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ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1500

TEST REPORT

Test Report #	19H-004255	Date of Report Issue:	June 28, 2019
Date of Sample Received:	June 11, 2019	Pages:	Page 1 of 14

CLIENT INFORMATION:

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

SAMPLE INFORMATION:

Description:	22 Oz. Vortex Stainless Steel Tumbler		
Assortment:	1 color Tumbler / 4 color Lid	Purchase Order Number:	317158
SKU No.:	5771	Agent:	Growth-Sonic
Factory No.:	127610	Country of Origin:	China
Country of Distribution:	United States	Labeled Age Grade:	-
Quantity Submitted:	5 pcs (Lids) per style, 11 pcs (Tumbler)	Recommended Age Grade:	-
Testing Period:	06/12/2019 – 06/21/2019 06/24/2019 – 06/28/2019	Tested Age Grade:	-

OVERALL RESULT: PASS

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

QIMA Testing (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, Total Lead in Substrate Materials
PASS	California Proposition 65, Total Lead in Substrate Materials
PASS	FDA GRAS Specifications, Total Chromium in Stainless Steel Food Containers#
PASS	Client's Requirement, Bisphenol A and Bisphenol S#
PASS	FDA 21 CFR 177.1210, Closures with Sealing Gaskets#
PASS	FDA 21 CFR 177.1240, 1,4-Cyclohexylene Dimethylene Terephthalate and 1,4-Cyclohexylene Dimethylene Isophthalate Copolymer#
PASS	FDA 21 CFR 180.22 and 181.32, Acrylonitrile/Styrene Copolymers
PASS	Canadian Consumer Products Containing Lead Regulations (SOR/2018-83), Total Lead Content

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.	1+2+3	4+5+6	7+8	9	10	**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.	11	---	---	---	---	**Total Limit (ppm)**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	
Total Lead (Pb)	ND	---	---	---	---	**100**
Conclusion	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.	1+2+3	4+5+6	7+8	9	10	**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.	11	---	---	---	---	**Total**
Test Item	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	**Limit (ppm)**
Total Lead (Pb)	ND	---	---	---	---	**100**
Conclusion	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:

FDA GRAS Specifications, Total Chromium in Stainless Steel Food Containers

Test Method: In-House Method#
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	10	---	---	---	---	
Test Item	Result (% m/m)	Result (% m/m)	Result (% m/m)	Result (% m/m)	Result (% m/m)	**Limit (% m/m)**
Total Chromium (Cr)	16.6	---	---	---	---	**GT 16**
Conclusion	PASS	---	---	---	---	

Note:
% m/m = Percent by mass
GT = Greater than

Remark:
The limit is quoted from ANSI/NSF 51-1997 Section 7.1.2.

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.		1	2	3	4	
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.		5	6	7	8	
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.		9	---	---	---	
Test Item	CAS No.	Result (ppb)	Result (ppb)	Result (ppb)	Result (ppb)	**Limit (ppb)**
Bisphenol A (BPA)	80-05-7	ND	---	---	---	**ND**
Bisphenol S (BPS)	80-09-1	ND	---	---	---	**ND**
Conclusion		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.			9	---		
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 177.1240, 1,4-Cyclohexylene Dimethylene Terephthalate and 1,4- Cyclohexylene Dimethylene Isophthalate Copolymer

Test Method: FDA 21 CFR 177.1240#

Specimen No.			1	2		
Test Item	Test Condition		Result (%)	Result (%)	**RL (%)**	**Limit (%)**
	Temp.	Duration				
Distilled water extractive	Reflux	2 hours	LT 0.02	LT 0.02	**0.01**	**0.05**
n-Hexane extractive	Reflux	2 hours	LT 0.02	LT 0.02	**0.01**	**0.05**
Ethyl acetate extractive	Reflux	2 hours	0.550	0.533	**0.01**	**0.7**
		Conclusion	PASS	PASS		

Specimen No.			3	4		
Test Item	Test Condition		Result (%)	Result (%)	**RL (%)**	**Limit (%)**
	Temp.	Duration				
Distilled water extractive	Reflux	2 hours	LT 0.02	LT 0.02	**0.01**	**0.05**
n-Hexane extractive	Reflux	2 hours	LT 0.02	LT 0.02	**0.01**	**0.05**
Ethyl acetate extractive	Reflux	2 hours	0.524	0.512	**0.01**	**0.7**
		Conclusion	PASS	PASS		

Note:
Temp. = Temperature
% w/w = Percent by weight
LT = Less than
ND = Not detected. Result value is less than reporting limit (RL).

