AT-1500

TEST REPORT

Test Report #	17H-009891	Date of Report Issue:	February 21, 2018
Date of Sample Received:	December 14, 2017	Pages:	Page 1 of 18

CLIENT INFORMATION:

Company:	Hit Promotional Products
Recipient:	Nathan Cotter
Recipient Email:	ncotter@hitpromo.net

SAMPLE INFORMATION:

Description:	Light Up Fun Cube		
Assortment:	1 color	Purchase Order Number:	227744
SKU No.:	0709	Agent:	Growth-Sonic
Factory No.:	127102	Country of Origin:	China
Country of Distribution:	United States	Labeled Age Grade:	-
Quantity Submitted:	13 pcs + 1 lot Parts	Recommended Age Grade:	Over 5 years of age
Testing Period:	12/14/2017 – 12/22/2017 01/12/2018 – 01/18/2018 02/09/2018 – 02/13/2018 02/15/2018 – 02/21/2018	Tested Age Grade:	Over 5 years of age

OVERALL RESULT: **PASS**

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

ANSECO GROUP (HK) LIMITED

Loska Yeung Lok Ka
Assistant Manager, Chemical Laboratory

ANSECO GROUP (HK) LIMITED

Ricky Cheung Chin Yeung
Manager, Physical Laboratory

TEST RESULTS SUMMARY:

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

CONCLUSION	TEST(S) CONDUCTED
PASS	CPSIA Section 106 & ASTM F963-16 Toy Safety, Clause 4.3.5 Total Elements Screening in Substrate Materials
PASS	CPSIA Section 106 & ASTM F963-16 Toy Safety, Clause 4.3.5 Soluble Elements in Substrate Materials
PASS	CPSIA Section 101, Total Lead in Substrate Materials
PASS	California Proposition 65, Total Lead in Substrate Materials
PASS	CPSIA Section 108, Phthalates – Mouthable (DBP, BBP, DEHP, DnOP, DINP, DIDP)
PASS	California Proposition 65, Phthalates (DBP, BBP, DEHP, DINP, DIDP, DnHP)
PASS	CPSC 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	CPSIA Section 106, Mandatory Toy Safety Standard ASTM F963-16, Mechanical Hazards 16 CFR 1500, Federal Hazardous Substances Act (FHSA), Mechanical Hazards
PASS	16 CFR 1500.44 and ASTM F963-16, Section 4.2, Flammability of Solids
PASS	CPSIA Section 103, Tracking Labels for Children's Products[#]
PASS	Canadian Toy Regulations SOR/2011-17 as Amended by SOR/2016-195 & SOR/2016-302, Mechanical Hazards Requirements
PASS	Canadian Toy Regulations SOR/2011-17 as Amended by SOR/2016-195 & SOR/2016-302, Item 21 Celluloid or Cellulose Nitrate

Remark:
CPSIA Section 106 & ASTM F963-16 Toy Safety, Clause 4.3.5 Soluble Elements in Paints and Similar Surface Coatings was not conducted as specimen mass found on single sample less than 10 milligrams.

DETAILED RESULTS:

CPSIA Section 106 & ASTM F963-16 Toy Safety, Clause 4.3.5 Total Elements Screening in Substrate Materials

Test Method: ASTM F963-16 Clause 8.3.1
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Substrate Materials Other Than Modeling Clay

Specimen No.	2	3	4	5	6	**Soluble Limit (ppm)**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Antimony (Sb)	ND	ND	ND	ND	ND	**60**
Total Arsenic (As)	ND	ND	ND	ND	ND	**25**
Total Barium (Ba)	ND	ND	ND	ND	ND	**1000**
Total Cadmium (Cd)	ND	ND	ND	ND	ND	**75**
Total Chromium (Cr)	ND	ND	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.

DETAILED RESULTS:

CPSIA Section 106 & ASTM F963-16 Toy Safety, Clause 4.3.5 Total Elements Screening in Substrate Materials

Test Method: ASTM F963-16 Clause 8.3.1
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Substrate Materials Other Than Modeling Clay

Specimen No.	7+8	---	---	---	---	**Soluble Limit (ppm)**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Antimony (Sb)	ND	---	---	---	---	**60**
Total Arsenic (As)	ND	---	---	---	---	**25**
Total Barium (Ba)	30	---	---	---	---	**1000**
Total Cadmium (Cd)	ND	---	---	---	---	**75**
Total Chromium (Cr)	ND	---	---	---	---	**60**
Total Lead (Pb)	ND	---	---	---	---	**90**
Total Mercury (Hg)	ND	---	---	---	---	**60**
Total Selenium (Se)	ND	---	---	---	---	**500**
Conclusion	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 exceeded 80% of the soluble heavy metal limits, therefore a separate soluble analysis should be conducted.

