

## TEST REPORT

Test Report # 23W-011377 Date of Report Issue: August 22, 2023  
Date of Sample Received: August 7, 2023 Pages: Page 1 of 24

### CLIENT INFORMATION:

Company: Spector & Co.  
Address: testing@spectorandco.com



### SAMPLE INFORMATION:

Description: 22 OZ / 650 ML Tritan single wall Tumbler with spill resistant  
Assortment: BLK /WHT/SND/NVY  
PO No.: -  
Item No./Name: DW700  
Item Class: PERFECT STORM  
Factory/Supplier: USN039  
Country of Origin: China  
Country of Distribution: Canada, United States  
Testing Period: 08/11/2023-08/22/2023

### OVERALL RESULT:

**PASS**

Please refer to the following pages for test result summary and appropriate notes.

QIMA (HANGZHOU) TESTING CO., LTD.



Jeremy Xu  
Chemical Laboratory Supervisor



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**TEST RESULTS SUMMARY:**

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

CONCLUSION	TEST(S) CONDUCTED
PASS	California Proposition 65, Total Lead in Substrate Materials
Not Applicable	Canadian Surface Coating Materials Regulations SOR/2016-193, Total Lead in Stickers, Films and Surface Coating Materials
PASS	Canadian Consumer Products Containing Lead Regulations (SOR/2018-83), Total Lead Content
PASS	California Proposition 65, Total Cadmium in Substrate Materials
Not Applicable	Canadian Surface Coating Materials Regulations SOR/2016-193, Total Mercury in Paints and Surface Coatings
Not Applicable	Client's requirement, Total Nickel content
PASS	Client's requirement, Bisphenol A content
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	California Proposition 65, Phthalates (DBP, BBP, DEHP, DINP, DIDP, DnHP)
PASS	Client's Requirement, Phthalates content
PASS	FDA 21 CFR 177.1210, Closures with Sealing Gaskets
PASS	FDA 21 CFR 177.1520, Polypropylene Homopolymers
PASS	FDA 21 CFR 177.2420, Polyester Resins, Cross-Linked
PASS	FDA 21 CFR 177.2600, Rubber



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**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+5	3+4+9	7+8+10	12+13+15	14+19	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	ND	ND	ND	ND	<b>100</b>
<b>Conclusion</b>	PASS	PASS	PASS	PASS	PASS	

Specimen No.	17+18+20	---	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	---	---	---	---	<b>100</b>
<b>Conclusion</b>	PASS	---	---	---	---	

**Note:**

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected (Reporting Limit = 15 mg/kg)

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:**

**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+5	3+4+9	7+8+10	12+13+15	14+19	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	ND	ND	ND	ND	<b>90</b>
<b>Conclusion</b>	PASS	PASS	PASS	PASS	PASS	

Specimen No.	17+18+20	---	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	---	---	---	---	<b>90</b>
<b>Conclusion</b>	PASS	---	---	---	---	

*Note:*  
 mg/kg=Milligrams per kilogram)  
 LT = Less than  
 ND = Not detected (Reporting Limit = 15 mg/kg)  
 Composite results are based on specimen of least mass resulting in highest potential concentration.



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**DETAILED RESULTS:**

**California Proposition 65, Total Cadmium in Substrate Materials**

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

Specimen No.	1+2+5	3+4+9	7+8+10	12+13+15	14+19	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Cadmium (Cd)	ND	ND	ND	ND	ND	<b>75</b>
<b>Conclusion</b>	PASS	PASS	PASS	PASS	PASS	

Specimen No.	17+18+20	---	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Cadmium (Cd)	ND	---	---	---	---	<b>75</b>
<b>Conclusion</b>	PASS	---	---	---	---	

**Note:**  
 mg/kg = Milligrams per kilogram  
 LT = Less than  
 ND = Not detected (Reporting Limit = 15 mg/kg)  
 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 content**

