



CONSUMER PRODUCTS SERVICES DIVISION



## SUPER IMPULSE LTD

**Technical Report:** (5220)108-0811

June 08, 2020

Date Received: June 05, 2020

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JOHNSON YAM / NICOLE NG  
SUPER IMPULSE LTD  
UNIT 512-513, 5/F, PENINSULA CENTRE, 67 MODY  
ROAD  
TSIM SHA TSUI  
KOWLOON  
HONG KONG

Sample Description:	WORLD'S SMALLEST Pictionary DIPPED PARTS		
Vendor:	N/A	Sample Size:	8 + 1 LOT(S)
Manufacturer:	N/A	Style No(s):	5021
Buyer:	N/A	SKN/SKU No.:	N/A
Labeled Age Grade:	6+	PO No.:	N/A
Appropriate Age Grade:	OVER 6 YEARS OF AGE	Ref #:	N/A
Client Specified Age Grade:	NOT SPECIFIED	Country of Origin:	CHINA
Tested Age Grade:	OVER 6 YEARS OF AGE	Assortment No.:	N/A
UPC Code:	810010990853	Country of destination:	US+EN

### **EXECUTIVE SUMMARY:**

The sample(s) MEET the following requirement(s):

- The submitted sample(s) was reviewed to identify rules, bans, regulations and standards under the CPSC (Consumer Product Safety Act) enforced by the CPSC.
- The mechanical hazards requirements of 16 CFR 1500, "Federal Hazardous Substances Act Regulations".
- The flammability requirement of solids under ASTM F963-17 section 4.2 according to Annex A5, "Flammability testing procedure for solids and soft toys".
- The labeling requirements of ASTM F963-17, "Standard consumer safety specification for toy safety".
- The mechanical hazards requirements of ASTM F963-17, "Standard consumer safety specification for toy safety".
- The soluble heavy metals content in surface coating requirements of ASTM F963-17, "Standard Consumer Safety Specification for Toy Safety," Section 4.3.5.1(2).
- The soluble heavy metals content in substrate requirements of ASTM F963-17, "Standard Consumer Safety Specification for Toy Safety," Section 4.3.5.2(2)(b).
- The BBP, DBP, DEHP, DnHP and DIDP content requirements in toys, child care articles and watches according to the California Proposition 65 settlements of County of Sacramento case number 07AS04683, and the Alameda Superior Court case numbers BG07350969, RG08367601, RG07351032 and RG08378050.
- The total lead content requirements in children products according to the California Proposition 65 settlements of Alameda Superior Court RG 07356892.



**EXECUTIVE SUMMARY:**

The sample(s) MEET the following requirement(s):

- The phthalates (BBP, DBP, DEHP, DINP, DIBP, DPENP, DHEXP & DCHP) content requirements of the Consumer Product Safety Improvement Act (CPSIA) of 2008 Sec. 108(a) and 108(c), 16 CFR 1307).
- The total lead content of 100ppm requirements by composite testing in substrate materials (Consumer Products Safety Improvement Act (CPSIA) of 2008).
- The total lead content of 90ppm requirements of 16 CFR 1303, "Ban of lead-containing paint and certain consumer products bearing lead-containing paint" as mandated by Congress in section 101(f) of the Consumer Products Safety Improvement Act (CPSIA) of 2008, Public Law 110-314.
- The tracking label requirement of the Consumer Product Safety Improvement Act (CPSIA) of 2008 section 103 Tracking Labels for Children's Products.
- The heavy metals content in packaging requirements of Model Toxics Legislation of the Toxics in Packaging Clearinghouse, TPCH (formerly the Coalition of Northeastern Governors, CONEG).

Note: The sample(s) was not evaluated to the Normal Use testing requirements specified in ASTM F963-17, Section 8.5. It is the responsibility of the manufacturer, vendor or distributor to conduct tests that will simulate normal use conditions. These tests shall ensure that hazards are not generated through normal wear and deterioration of the sample(s). These tests shall also simulate the normal play mode of the toy and to simulate the expected mode of use of the particular toy. The tests shall be conducted in an expected use environment. These normal use tests shall simulate the intended use of the toy based on its estimated lifetime.

