AT-1500

TEST REPORT

Test Report #	18H-008397	Date of Report Issue:	November 7, 2018
Date of Sample Received:	October 30, 2018	Pages:	Page 1 of 15

CLIENT INFORMATION:

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

SAMPLE INFORMATION:

Description:	20 Oz. Aluminum Sports Bottle		
Assortment:	5 colors	Purchase Order Number:	281552
SKU No.:	5707	Agent:	Growth Sonic
Factory No.:	127827	Country of Origin:	China
Country of Distribution:	United States	Labeled Age Grade:	-
Quantity Submitted:	5 pcs per style + 1 lot dry paint	Recommended Age Grade:	-
Testing Period:	10/30/2018 – 11/07/2018	Tested Age Grade:	-

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

TEST RESULTS SUMMARY:

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

CONCLUSION	TEST(S) CONDUCTED
PASS	CPSIA Section 101 & 16 CFR 1303, Total Lead in Paints and Surface Coatings
PASS	California Proposition 65, Total Lead in Paints and Surface Coatings
PASS	CPSIA Section 101, Total Lead in Substrate Materials
PASS	California Proposition 65, Total Lead in Substrate Materials
PASS	Client's Requirement, Bisphenol A and Bisphenol S
PASS	FDA 21 CFR 177.1210, Closures with Sealing Gaskets[#]
PASS	FDA 21 CFR 177.1520, Polypropylene Copolymers
PASS	Food and Drug Administration Compliance Program Guidance Manual 7304.019 Chapter 04 Toxic Elements in Food and Foodware - Leachable Lead and Cadmium[#]
PASS	ASTM B117-16 Resistance to Corrosion[#]
PASS	Canadian Consumer Products Containing Lead Regulations (SOR/2018-83), Total Lead Content

DETAILED RESULTS:

CPSIA Section 101 & 16 CFR 1303, Total Lead in Paints and Surface Coatings

Test Method: CPSC-CH-E-1003-09.1
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5	6+7	---	---	**Total Limit (ppm)**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Lead (Pb)	ND	ND	ND	---	---	**90**
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 Paints and Surface Coatings

Test Method: CPSC-CH-E-1003-09.1
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5	6+7	---	---	**Total Limit (ppm)**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Lead (Pb)	ND	ND	ND	---	---	**90**
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 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.	8+9	10+11+12	13	14	---	**Total Limit (ppm)**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Lead (Pb)	ND	ND	ND	39	---	**100**
Conclusion	PASS	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.	8+9	10+11+12	13	14	---	**Total Limit (ppm)**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Lead (Pb)	ND	ND	ND	39	---	**100**
Conclusion	PASS	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:

Client's Requirement, Bisphenol A and Bisphenol S

Test Method: In-House Method#
Analytical Method: Liquid Chromatography with Mass Spectrometry or
Liquid Chromatography with Mass Spectrometry Mass Spectrometry

Specimen No.		8	9	10	11	
Test Item	CAS No.	Result (ppb)	Result (ppb)	Result (ppb)	Result (ppb)	**Limit (ppb)**
Bisphenol A (BPA)	80-05-7	ND	ND	ND	ND	**ND**
Bisphenol S (BPS)	80-09-1	ND	ND	ND	ND	**ND**
Conclusion		PASS	PASS	PASS	PASS	

Specimen No.		12	13	---	---	
Test Item	CAS No.	Result (ppb)	Result (ppb)	Result (ppb)	Result (ppb)	**Limit (ppb)**
Bisphenol A (BPA)	80-05-7	ND	ND	---	---	**ND**
Bisphenol S (BPS)	80-09-1	ND	ND	---	---	**ND**
Conclusion		PASS	PASS	---	---	

Note:
ppb (Parts per billion) = µg/kg (Micrograms per kilogram)
NA = Not applicable
LT = Less than
ND = Not detected (Reporting limit: BPA = 1000 ppb; BPS = 200 ppb)

DETAILED RESULTS:

FDA 21 CFR 177.1210, Closures with Sealing Gaskets

Test Method: FDA 21 CFR 177.1210#

Specimen No.			13	---		
Test Item	Test Condition		Result (ppm)	Result (ppm)	**RL (ppm)**	**Limit (ppm)**
	Temp.	Duration				
Distilled water extractive	Fill boiling	Until Cool to 100°F	ND	---	**10**	**50**
		Conclusion	PASS	---		

Note:
Temp. = Temperature
°F = Degree Fahrenheit
ppm (Parts per million) = mg/kg (Milligrams per kilogram foodstuff)
LT = Less than
ND = Not detected. Result value is less than reporting limit (RL).

Remark:
The specification is quoted from 21 CFR 177.1210 Table 2 Section 2.

DETAILED RESULTS:

FDA 21 CFR 177.1520, Polypropylene Copolymers

Test Method: FDA 21 CFR 177.1520

Specimen No.			8	9		
Test Item	Temp.	Duration	Result	Result	**RL**	**Limit**
Density (g/cc)	NA	NA	0.903	0.902	**NA**	**0.85-1.00**
n-Hexane extractive (%)	50°C	2 hours	1.2	0.7	**0.4**	**5.5**
Xylene extractive (%)	Reflux	2 hours or until total dissolved	3.4	3.2	**1.0**	**30**
		Conclusion	PASS	PASS		

Specimen No.			10	11		
Test Item	Temp.	Duration	Result	Result	**RL**	**Limit**
Density (g/cc)	NA	NA	0.903	0.914	**NA**	**0.85-1.00**
n-Hexane extractive (%)	50°C	2 hours	0.9	0.9	**0.4**	**5.5**
Xylene extractive (%)	Reflux	2 hours or until total dissolved	3.4	2.8	**1.0**	**30**
		Conclusion	PASS	PASS		

Note:
Temp. = Temperature
°C = Degree Celsius
g/cc = Grams per cubic centimeter
% = Percent by weight
NA = Not applicable
LT = Less than
ND = Not detected. Result value is less than reporting limit (RL).

