

Test Report

No.: 68.431.22.4574.01

Date: 2022-11-30



Greater China

Applicant: Spector & CO
Address: /
Product Name: 600 ML / 20 OZ STAINLESS STEEL BOTTLE
End Use: DRINKWARE
Item No.: DW311
Style No.: EYE CANDY DOUBLE-DIP
Supplier: USS149
Country of Origin: CHINA
Country of Destination: CANADA & U.S.A.
Receipt Date of Sample: 2022-10-31
Date of Testing: From 2022-10-31 to 2022-11-28
Sample Submitted: The sample(s) was (were) submitted by applicant and identified.
Test Result: Refer to the data listed in following pages

Test Item	Conclusion
1. US California Proposition 65 - Total Cadmium Content Test - Paint and Similar Surface-Coating Materials	Pass*
2. US California Proposition 65 - Total Cadmium Content Test - Substrate Materials	Pass*
3. US California Proposition 65 - Total lead Content Test - Paint and Similar Surface-Coating Materials	Pass*
4. US California Proposition 65 - Total Lead Content Test - Substrate Materials	Pass*
5. Phthalates Content (11P)	Pass*
6. Tungsten Content Test	Report As Is
7. Canadian Surface Coating Materials Regulations SOR/2016-193 - Total Mercury Content Test	Pass
8. Canadian Surface Coating Materials Regulations SOR/2016-193 - Total Lead Content Test	Pass
9. Canadian Consumer Products Containing Lead Regulations SOR/2018-83 - Total Lead Content Test	Pass
10. Total Nickel Content Test	Report As Is
11. U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates Content (8P)	Pass
12. US California Proposition 65 - Phthalates Content (6P)	Pass*
13. FDA CFR Title 21 Part 177.1210	Pass
14. FDA CFR Title 21 Part 177.1520	Pass
15. Total Chromium	Pass

Remarks: 1. MDL = Method Detection Limit
2. N.D. = Not Detected (<MDL)
3. ≤ Less than

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Shenzhen, Guangdong, China

Phone: +86 755 8828 6998
Fax: +86 755 8828 5299
E-mail: info@tuv sud.com
Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test: Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

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4. 1 mg/kg = 1 ppm = 0.0001%

5. NA=Not Applicable

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Testing Center

Prepared by:

Authorized by:

Jojo Zhao



Steven Shu

Jojo Zhao
Project Coordinator

Shu, Steven
Senior Project Coordinator

Note:

- (1) The TÜV SÜD Certification and Testing (China) Co., Ltd. "General Terms & Conditions" applied.
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For further details, please see "Testing and certification regulation", chapter A-3.4
For full version, please visit: EN : <https://www.tuvsud.cn/zh-cn/resource/terms-and-conditions---en> ; SCN: <https://www.tuvsud.cn/zh-cn/terms-and-conditions> ; TCN: <https://www.tuvsud.com/zh-tw/terms-and-conditions>
- (2) The results relate only to the Items tested.
- (3) The test report shall not be reproduced except in full without the written approval of the laboratory
- (4) If relevant standards do not specify decision rule(s), follow decision rule as below:
 - "Pass" means that the measured result is within the limits, even when extended by expanded uncertainty at a level of confidence of 95%.
 - "Fail" means that the measured result is beyond the limit, even when extended by expanded uncertainty at a level of confidence of 95%.
- (5) The test item and sample were specified by the client.
- (6) "" denotes the conclusion was drawn according to the client's specification.

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Description of Tested Subject:

Sample	Description	Photo
A	Whole product	
001	Black PP-HO plastic (Lid)	
002	Grey silicone (Sealing ring)	

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<p>003</p>	<p>Silvery 304 stainless steel metal (Inner wall)</p>	
<p>004</p>	<p>Black printed white plastic sticker (QR code sticker)</p>	
<p>005</p>	<p>Red coating (Bottle)</p>	
<p>006</p>	<p>Orange coating (Bottle)</p>	

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<p>007</p>	<p>Blue coating (Bottle)</p>	
<p>008</p>	<p>Green coating (Bottle)</p>	
<p>009</p>	<p>Black coating (Bottle)</p>	
<p>010</p>	<p>Silvery coating (Bottle)</p>	