Note: According to the associated documents of Consumer Product Safety Improvement Act (CPSIA) of 2008, exemptions were granted to certain materials or products, such as natural materials / paper and similar materials / CMYK process printing inks / metal & alloys / electronics devices components / ordinary books / dyed & undyed textiles. Therefore, the lead content analysis of some components was not conducted.

Note: According to ASTM F963-17, "Standard consumer safety specification on toy safety", Annex A11.10.1.5, exemption were granted to paper and paperboard. Therefore, the heavy metals content in substrate analysis of some components of ASTM F963-17, Section 4.3.5.2(2)(b) was not conducted.

Note: Insufficient surface coatings were found on the submitted samples. Therefore, the heavy metals tests were conducted on the submitted parts.

BUREAU VERITAS HONG KONG LIMITED

Lai Ka Ming, Kent  
Director  
Toys and Juvenile Products Department



**RESULTS:**

**APPROPRIATE AGE GRADE DETERMINATION**

The Appropriate Age Grade is determined with reference to the Age Determination Guidelines of the Consumer Product Safety Commission (CPSC); and the ASTM F963-17, "Standard Consumer Safety Specification for Toy Safety". Annex A1	
Note :	The most stringent age grade from the Labeled Age Grade and the Appropriate Age Grade will be used for testing.
Note :	If the client does not specify an age grade for testing or request Bureau Veritas Consumer Products Services, Inc. to determine an appropriate age grade, the labeled age grade will be used for testing.

**USE AND ABUSE TESTS**

The samples were undergo the tests in accordance with section 8.6 through 8.16, whichever is applicable		
Test	Test Parameters	Standard Reference
Impact Test	4 x 3 ft	1500.53(b)
Torque Test	4 in-lbs	1500.53(e)
Tension Test	15 lbs	1500.53(f)
Compression Test	30 lbs	1500.53(g)



**RESULTS:**

**PHYSICAL AND MECHANICAL HAZARDS (ASTM F963-17)**

Section	Requirement	Result
4.1	Material Quality	M
4.3.7	Stuffing Materials	N/A
4.5	Sound-Producing Toys	N/A
4.6	Small Objects	N/A
4.7	Accessible Edges	M
4.8	Projections	N/A
4.9	Accessible Points	M
4.10	Wires and Rods	N/A
4.11	Nails and Fasteners	N/A
4.12	Plastic Film	N/A
4.13	Folding Mechanisms and Hinges	N/A
4.14	Cords, Straps and Elastics	N/A
4.15	Stability and Over-Load Requirements	N/A
4.16	Confined Spaces	N/A
4.17	Wheels, Tires, and Axles	N/A
4.18	Holes, Clearances and Accessibility of Mechanisms	N/A
4.19	Simulated Protective Devices	N/A
4.20	Pacifiers	N/A
4.21	Projectile Toys	N/A
4.22	Teethers and Teething Toys	N/A
4.23	Rattles	N/A
4.24	Squeeze Toys	N/A
4.25	Battery-Operated Toys (exclude Section 4.25.10 Battery-powered ride-on toys & Section 4.25.11 Toys that Contain Secondary Cells or Secondary Batteries)	N/A
4.26	Toys Intended to be Attached to a Crib or Playpen	N/A
4.27	Stuffed and Beanbag-Type Toys	N/A
4.30	Toy Gun Marking	N/A
4.32	Certain Toys with Nearly Spherical Ends	N/A
4.34	Small Balls	N/A
4.35	Pompoms	N/A
4.36	Hemispheric-Shaped Objects	N/A
4.37	Yo Yo Elastic Tether Toys	N/A
4.38	Magnets	N/A
4.39	Jaw Entrapment in Handles and Steering Wheels	N/A
4.40	Expanding Materials	N/A