The total heavy metals screening results of Specimen No. 10 & 11 exceeded the soluble heavy metal limits, therefore a separate soluble analysis was conducted.

DETAILED RESULTS:

CPSIA Section 106 & ASTM F963-16 Toy Safety, Clause 4.3.5 Soluble Elements in Substrate Materials

Test Method: ASTM F963-16 Clause 8.3.5
Analytical Method: Inductively Coupled Plasma-Mass Spectrometry

Substrate Materials Other than Modeling Clay

Specimen No.	10	11	---	---	---	**Soluble Limit (ppm)**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Soluble Antimony (Sb)	ND	ND	---	---	---	**60**
Soluble Arsenic (As)	ND	ND	---	---	---	**25**
Soluble Barium (Ba)	ND	ND	---	---	---	**1000**
Soluble Cadmium (Cd)	ND	ND	---	---	---	**75**
Soluble Chromium (Cr)	ND	ND	---	---	---	**60**
Soluble Lead (Pb)	ND	ND	---	---	---	**90**
Soluble Mercury (Hg)	ND	ND	---	---	---	**60**
Soluble Selenium (Se)	ND	ND	---	---	---	**500**
Conclusion	PASS	PASS	---	---	---	

Note:
ppm (Parts per million) = mg/kg (Milligrams per kilogram)
LT = Less than
ND = Not detected (Reporting Limit = 2 ppm)

Remark:
Test portion of Specimen No. 11 found on single sample was 67.1 mg.

DETAILED RESULTS:

CPSIA Section 101, Total Lead in Substrate Materials

Test Method: CPSC-CH-E1001-08.3 (Metal), CPSC-CH-E1002-08.3 (Non-Metal)
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	2	3	4	5	6	**Total**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	**Limit (ppm)**
Total Lead (Pb)	ND	ND	ND	ND	ND	**100**
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	9	10	11	---	---	**Total**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	**Limit (ppm)**
Total Lead (Pb)	ND	77	ND	---	---	**100**
Conclusion	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.

DETAILED RESULTS:

California Proposition 65, Total Lead in Substrate Materials

Test Method: CPSC-CH-E1001-08.3 (Metal), CPSC-CH-E1002-08.3 (Non-Metal)
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	2	3	4	5	6	**Total Limit (ppm)**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Lead (Pb)	ND	ND	ND	ND	ND	**100**
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	9	10	11	---	---	**Total Limit (ppm)**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Lead (Pb)	ND	77	ND	---	---	**100**
Conclusion	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 specification is quoted from client's requirement.

DETAILED RESULTS:

CPSIA Section 108, Phthalates – Mouthable (DBP, BBP, DEHP, DnOP, DINP, DIDP)

Test Method: CPSC-CH-C1001-09.3
Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		2	3	4	5	
Test Item	CAS No.	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	**Limit (ppm)**
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**
Conclusion		PASS	PASS	PASS	PASS	

Note:
ppm (Parts per million) = mg/kg (Milligrams per kilogram) = 0.0001 % m/m (Percent by mass)
LT = Less than
ND = Not detected (Reporting Limit = 120 ppm)
Composite results are based on specimen of least mass resulting in highest potential concentration.

DETAILED RESULTS:

CPSIA Section 108, Phthalates – Mouthable (DBP, BBP, DEHP, DnOP, DINP, DIDP)

Test Method: CPSC-CH-C1001-09.3
Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		6	---	---	---	
Test Item	CAS No.	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	**Limit (ppm)**
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**
Conclusion		PASS	---	---	---	

Note:
ppm (Parts per million) = mg/kg (Milligrams per kilogram) = 0.0001 % m/m (Percent by mass)
LT = Less than
ND = Not detected (Reporting Limit = 120 ppm)
Composite results are based on specimen of least mass resulting in highest potential concentration.

DETAILED RESULTS:

California Proposition 65, Phthalates (DBP, BBP, DEHP, DINP, DIDP, DnHP)

Test Method: CPSC-CH-C1001-09.3
Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		2	3	4	5	
Test Item	CAS No.	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	**Limit (ppm)**
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:
ppm (Parts per million) = mg/kg (Milligrams per kilogram) = 0.0001 % m/m (Percent by mass)
LT = Less than
ND = Not detected (Reporting Limit = 120 ppm)
Composite results are based on specimen of least mass resulting in highest potential concentration.