Test Method: In-House Method

Analytical Method: Liquid Chromatography-Mass Spectrometer Mass Spectrometer (LC-MS/MS)

Specimen No.		1	2	3	4	Client's limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Bisphenol A (BPA)	80-05-7	ND	ND	ND	ND	<b>Not Detected</b>
<b>Conclusion</b>		PASS	PASS	PASS	PASS	

Specimen No.		5	7	8	9	Client's limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Bisphenol A (BPA)	80-05-7	ND	ND	ND	ND	<b>Not Detected</b>
<b>Conclusion</b>		PASS	PASS	PASS	PASS	

Specimen No.		10	12	13	14	Client's limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Bisphenol A (BPA)	80-05-7	ND	ND	ND	ND	<b>Not Detected</b>
<b>Conclusion</b>		PASS	PASS	PASS	PASS	

Specimen No.		15	17	18	19	Client's limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Bisphenol A (BPA)	80-05-7	ND	ND	ND	ND	<b>Not Detected</b>
<b>Conclusion</b>		PASS	PASS	PASS	PASS	

**Note:**

mg/kg=milligram per kilogram

ND=Not Detected (Reporting limit = 1.0mg/kg)



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**DETAILED RESULTS:**

**Client's requirement, Bisphenol A content**

Test Method: In-House Method  
 Analytical Method: Liquid Chromatography-Mass Spectrometer Mass Spectrometer (LC-MS/MS)

Specimen No.	20	---	---	---	Client's limit (mg/kg)
Test Item CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Bisphenol A (BPA) 80-05-7	ND	---	---	---	<b>Not Detected</b>
<b>Conclusion</b>	PASS	---	---	---	

*Note:*  
 mg/kg=milligram per kilogram  
 ND=Not Detected (Reporting limit = 1.0mg/kg)



**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-C1001-09.4  
 Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		1+2+5	3+4+9	7+8+10	12+13+15	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
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
<b>Conclusion</b>		PASS	PASS	PASS	PASS	

*Note:*  
 mg/kg = Milligrams per kilogram  
 LT = Less than  
 ND = Not detected (Reporting Limit = 150 mg/kg)  
 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-C1001-09.4  
 Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		14+19	17+18+20	---	---	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Dibutyl phthalate (DBP)	84-74-2	ND	ND	---	---	1000
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	---	---	1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	ND	---	---	1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	---	---	1000
Di-n-hexyl phthalate (DHEXP / DnHP)	84-75-3	ND	ND	---	---	1000
Dicyclohexyl phthalate (DCHP)	84-61-7	ND	ND	---	---	1000
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	---	---	1000
Di-n-pentyl phthalate (DPENP)	131-18-0	ND	ND	---	---	1000
<b>Conclusion</b>		PASS	PASS	---	---	

*Note:*  
 mg/kg = Milligrams per kilogram  
 LT = Less than  
 ND = Not detected (Reporting Limit = 150 mg/kg)  
 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-C1001-09.4  
 Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		1+2+5	3+4+9	7+8+10	12+13+15	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
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
<b>Conclusion</b>		PASS	PASS	PASS	PASS	

**Note:**  
 mg/kg (Milligrams per kilogram) = 0.0001 % w/w (Percent by weight)  
 LT = Less than  
 ND = Not detected (Reporting Limit = 150 mg/kg)  
 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-C1001-09.4  
 Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		14+19	17+18+20	---	---	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Dibutyl phthalate (DBP)	84-74-2	ND	ND	---	---	1000
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	---	---	1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	ND	---	---	1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	---	---	1000
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	---	---	1000
Di-n-hexyl phthalate (DnHP)	84-75-3	ND	ND	---	---	1000
<b>Conclusion</b>		PASS	PASS	---	---	

**Note:**  
 mg/kg (Milligrams per kilogram) = 0.0001 % w/w (Percent by weight)  
 LT = Less than  
 ND = Not detected (Reporting Limit = 150 mg/kg)  
 Composite results are based on specimen of least mass resulting in highest potential concentration.