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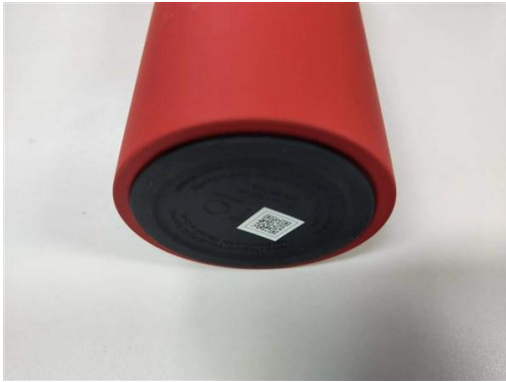
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011	Black silicone w/ adhesive backing (Bottom pad)	
012	Black silicone (Handle)	

T. No	Sample	Description
T1	001	Black PP-HO plastic (Lid)
T2	002	Grey silicone (Sealing ring)
T3	003	Silvery 304 stainless steel metal (Inner wall)
T4	004	Black printed white plastic sticker (QR code sticker)
T5	005	Red coating (Bottle)
T6	006	Orange coating (Bottle)
T7	007	Blue coating (Bottle)
T8	008	Green coating (Bottle)
T9	009	Black coating (Bottle)
T10	010	Silvery coating (Bottle)
T11	011	Black silicone w/ adhesive backing (Bottom pad)
T12	012	Black silicone (Handle)

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Test Result(s):

1. US California Proposition 65 - Total Cadmium Content Test - Paint and Similar Surface-Coating Materials

Test with reference to microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
005+006+007	mg/kg	10	75	N.D.	Pass
008+009+010	mg/kg	10	75	N.D.	Pass

2. US California Proposition 65 - Total Cadmium Content Test - Substrate Materials

Test with reference to acid digestion or microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
001	mg/kg	10	75	N.D.	Pass
002	mg/kg	10	75	N.D.	Pass
003	mg/kg	10	75	N.D.	Pass
004	mg/kg	10	75	N.D.	Pass
011	mg/kg	10	75	N.D.	Pass
012	mg/kg	10	75	N.D.	Pass

3. US California Proposition 65 - Total Lead Content Test - Paint and Similar Surface-Coating Materials

Test with reference to microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
005+006+007	mg/kg	10	90	N.D.	Pass
008+009+010	mg/kg	10	90	N.D.	Pass

4. US California Proposition 65 - Total Lead Content Test - Substrate Materials

Test with reference to acid digestion or microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
001	mg/kg	10	100	N.D.	Pass
002	mg/kg	10	100	N.D.	Pass
003	mg/kg	10	100	N.D.	Pass
004	mg/kg	10	100	N.D.	Pass
011	mg/kg	10	100	N.D.	Pass
012	mg/kg	10	100	N.D.	Pass

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5. Phthalates Content (11P)

Test with reference to in-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					001	002
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					005+006+007	008+009+010
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
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Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate,	26761-40-0 ,	%	0.005	0.1	N.D.	N.D.

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(DIDP)	68515-49-1					
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					011	012
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

6. Tungsten Content Test

Test with reference to acid digestion and determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES)

Test items	Unit	MDL	Limit	Result(s)
				003
Tungsten(W)	mg/kg	10.0	-	N.D.
Conclusion				Report As Is

7. Canadian Surface Coating Materials Regulations SOR/2016-193 - Total Mercury Content Test

Test with reference to microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Limit	Result(s)	Conclusion
004	mg/kg	10	10.0	N.D.	Pass

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005	mg/kg	10	10.0	N.D.	Pass
006	mg/kg	10	10.0	N.D.	Pass
007	mg/kg	10	10.0	N.D.	Pass
008	mg/kg	10	10.0	N.D.	Pass
009	mg/kg	10	10.0	N.D.	Pass
010	mg/kg	10	10.0	N.D.	Pass