Remark:
The specification is quoted from client's requirement.

DETAILED RESULTS:

California Proposition 65, Phthalates (DBP, BBP, DEHP, DINP, DIDP, DnHP)

Test Method: CPSC-CH-C1001-09.3
Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		6	---	---	---	
Test Item	CAS No.	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	**Limit (ppm)**
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:
ppm (Parts per million) = mg/kg (Milligrams per kilogram) = 0.0001 % m/m (Percent by mass)
LT = Less than
ND = Not detected (Reporting Limit = 120 ppm)
Composite results are based on specimen of least mass resulting in highest potential concentration.

Remark:
The specification is quoted from client's requirement.

DETAILED RESULTS:

CPSC 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-C1001-09.3 (Modified)#, In-House Method#
Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		2	3	4	5	
Test Item	CAS No.	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	**Limit (ppm)**
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:
ppm (Parts per million) = mg/kg (Milligrams per kilogram) = 0.0001 % m/m (Percent by mass)
LT = Less than
ND = Not detected (Reporting Limit = 120 ppm)
Composite results are based on specimen of least mass resulting in highest potential concentration.

DETAILED RESULTS:

CPSC 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-C1001-09.3 (Modified)#, In-House Method#
Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		6	---	---	---	
Test Item	CAS No.	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	**Limit (ppm)**
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:
ppm (Parts per million) = mg/kg (Milligrams per kilogram) = 0.0001 % m/m (Percent by mass)
LT = Less than
ND = Not detected (Reporting Limit = 120 ppm)
Composite results are based on specimen of least mass resulting in highest potential concentration.

DETAILED RESULTS:

CPSIA Section 106, Mandatory Toy Safety Standard ASTM F963-16, Mechanical Hazards
16 CFR 1500, Federal Hazardous Substances Act (FHSA), Mechanical Hazards

Mechanical hazards evaluated as described in 16 CFR 1500.51-1500.53 and ASTM F963-16, as applicable.

Test	Observation	Conclusion
Impact	No Sharp Edge or Sharp Point	PASS
Torque	No Sharp Edge or Sharp Point	PASS
Tension	No Sharp Edge or Sharp Point	PASS

Other Applicable ASTM F963-16 Sections

Section	Test	Conclusion
4.1	Material Quality	PASS
4.6	Small Objects	PASS
4.7	Accessible Edges	PASS
4.9	Accessible Points	PASS
4.11	Nails and Fasteners	PASS
4.25	Battery Operated Toys	PASS

16 CFR 1500.44 and ASTM F963-16, Section 4.2, Flammability of Solids

Test	Observation	Conclusion
Flammability of Solids	The burn rate is less than 0.1 in/sec.	PASS

DETAILED RESULTS:

CPSIA Section 103, Tracking Labels for Children's Products#

Requirement	Observation	Conclusion
Manufacturer or private labeler listed, location & date of manufacture, including batch, run number and/or other identifying characteristics	Information was present.	PASS

Canadian Toy Regulations SOR/2011-17 as Amended by SOR/2016-195 & SOR/2016-302, Mechanical Hazards Requirements

Test	Observation	Conclusion
Impact	No Sharp Edge or Sharp Point	PASS
Push/Pull	No Sharp Edge or Sharp Point	PASS

Section	Requirement	Conclusion
8	Metal Edges	PASS
9	Wires Frame	PASS
10	Plastic Edges	PASS
20	Heated Surfaces, Parts or Substances	PASS

Canadian Toy Regulations SOR/2011-17 as Amended by SOR/2016-195 & SOR/2016-302, Item 21 Celluloid or Cellulose Nitrate

(Method: Visual Observation)

Test	Observation	Conclusion
Cellulose Nitrate	No visual signs of Cellulose Nitrate.	PASS

SPECIMEN DESCRIPTION:

Specimen No.	Specimen Description	Location
1	Black coating	Tracking code/ on switch
2	Black printed white plastic	Cube body
3	Black printed dull white plastic	Switch
4	Matt white plastic	Gear/ flip button/ glides/ push button
5	Black plastic	Clip on holder strip
6	Transparent plastic	Inner string
7	Black textile	Strap
8	Dull black textile	String
9	Bright silvery metal	Ball on cube
10	Silvery metal	Inner switch
11	Coppery metal	Inner switch

DATE CODE PHOTO:

P1

SAMPLE PHOTO:

-End Report-