*M = Meet NM = Not Meet N/A = Not Applicable R = Refer to Comment Section*



**RESULTS:**

**LABELING AND INSTRUCTIONAL REQUIREMENT (ASTM F963-17)**

Section	Requirement	Result
5.4 & 5.3	Aquatic Toys	N/A
5.5 & 5.3	Crib and Playpen Toys	N/A
5.6 & 5.3	Mobiles	N/A
5.7 & 5.3	Stroller and Carriage Toys	N/A
5.8 & 5.3	Toys Intended to be Assembled by an Adult	N/A
5.9 & 5.3	Simulated Protective Devices	N/A
5.10 & 5.3	Toys with Functional Sharp Edges or Sharp Points	N/A
5.11	Small Objects, Small Balls, Marbles and Balloons (16 CFR 1500.19)	N/A
5.12	Toy Caps (16CFR1500.86)	N/A
5.13	Art Materials (16 CFR 1500.14(b)(8))	N/A
5.15	Battery-Operated Toys (exclude 5.15.1 and 5.15.2)	N/A
5.15.1 & 5.3	Battery-Powered Ride-On Toys	N/A
5.15.2 & 5.3	Button or Coin Cell Batteries	N/A
5.16	Promotional Materials	M
5.17 & 5.3	Magnets	N/A
6.1	Definition and Description	M
6.2	Crib and Playpen Toys	N/A
6.3	Mobiles	N/A
6.4 & 5.3	Toys Intended to be Assembled by an Adult	N/A
6.5	Battery-Operated Toys	N/A
6.6	Battery-Powered Ride-On Toys	N/A
6.7	Toys in Contact with Food	N/A
7.1	Producer's Name and Address	M
7.2	Battery-Powered Ride-on Toys	N/A

*M = Meet NM = Not Meet N/A = Not Applicable R = Refer to Comment Section*



**RESULTS:**

**FLAMMABILITY (ASTM F963-17 section 4.2 according to Annex A5)**

Requirement	Test Method Reference	Findings
Burn rate no greater than 0.1 of an inch per second	ASTM F963-17 section 4.2 according to Annex A5	Most rapid burn rate not exceed 0.1 of an inch per second.

**TOTAL LEAD CONTENT IN SURFACE COATING BY COMPOSITE TESTING ("Ban of Lead-containing paint and certain consumer products bearing Lead-containing paint", Consumer Product Safety Improvement Act (CPSIA) of 2008)**

**Test Method:** U.S. CPSC-CH-E1003.09.1:2011

Element:			Lead		
Requirement: Maximum allowable limit:			90 mg/kg		
Sample Description			Result (mg/kg)		Conclusion
Color / Component	Location	Style	Overall	Potential	
(A) blue coating grey coating	color pencil words on case , parts		LT 10	---	Pass

*LT = Less Than*  
*\* = Average of duplicate analyses*

*mg/kg = milligrams per kilogram (ppm = parts per million)*  
*Potential = Estimated lead content per component is based on calculation by component individual weight*



**RESULTS:**

**TOTAL LEAD CONTENT IN SUBSTRATE BY COMPOSITE TESTING (100PPM) (Consumer Product Safety Improvement Act (CPSIA) of 2008)**

**Test Method:** U.S. CPSC-CH-E1001-08.3:2012 or U.S. CPSC-CH-E1002-08.3:2012

Analyte	Lead
Requirement: Maximum allowable limit:	100 mg/kg

Analyte		Sample Description			Lead (Pb)	Conclusion
		Color / Component	Location	Style	Result (mg/kg)	
(A)	black plastic black printed white plastic translucent plastic	case and plate dice timer			LT 10	Pass
(B)	clear laminated multi color printed white paper sticker clear laminated multi color printed white paper card red plastic	sticker paper card block			LT 10	Pass
(C)	dull black plastic yellow plastic blue plastic	block block block			LT 10	Pass
(D)	white paper / glue	note pad			LT 10	Pass
(E)	blue core	color pencil			LT 10	Pass

LT = Less Than

\* = Average of duplicate analyses

mg/kg = milligrams per kilogram (ppm = parts per million)