**Remark:**  
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**DETAILED RESULTS:**

**Client's Requirement, Phthalates content**

Test Method: CPSC-CH-C1001-09.4  
 Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		1+2+5	3+4+9	7+8+10	12+13+15	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
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 (DHEXP / DnHP)	84-75-3	ND	ND	ND	ND	1000
Di-n-octyl phthalate (DNOP)	117-84-0	ND	ND	ND	ND	1000
Diethyl phthalate (DEP)	84-66-2	ND	ND	ND	ND	1000
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	ND	ND	1000
Dicyclohexyl phthalate (DCHP)	84-61-7	ND	ND	ND	ND	1000
Di-n-pentyl phthalate (DPENP/DnPP)	131-18-0	ND	ND	ND	ND	1000
<b>Conclusion</b>		PASS	PASS	PASS	PASS	

**Note:**  
 mg/kg (Milligrams per kilogram) = 0.0001 % w/w (Percent by weight)  
 LT = Less than  
 ND = Not detected (Reporting Limit = 150 mg/kg)  
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**DETAILED RESULTS:**

**Client's Requirement, Phthalates content**

Test Method: CPSC-CH-C1001-09.4  
 Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		14+19	17+18+20	---	---	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Dibutyl phthalate (DBP)	84-74-2	ND	ND	---	---	1000
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	---	---	1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	ND	---	---	1000
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	---	---	1000
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	---	---	1000
Di-n-hexyl phthalate (DHEXP / DnHP)	84-75-3	ND	ND	---	---	1000
Di-n-octyl phthalate (DNOP)	117-84-0	ND	ND	---	---	1000
Diethyl phthalate (DEP)	84-66-2	ND	ND	---	---	1000
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	---	---	1000
Dicyclohexyl phthalate (DCHP)	84-61-7	ND	ND	---	---	1000
Di-n-pentyl phthalate (DPENP/DnPP)	131-18-0	ND	ND	---	---	1000
<b>Conclusion</b>		PASS	PASS	---	---	

**Note:**

mg/kg (Milligrams per kilogram) = 0.0001 % w/w (Percent by weight)

LT = Less than

ND = Not detected (Reporting Limit = 150 mg/kg)

Composite results are based on specimen of least mass resulting in highest potential concentration.



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**DETAILED RESULTS:**

**FDA 21 CFR 177.1210, Closures with Sealing Gaskets**

Test Method: FDA 21 CFR 177.1210

Specimen No.			4	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Distilled water extractive (mg/kg)	Fill boiling	Cooling to 100°F	ND	10	50
n-Heptane extractive (mg/kg)	120°F	0.25hours	ND	10	50
8% Ethanol extractive (mg/kg)	Fill boiling	Cooling to 100°F	ND	10	50
<b>Conclusion</b>			PASS		

*Note:*

Temp. = Temperature

°F = Degree Fahrenheit

ppm (Parts per million) = mg/kg (Milligrams per kilogram)

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 3.



**DETAILED RESULTS:**

**FDA 21 CFR 177.1520, Polypropylene Homopolymers**

Test Method: FDA 21 CFR 177.1520

Specimen No.			1	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Density (g/cc)	NA	NA	0.892	NA	0.880 – 0.913
Melting point (°C)	NA	NA	169	NA	150 – 180
n-Hexane extractive (% w/w)	Reflux	2 hours	0.7	0.1	6.4
Xylene extractive (% w/w)	Reflux	2 hours	1.7	0.5	9.8
<b>Conclusion</b>			PASS		

Specimen No.			2	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Density (g/cc)	NA	NA	0.889	NA	0.880 – 0.913
Melting point (°C)	NA	NA	168	NA	150 – 180
n-Hexane extractive (% w/w)	Reflux	2 hours	0.8	0.1	6.4
Xylene extractive (% w/w)	Reflux	2 hours	0.7	0.5	9.8
<b>Conclusion</b>			PASS		

**Note:**

- Temp. = Temperature
- °C = Degree Celsius
- g/cc = Grams per cubic centimeter
- % w/w = 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) 1.1.



