For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

Test Report

Date : 2020-05-11
No. : SP20050002

Page 7 of 7

The photo of submitted samples



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

STC (Shanghai) Company Limited

130 Huashen Road, Waigaoqiao Pilot Free Trade Zone, Shanghai, China. Zip Code: 200131

Tel: +86 21 5219 8248 Fax: +86 21 5219 8249 Email: shstc@shstc.org Website: www.stc-group.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

Instead of certified for the society, it is used for internal reference only.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

Conditions of Issuance of Test Reports

1. All samples and goods are accepted by The STC (Shanghai) Company Limited (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The Company provides its services on the basis that such terms and conditions constitute express agreement between the Company and any person, firm or company requesting its services (the "Clients").
2. Any report issued by the Company as a result of this application for testing service (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to his customer, supplier or other persons directly concerned. Subject to clause 3, the Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
3. The Company shall be at liberty to disclose the testing-related documents and/or files anytime to any third-party accreditation and/or recognition bodies for audit or other related purposes. No liabilities whatsoever shall attach to the Company's act of disclosure.
4. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
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.
7. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
8. Sample submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
9. The Company will not be liable for or accept responsibility for any loss or damage howsoever arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
10. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
11. Subject to the variable length of retention time for test data and report stored hereinto as to otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of this test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after the retention period. Under no circumstances shall we be liable for damages of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.
12. Issuance records of the Report are available on the internet at www.stc-group.org. Further enquiry of validity or verification of the Reports should be addressed to the Company.