8. Canadian Surface Coating Materials Regulations SOR/2016-193 - Total Lead Content Test

Test with reference to microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Limit	Result(s)	Conclusion
004	mg/kg	10	90	N.D.	Pass
005	mg/kg	10	90	N.D.	Pass
006	mg/kg	10	90	N.D.	Pass
007	mg/kg	10	90	N.D.	Pass
008	mg/kg	10	90	N.D.	Pass
009	mg/kg	10	90	N.D.	Pass
010	mg/kg	10	90	N.D.	Pass

9. Canadian Consumer Products Containing Lead Regulations SOR/2018-83 - Total Lead Content Test

Test with reference to acid digestion or microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Limit	Result(s)	Conclusion
001	mg/kg	10	90	N.D.	Pass
002	mg/kg	10	90	N.D.	Pass
003	mg/kg	10	90	N.D.	Pass
004	mg/kg	10	90	N.D.	Pass
005+006+007	mg/kg	10	90	N.D.	Pass
008+009+010	mg/kg	10	90	N.D.	Pass
011	mg/kg	10	90	N.D.	Pass
012	mg/kg	10	90	N.D.	Pass

10. Total Nickel Content Test

Test with reference to acid digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Limit	Result(s)	Conclusion
003	mg/kg	5	-	79509.018	Report As Is

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11. U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates Content (8P)

Test with reference to in-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					001	002
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					005+006+007	008+009+010
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					011	012
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.

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Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

12. US California Proposition 65 - Phthalates Content (6P)

Test with reference to in-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					001	002
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					005+006+007	008+009+010
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.

Regd. Office:

TüV Süd Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,
Shenzhen, Guangdong, China

Phone: +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuvsud.com

Web : http://www.tuvsud.cn

Lab 1 - Chemical testing and part of electrical testing

Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

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Date: 2022-11-30



Greater China

Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					011	012
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

13. FDA CFR Title 21 Part 177.1210

Test for compliance with the selected requirement(s) in U.S. F.D.A. C.F.R. 21. Part 177.1210

TEST ITEMS	TEST CONDITIONS	RESULT [ppm]	CFR Specification [ppm]
		SAMPLE 002	
Chloroform extractives in Distilled water	Fill boiling water and then cool to 100 °F	<10.0	50
Chloroform extractives in 8% Ethanol	Fill boiling 8% ethanol and then cool to 100 °F	<10.0	50
Chloroform extractives in N-heptane	120°F for 15 Minutes	<10.0	250
Conclusion		Pass	-

Note:

1. "ppm" denotes part per million
2. "<" denotes less than
3. "°C" denotes degree Celsius
4. The specification is quoted from U.S. F.D.A. C.F.R. 21. Part 177.1210

14. FDA CFR Title 21 Part 177.1520

Test for compliance with the selected requirement(s) in U.S. F.D.A. C.F.R. 21. Part 177.1520

TEST ITEMS	RESULTS	CFR Specification [PP Homopolymer]
	SAMPLE 001	

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Phone: +86 755 8828 6998
 Fax: +86 755 8828 5299
 E-mail: info@tuv sud.com
 Web : http://www.tuv sud.cn

Lab 1 - Chemical testing and part of electrical testing Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China
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Density [g/cc]	0.900	0.880 - 0.913
Melting Point Range [°C]	168-171	160 - 180
Maximum extractive in n-hexane after reflux for 2 hours [%]	<1.00	6.4
Maximum extractive in xylene after reflux for 2 hours at 25 °C [%]	1.73	9.8
Conclusion	Pass	-

Note:

1. “%” denotes percentage by weight
2. “g/cc” denotes gram per cubic centimeter
3. “<” denotes less than
4. “°C” denotes degree Celsius
5. The specification is quoted from U.S. F.D.A. C.F.R. 21. Part 177.1520

15. Total Chromium Content

Test for compliance with the selected requirement(s) in the General Recognized As Safe (GRAS) specification according to United State Food and Drug Administration (US FDA) Regulations on stainless steel

Test Method: Digested by acid and analyzed by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES)

Analyte	Results [%]
	Sample 003
Total Chromium(Cr)	17.38
Limit	Not less than 16
Conclusion	Pass

Note:

- “%” denotes percentage by weight

-End of Test Report-

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 Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District,
 Shenzhen, Guangdong, China

Phone: +86 755 8828 6998

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Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China