**DETAILED RESULTS:**

**FDA 21 CFR 177.1520, Polypropylene Homopolymers**

Test Method: FDA 21 CFR 177.1520

Specimen No.			7	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Density (g/cc)	NA	NA	0.891	NA	0.880 – 0.913
Melting point (°C)	NA	NA	165	NA	150 – 180
n-Hexane extractive (% w/w)	Reflux	2 hours	0.7	0.1	6.4
Xylene extractive (% w/w)	Reflux	2 hours	0.5	0.5	9.8
<b>Conclusion</b>			PASS		

Specimen No.			8	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Density (g/cc)	NA	NA	0.892	NA	0.880 – 0.913
Melting point (°C)	NA	NA	167	NA	150 – 180
n-Hexane extractive (% w/w)	Reflux	2 hours	0.4	0.1	6.4
Xylene extractive (% w/w)	Reflux	2 hours	4.3	0.5	9.8
<b>Conclusion</b>			PASS		

**Note:**

- Temp. = Temperature
- °C = Degree Celsius
- g/cc = Grams per cubic centimeter
- % w/w = 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) 1.1.



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**DETAILED RESULTS:**

**FDA 21 CFR 177.1520, Polypropylene Homopolymers**

Test Method: FDA 21 CFR 177.1520

Specimen No.			12	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Density (g/cc)	NA	NA	0.899	NA	0.880 – 0.913
Melting point (°C)	NA	NA	165	NA	150 – 180
n-Hexane extractive (% w/w)	Reflux	2 hours	0.3	0.1	6.4
Xylene extractive (% w/w)	Reflux	2 hours	1.5	0.5	9.8
<b>Conclusion</b>			PASS		

Specimen No.			13	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Density (g/cc)	NA	NA	0.890	NA	0.880 – 0.913
Melting point (°C)	NA	NA	165	NA	150 – 180
n-Hexane extractive (% w/w)	Reflux	2 hours	0.3	0.1	6.4
Xylene extractive (% w/w)	Reflux	2 hours	1.7	0.5	9.8
<b>Conclusion</b>			PASS		

**Note:**

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

**Remark:**

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**DETAILED RESULTS:**

**FDA 21 CFR 177.1520, Polypropylene Homopolymers**

Test Method: FDA 21 CFR 177.1520

Specimen No.			17	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Density (g/cc)	NA	NA	0.896	NA	0.880 – 0.913
Melting point (°C)	NA	NA	166	NA	150 – 180
n-Hexane extractive (% w/w)	Reflux	2 hours	0.8	0.1	6.4
Xylene extractive (% w/w)	Reflux	2 hours	1.1	0.5	9.8
<b>Conclusion</b>			PASS		

Specimen No.			18	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Density (g/cc)	NA	NA	0.885	NA	0.880 – 0.913
Melting point (°C)	NA	NA	165	NA	150 – 180
n-Hexane extractive (% w/w)	Reflux	2 hours	0.9	0.1	6.4
Xylene extractive (% w/w)	Reflux	2 hours	2.8	0.5	9.8
<b>Conclusion</b>			PASS		

**Note:**

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

**Remark:**

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**DETAILED RESULTS:**

**FDA 21 CFR 177.2420, Polyester Resins, Cross-Linked**

Test Method: FDA 21 CFR 177.2420

Specimen No.			6	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Distilled water extractive (mg/in <sup>2</sup> )	Fill boiling	Cooling to 100°F	ND	<b>0.01</b>	<b>0.1</b>
n-Heptane extractive (mg/in <sup>2</sup> )	120°F	0.25hours	0.01	<b>0.01</b>	<b>0.1</b>
<b>Conclusion</b>			PASS		