**RESULTS:**

**SOLUBLE HEAVY METALS CONTENT IN SURFACE COATING (ASTM F963-17, Section 4.3.5.1(2))**

**Test Method:** ASTM International Standard ASTM F963-17, Section 8.3.2 to 8.3.4

Sample Identity	Color	Location	Style
(A)	blue coating	color pencil	

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Maximum Limit (mg/kg)	25	1000	75	60	60	90	60	500
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Sample	Result (mg/kg)								(g)	
A.	0.376	237	LT 0.15	0.112	LT 0.25	0.298	LT 2	LT 2		Pass

LT = Less Than  
 CR = adjusted analytical result  
 mg/kg = milligrams per kilogram (ppm=parts per million)  
 \* = Average of duplicate analysis

As = Arsenic, Ba = Barium, Cd = Cadmium,  
 Cr = Chromium, Hg = Mercury, Pb = Lead,  
 Sb = Antimony, Se = Selenium



**RESULTS:**

**SOLUBLE HEAVY METALS CONTENT IN SUBSTRATE (ASTM F963-17, Section 4.3.5.2(2)(b))**

**Test Method:** ASTM International Standard ASTM F963-17, Section 8.3.5 (Excluding 8.3.5.5(3))

Sample Identity	Color	Location	Style
Type I: Substrate other than modeling clay			
A	black plastic	case and plate	
B	black printed white plastic	dice	
C	translucent plastic	timer	
D	clear laminated multi color printed white paper sticker	sticker	
E	clear laminated multi color printed white paper card	paper card	
F	red plastic	block	
G	dull black plastic	block	
H	yellow plastic	block	
I	blue plastic	block	
J	white paper / glue	note pad	
K	blue core	color pencil	



**RESULTS:**

**SOLUBLE HEAVY METALS CONTENT IN SUBSTRATE (ASTM F963-17, Section 4.3.5.2(2)(b))**

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	
Max. Limit Type I (mg/kg)	25	1000	75	60	60	90	60	500	
Max. Limit Type II (mg/kg)	25	250	50	25	25	90	60	500	
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%	

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Sample	Result (mg/kg)								(g)	
A	LT 0.15	LT 2	LT 0.15	LT 0.02	LT 0.25	LT 0.2	LT 2	LT 2		PASS
B	LT 0.15	LT 2	LT 0.15	LT 0.02	LT 0.25	LT 0.2	LT 2	LT 2		PASS
C	0.273	LT 2	LT 0.15	LT 0.02	LT 0.25	LT 0.2	LT 2	LT 2		PASS
D	0.191	LT 2	LT 0.15	0.035	LT 0.25	0.329	LT 2	LT 2		PASS
E	LT 0.15	LT 2	LT 0.15	LT 0.02	LT 0.25	LT 0.2	LT 2	LT 2		PASS
F	LT 0.15	LT 2	LT 0.15	0.093	LT 0.25	0.4	LT 2	LT 2		PASS
G	LT 0.15	LT 2	LT 0.15	0.03	LT 0.25	LT 0.2	LT 2	LT 2		PASS
H	0.389	LT 2	LT 0.15	LT 0.02	LT 0.25	0.221	LT 2	LT 2		PASS



**RESULTS:**

**SOLUBLE HEAVY METALS CONTENT IN SUBSTRATE (ASTM F963-17, Section 4.3.5.2(2)(b))**

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	
Max. Limit Type I (mg/kg)	25	1000	75	60	60	90	60	500	
Max. Limit Type II (mg/kg)	25	250	50	25	25	90	60	500	
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%	

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Sample	Result (mg/kg)								(g)	
I	LT 0.15	LT 2	LT 0.15	0.032	LT 0.25	0.256	LT 2	LT 2		PASS
J	0.322	LT 2	LT 0.15	0.108	LT 0.25	0.259	LT 2	LT 2		PASS
K	LT 0.15	42	LT 0.15	LT 0.002	LT 0.15	LT 0.2	LT 2	LT 2		PASS