DETAILED RESULTS:

FDA 21 CFR 180.22 and 181.32, Acrylonitrile/Styrene Copolymers

Test Method: FDA 21 CFR 180.22 and 181.32
Analytical Method: Headspace-Gas Chromatography with Mass Spectrometry

Acrylonitrile Monomers:

Specimen No.			5		
Test Simulant	Test Condition		Result	**RL**	**Limit**
	Temp.	Duration			
Distilled water extractive (mg/in^2)	120°F	2 hours	ND	**0.001**	**0.003**
3% Acetic acid extractive (mg/in^2)	120°F	2 hours	ND	**0.001**	**0.003**
Conclusion			PASS		

Specimen No.			6		
Test Simulant	Test Condition		Result	**RL**	**Limit**
	Temp.	Duration			
Distilled water extractive (mg/in^2)	120°F	2 hours	ND	**0.001**	**0.003**
3% Acetic acid extractive (mg/in^2)	120°F	2 hours	ND	**0.001**	**0.003**
Conclusion			PASS		

Note:
Temp. = Temperature
°F = Degree Fahrenheit
mg/in^2 = Milligrams per square inch
LT = Less than
ND = Not detected. Result value is less than reporting limit (RL).

Remark:
The specification is quoted from 21 CFR 181.32 (b) (3).

DETAILED RESULTS:

FDA 21 CFR 180.22 and 181.32, Acrylonitrile/Styrene Copolymers

Test Method: FDA 21 CFR 180.22 and 181.32
Analytical Method: Headspace-Gas Chromatography with Mass Spectrometry

Acrylonitrile Monomers:

Specimen No.			7		
Test Simulant	Test Condition		Result	**RL**	**Limit**
	Temp.	Duration			
Distilled water extractive (mg/in^2)	120°F	2 hours	ND	**0.001**	**0.003**
3% Acetic acid extractive (mg/in^2)	120°F	2 hours	ND	**0.001**	**0.003**
Conclusion			PASS		

Specimen No.			8		
Test Simulant	Test Condition		Result	**RL**	**Limit**
	Temp.	Duration			
Distilled water extractive (mg/in^2)	120°F	2 hours	ND	**0.001**	**0.003**
3% Acetic acid extractive (mg/in^2)	120°F	2 hours	ND	**0.001**	**0.003**
Conclusion			PASS		

Note:
Temp. = Temperature
°F = Degree Fahrenheit
mg/in^2 = Milligrams per square inch
LT = Less than
ND = Not detected. Result value is less than reporting limit (RL).

Remark:
The specification is quoted from 21 CFR 181.32 (b) (3).

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	
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.	11	---	---	---	---	
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	**Limit (mg/kg)**
Total Lead (Pb)	ND	---	---	---	---	**90**
Conclusion	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 mg/kg)
Composite results are based on specimen of least mass resulting in highest potential concentration.

SPECIMEN DESCRIPTION:

Specimen No.	Specimen Description	Location
1	Clear red plastic (PCTG)	Slider (lid(red) style)
2	Clear green plastic (PCTG)	Slider (lid(lime) style)
3	Clear blue plastic (PCTG)	Slider (lid(blue) style)
4	Clear grey plastic (PCTG)	Slider (lid(grey) style)
5	Transparent red plastic (AS)	Lid (lid(red) style)
6	Transparent green plastic (AS)	Lid (lid(lime) style)
7	Transparent blue plastic (AS)	Lid (lid(blue) style)
8	Transparent grey plastic (AS)	Lid (lid(grey) style)
9	Black soft plastic (Silicone)	Gasket (all styles)
10	Silvery metal (304SS)	Inner wall (tumbler style)
11	Dull silvery metal	Outer wall/ bottom (tumbler style)

SAMPLE PHOTO:

SAMPLE PHOTO:

-End Report-