Specimen No.			11	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Distilled water extractive (mg/in <sup>2</sup> )	Fill boiling	Cooling to 100°F	ND	<b>0.01</b>	<b>0.1</b>
n-Heptane extractive (mg/in <sup>2</sup> )	120°F	0.25hours	ND	<b>0.01</b>	<b>0.1</b>
<b>Conclusion</b>			PASS		

**Note:**

Temp. = Temperature

°F = Degree Fahrenheit

mg/in<sup>2</sup> = 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 177.2420 (c).



**DETAILED RESULTS:**

**FDA 21 CFR 177.2420, Polyester Resins, Cross-Linked**

Test Method: FDA 21 CFR 177.2420

Specimen No.			16	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Distilled water extractive (mg/in <sup>2</sup> )	Fill boiling	Cooling to 100°F	ND	<b>0.01</b>	<b>0.1</b>
n-Heptane extractive (mg/in <sup>2</sup> )	120°F	0.25hours	ND	<b>0.01</b>	<b>0.1</b>
<b>Conclusion</b>			PASS		

Specimen No.			21	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Distilled water extractive (mg/in <sup>2</sup> )	Fill boiling	Cooling to 100°F	ND	<b>0.01</b>	<b>0.1</b>
n-Heptane extractive (mg/in <sup>2</sup> )	120°F	0.25hours	ND	<b>0.01</b>	<b>0.1</b>
<b>Conclusion</b>			PASS		

**Note:**

- Temp. = Temperature
- °F = Degree Fahrenheit
- mg/in<sup>2</sup> = 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 177.2420 (c).



**DETAILED RESULTS:**

**FDA 21 CFR 177.2600, Rubber**

Test Method: FDA 21 CFR 177.2600

Specimen No.			3	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Distilled water extractive (mg/in <sup>2</sup> )	Reflux	First 7 hours	ND	<b>2</b>	<b>20</b>
Distilled water extractive (mg/in <sup>2</sup> )	Reflux	Succeeding 2 hours	ND	<b>0.1</b>	<b>1</b>
n-Hexane extractive (mg/in <sup>2</sup> )	Reflux	First 7 hours	ND	<b>15</b>	<b>175</b>
n-Hexane extractive (mg/in <sup>2</sup> )	Reflux	Succeeding 2 hours	0.7	<b>0.4</b>	<b>4</b>
<b>Conclusion</b>			PASS		

Specimen No.			9	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Distilled water extractive (mg/in <sup>2</sup> )	Reflux	First 7 hours	ND	<b>2</b>	<b>20</b>
Distilled water extractive (mg/in <sup>2</sup> )	Reflux	Succeeding 2 hours	ND	<b>0.1</b>	<b>1</b>
n-Hexane extractive (mg/in <sup>2</sup> )	Reflux	First 7 hours	ND	<b>15</b>	<b>175</b>
n-Hexane extractive (mg/in <sup>2</sup> )	Reflux	Succeeding 2 hours	0.6	<b>0.4</b>	<b>4</b>
<b>Conclusion</b>			PASS		

**Note:**

Temp. = Temperature

mg/in<sup>2</sup> = 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 177.2600 (e) and 177.2600 (f).