*mg/kg = milligrams per kilogram (ppm=parts per million)*  
*CR = adjusted analytical result*  
*LT = Less Than*  
*ND = None Detected*

*As = Arsenic, Ba = Barium, Cd = Cadmium,  
 Cr = Chromium, Hg = Mercury, Pb = Lead,  
 Sb = Antimony, Se = Selenium  
 Detection limit (mg/kg): Each element 2*

**Remark:**

Textiles (natural or synthetic) are exempted for lead content requirement according to clarification of Toy Industry Association for ASTM F963-17. The lead content analysis result of corresponding material herein is for client's reference only.



**RESULTS:**

**Heavy Metals Content In Packaging – Model Toxics Legislation Of The Toxics In Packaging Clearinghouse (TPCH)**

Analyte	Sum of Pb, Cd, Hg & Cr VI	
Requirement: Maximum allowable limit:	100 mg/kg	

Analyte			Sum of Pb, Cd, Hg & Cr VI	Conclusion
Sample Description			Result (mg/kg)	
	Color / Component	Location	Style	
(A)	clear adhesive tape	blister		PASS
(B)	clera PVC	blister and tray		PASS
(C)	white paper card	insert		PASS
(D)	all coating	insert		PASS

LT = Less Than

\* = Average of duplicate analysis

mg/kg = milligrams per kilogram (ppm=parts per million)

Pb = Lead, Cd = Cadmium, Hg = Mercury, Cr VI = Hexavalent chromium

Remark:

The former name of the working group of this legislation was Coalition of Northeastern Governors (CONEG).



**RESULTS:**

**TOTAL LEAD CONTENT IN CHILDREN PRODUCTS (California Proposition 65 settlements of Alameda Superior Court RG 07356892)**

Test Method: Acid digestion followed by Atomic Absorption Spectrophotometry or Inductively Coupled Plasma Spectrometry

		Maximum allowable limit
Analyte		Lead
Type 1	Paint and surface coatings	90 mg/kg
Type 2	Substrate materials	100 mg/kg

Analyte				Lead (Pb)	Conclusion
Sample Description				Result (mg/kg)	
	Color / Component	Location	Style		
Type 1: Paint and surface coatings					
(A)	blue coating grey coating	color pencil words on case , parts		LT 10	PASS
Type 2: Substrate materials					
(B)	black plastic black printed white plastic translucent plastic	case and plate dice timer		LT 10	Pass
(C)	clear laminated multi color printed white paper sticker clear laminated multi color printed white paper card red plastic	sticker paper card block		LT 10	Pass
(D)	dull black plastic yellow plastic blue plastic	block block block		LT 10	Pass
(E)	white paper / glue	note pad		LT 10	Pass
(F)	blue core	color pencil		LT 10	Pass

LT = Less Than

\* = Average of duplicate analyses

mg/kg = milligrams per kilogram (ppm=parts per million)



**RESULTS:**

**PHTHALATES CONTENT IN CHILDREN'S TOYS AND CHILD CARE ARTICLES (Consumer Product Safety Improvement Act (CPSIA) of 2008, Section 108(a) and 108(c), 16 CFR 1307)**

**Test Method:** With reference to U. S. CPSC-CH-C1001-09.3 (April 1, 2010) / CPSC-CH-C1001-09.4 (January 17, 2018).

Sample Identity	Color / Component	Location	Style
(A)	black plastic black printed white plastic translucent plastic	case and plate dice timer	
(B)	clear laminated multi color printed white paper sticker clear laminated multi color printed white paper card red plastic	sticker paper card block	
(C)	dull black plastic yellow plastic	block block	
(D)	blue plastic white paper / glue	block note pad	
(E)	grey coating	words on case , parts	
(F)	clear / blue coating / white underlying	color pencil	

Test Parameter:	Listed Phthalates (See Remark)		
Requirement:	Each 0.1%		
Sample ID	Detected Analyte	Concentration (%)	Conclusion
A.	ND	ND	Pass
B.	ND	ND	Pass
C.	ND	ND	Pass
D.	ND	ND	Pass
E.	ND	ND	Pass
F.	ND	ND	Pass