Remark:
The specification is quoted from 21 CFR 177.1520 (c) 3.1a.

DETAILED RESULTS:

FDA 21 CFR 177.1520, Polypropylene Copolymers

Test Method: FDA 21 CFR 177.1520

Specimen No.			12	---		
Test Item	Temp.	Duration	Result	Result	**RL**	**Limit**
Density (g/cc)	NA	NA	0.909	---	**NA**	**0.85-1.00**
n-Hexane extractive (%)	50°C	2 hours	0.7	---	**0.4**	**5.5**
Xylene extractive (%)	Reflux	2 hours or until total dissolved	4.1	---	**1.0**	**30**
		Conclusion	PASS	---		

Note:
Temp. = Temperature
°C = Degree Celsius
g/cc = Grams per cubic centimeter
% = Percent by weight
NA = Not applicable
LT = Less than
ND = Not detected. Result value is less than reporting limit (RL).

Remark:
The specification is quoted from 21 CFR 177.1520 (c) 3.1a.

DETAILED RESULTS:

Food and Drug Administration Compliance Program Guidance Manual 7304.019 Chapter 04 Toxic Elements in Food and Foodware - Leachable Lead and Cadmium

Test Method: ASTM C738-94(Reapproved 2011)#, In-House Method#
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	15A	15B	15C	15D	15E	15F	Average (ppm)	**Limit (ppm)**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)		
Volume of acid used (mL)	640	640	640	640	640	640		
Leachable Cadmium (Cd)	ND	ND	ND	ND	ND	ND	NA	**0.5**
Leachable Lead (Pb)	ND	ND	ND	ND	ND	ND	NA	**2.0**
Conclusion	PASS	PASS	PASS	PASS	PASS	PASS		

Note:
mL = Millilitres
ppm (Parts per million) = mg/L (Milligrams per litre)
NA = Not applicable
LT = Less than
ND = Not detected (Reporting Limit: Pb = 0.04 ppm; Cd = 0.02 ppm)

Remark:
The specification is referred from FDA CPG 545.400 & CPG 545.450.

	Category		Leachable Cd (mg/L)	Leachable Pb (mg/L)
	Cups and Mugs	(Any of 6)	**0.5**	**0.5**
	Flatware	(Average of 6)	**0.5**	**3.0**
	Large Hollowware	(Any of 6)	**0.25**	**1.0**
X	Small Hollowware	(Any of 6)	**0.5**	**2.0**
	Pitchers	(Any of 6)	**0.25**	**0.5**

DETAILED RESULTS:

ASTM B117-16 Resistance to Corrosion

Test Method: ASTM B117-16#
Analytical Method: Salt Spray (Fog) Apparatus
Evaluation: In-house rating

Specimen no.:	16	**Rating**	**Conclusion**
Condition	Observation		
1% Sodium chloride solution for 24 hours	Rusting was not found on test sample.	6	PASS

Notes:
NR = Not required; NA = Not applicable

Rating (quantity of defect): Rating 6 = Completely free of corrosion
Rating 5 = Very minor, i.e., little or barely corrosion
Rating 4 = Minor, i.e., little but significant corrosion
Rating 3 = Moderate, i.e., scattered corrosion
Rating 2 = Extensive, i.e., considerable corrosion
Rating 1 = Severe, i.e., dense corrosion
Requirement: Rating 6 = PASS; Rating 5 or below = FAIL (See Failure photo)

DETAILED RESULTS:

Canadian Consumer Products Containing Lead Regulations (SOR/2018-83), Total Lead Content

Test Method: ASTM F963-17 Clause 8.3.1
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4+5	6+7	8+9	10+11+12	
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	**Limit (mg/kg)**
Total Lead (Pb)	ND	ND	ND	ND	ND	**90**
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	13	14	---	---	---	
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	**Limit (mg/kg)**
Total Lead (Pb)	ND	39	---	---	---	**90**
Conclusion	PASS	PASS	---	---	---	

Note:
mg/kg (Milligrams per kilogram) = ppm (Parts per million) = 0.0001 % m/m (Percent by mass)
LT = Less than
ND = Not detected (Reporting Limit = 20 ppm)
Composite results are based on specimen of least mass resulting in highest potential concentration.

SPECIMEN DESCRIPTION:

Specimen No.	Specimen Description	Location
1	White coating	Words on bottom (red/ blue/ black styles)
2	Black coating	Words on bottom (lime/ silver styles)
3	Red coating	On body (red style)
4	Green coating	On body (lime style)
5	Blue coating	On body (blue style)
6	Bright black coating	On body (black style)
7	Transparent coating	On body (silver style)
8	Red plastic (PP-co)	Lid/ neck of bottle (red style)
9	Green plastic (PP-co)	Lid/ neck o bottle (lime style)
10	Blue plastic (PP-co)	Lid/ neck of bottle (blue style)
11	Black plastic (PP-co)	Lid/ neck of bottle (black style)
12	Grey plastic (PP-co)	Lid/ neck of bottle (silver style)
13	Translucent soft plastic (Silicone)	Gasket (all styles)
14	Silvery metal	Body (all style)
15	Silvery metal	Interior of bottle (all styles)
16	Complete product	Food contact metal part only (all styles)

SAMPLE PHOTO:

-End Report-