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**DETAILED RESULTS:**

**FDA 21 CFR 177.2600, Rubber**

Test Method: FDA 21 CFR 177.2600

Specimen No.			14	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Distilled water extractive (mg/in <sup>2</sup> )	Reflux	First 7 hours	ND	<b>2</b>	<b>20</b>
Distilled water extractive (mg/in <sup>2</sup> )	Reflux	Succeeding 2 hours	ND	<b>0.1</b>	<b>1</b>
n-Hexane extractive (mg/in <sup>2</sup> )	Reflux	First 7 hours	ND	<b>15</b>	<b>175</b>
n-Hexane extractive (mg/in <sup>2</sup> )	Reflux	Succeeding 2 hours	0.5	<b>0.4</b>	<b>4</b>
<b>Conclusion</b>			PASS		

Specimen No.			19	RL	Limit
Test Item	Test Condition		Result		
	Temp.	Duration			
Distilled water extractive (mg/in <sup>2</sup> )	Reflux	First 7 hours	ND	<b>2</b>	<b>20</b>
Distilled water extractive (mg/in <sup>2</sup> )	Reflux	Succeeding 2 hours	ND	<b>0.1</b>	<b>1</b>
n-Hexane extractive (mg/in <sup>2</sup> )	Reflux	First 7 hours	ND	<b>15</b>	<b>175</b>
n-Hexane extractive (mg/in <sup>2</sup> )	Reflux	Succeeding 2 hours	0.8	<b>0.4</b>	<b>4</b>
<b>Conclusion</b>			PASS		

**Note:**

Temp. = Temperature

mg/in<sup>2</sup> = Milligrams per square inch

LT = Less than

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**Remark:**

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**SPECIMEN DESCRIPTION:**

Specimen No.	Specimen Description	Location
1	Navy plastic	Straw (navy style)
2	Navy plastic	Lid (navy style)
3	Navy soft plastic	Straw hole (navy style)
4	Translucent soft plastic	Sealing ring (all styles)
5	Transparent navy plastic	Main body (navy style)
6	Transparent navy plastic	Interior (navy style)
7	Brown plastic	Straw (brown style)
8	Brown plastic	Lid (brown style)
9	Brown soft plastic	Straw hole (brown style)
10	Transparent brown plastic	Main body (brown style)
11	Transparent brown plastic	Interior (brown style)
12	Black plastic	Straw (black style)
13	Black plastic	Lid (black style)
14	Black soft plastic	Straw hole (black style)
15	Transparent black plastic	Main body (black style)
16	Transparent black plastic	Interior (black style)
17	White plastic	Straw (white style)
18	White plastic	Lid (white style)
19	White soft plastic	Straw hole (white style)
20	Transparent plastic	Main body (white style)
21	Transparent plastic	Interior (white style)



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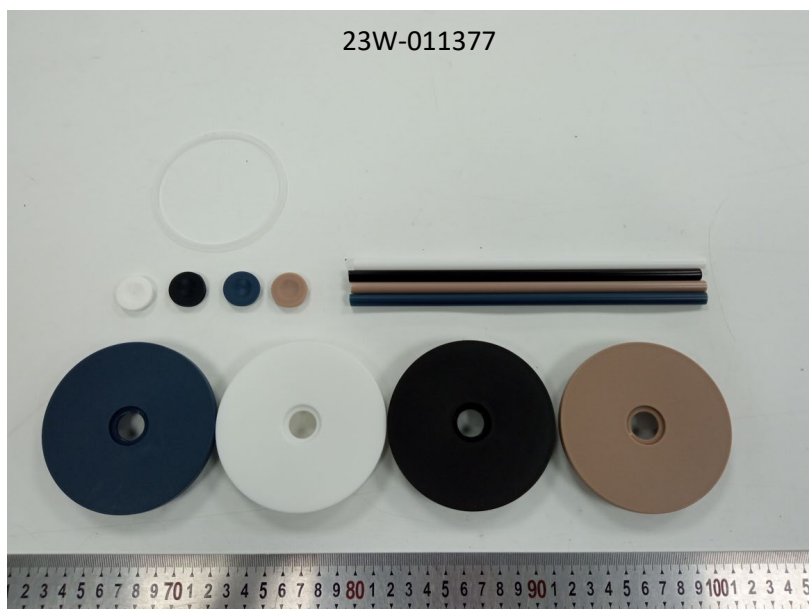
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**SAMPLE PHOTO:**



-End Report-