*Results reported in percentage*  
*ND = None detected*  
*Detection Limit: Each Phthalate (0.005%)*



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**RESULTS:**

**PHTHALATES CONTENT IN CHILDREN'S TOYS AND CHILD CARE ARTICLES (Consumer Product Safety Improvement Act (CPSIA) of 2008, Section 108(a) and 108(c), 16 CFR 1307)**

<b>LIST OF RESTRICTED PHTHALATES</b>		
<b>Number</b>	<b>Chemical Name</b>	<b>CAS Number</b>
1.	Butyl benzyl phthalate (BBP)	85-68-7
2.	Dibutyl phthalate (DBP)	84-74-2
3.	Di(2-ethylhexyl) phthalate (DEHP)	117-81-7
4.	Di-iso-nonyl phthalate (DINP)	28553-12-0 & 68515-48-0
5.	Di-iso-butyl phthalate (DIBP)	84-69-5
6.	Di-n-pentyl phthalate (DPENP or DnPP)	131-18-0
7.	Di-n-hexyl phthalate (DHEXP or DnHP)	84-75-3
8.	Dicyclohexyl phthalate (DCHP)	84-61-7



**RESULTS:**

**BBP/DBP/DEHP/DnHP/DIDP PHTHALATES CONTENT REQUIREMENTS IN TOYS, CHILD CARE ARTICLES AND WATCHES (California Proposition 65 settlements of County of Sacramento case number 07AS04683, and the Alameda Superior Court case numbers BG07350969, RG08367601, RG07351032 and RG08378050)**

	Color / Component	Location	Style
	Composite of		
(A)	black plastic black printed white plastic translucent plastic	case and plate dice timer	
(B)	clear laminated multi color printed white paper sticker clear laminated multi color printed white paper card red plastic	sticker paper card block	
(C)	dull black plastic yellow plastic	block block	
(D)	blue plastic white paper / glue	block note pad	
(E)	grey coating	words on case , parts	
(F)	clear / blue coating / white underlying	color pencil	

Test Parameter	BBP	DBP	DEHP	DnHP	DIDP	
Limit (%)	0.1	0.1	0.1	0.1	0.1	
Sample	Result (%)					Conclusion
A	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
B	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
C	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
D	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
E	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
F	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass

*Detection Limit :*

BBP = Butyl benzyl phthalate (0.005%)  
 DBP = Dibutyl phthalate (0.005%)  
 DEHP = Di(2-ethylhexyl) phthalate (0.005%)  
 DnHP = Di-n-hexyl phthalate (0.005%)  
 DIDP = Di-iso-decyl phthalate (0.005%)

*Results reported in percentage*

LT = Less than  
 ND = None detected



**RESULTS:**

Products	Law/ Act	Federal Regulations Title 16 CFR Part No. / Section No.
Lead paint on Children's Products	CPSA	16 CFR 1303
Total lead content in metal children's products and in non-metal children's products	CPSIA	CPSIA section 101
ASTM F963-17 (Consumer Safety Specifications for Toy Safety) Section 4.3.7, 4.5-4.27, 4.30, 4.32, 4.35-4.40 Mechanical hazards	CPSA	16 CFR 1250
ASTM F963-17 (Consumer Safety Specifications for Toy Safety) Section 4.3.5.1(2) Surface Coating Materials - Soluble Test for Metal	CPSA	16 CFR 1250
ASTM F963-17 (Consumer Safety Specifications for Toy Safety) Section 4.3.5.2 Toy Substrate Materials	CPSA	16 CFR 1250
Phthalates	CPSIA	16 CFR 1307

Note: CPSA – Consumer Product Safety Act  
 FHSA – Federal Hazardous Substances Act  
 CPSIA – Consumer Product Safety Improvement Act  
 FFA – Flammable Fabrics Act

**RESULTS:**



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