

SPECIFICATION FOR APPROVAL

CUSTOMER: 磐旭

CUSTOMER P/N : 3452002001440M

MODEL NAME: HT08 ANT HF

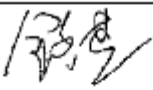
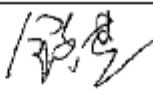
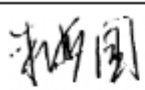
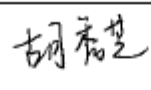
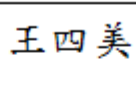
AWAN P/N: ALP6P-100002

Date: 2022-07-06

Customer Approval

R&D Manager

AWAN Approved

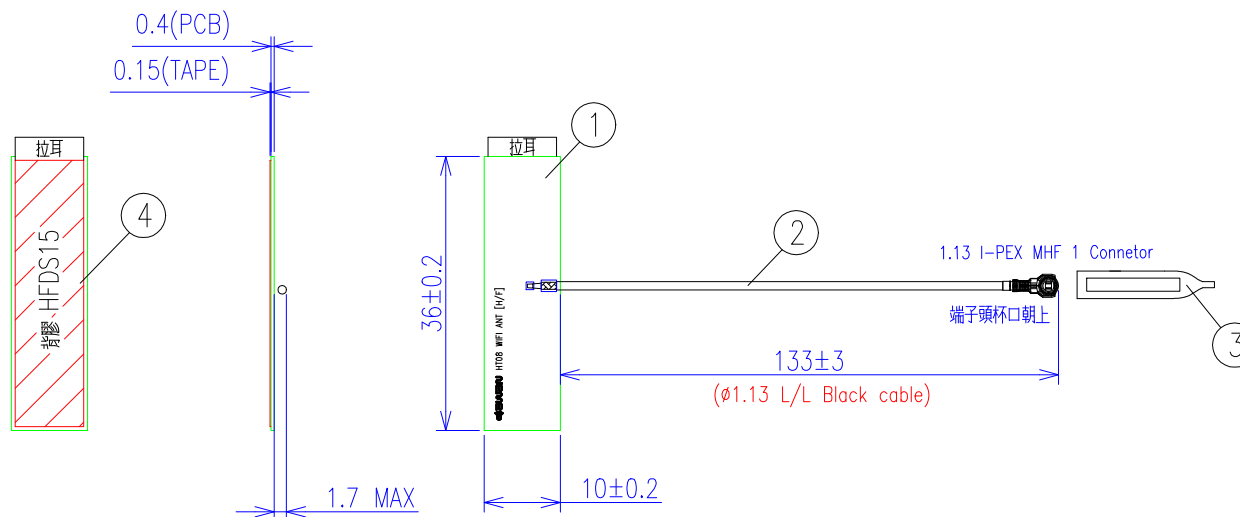
					
&D Manager / Dongyan.Jin	Mechanical Manager / Dongyan.Jin	Q&R Manager / Fish Tong	Project Engineer / Jake.Zhu	Product Manager/ Xiuzhi.hu	Authorized Strength/ Simei.Wang



No.925, Hua-Yuan Road,Zhang- Pu Town,
Kun -Shan City, Jiang -Su Prov.,P.R.C.
TEL : 86-512-5744-6168
FAX : 86-512-5744-9168
Http : //www.awan-ant.com

1	AWAN P/N	ALP6P-100002
2	CustomerP/N	3452002001440M

3	Rev.	EC#	Description	Drawn/Date	Checked/Date	Approved/Date
4	X1		NEW RELEASE	Trista 03/16/22'	Louis 03/16/22'	Louis 03/16/22'



4	TAPE(HFDS15)	1	Tube		
3	防護蓋,ø3.6*18mm,單邊封口有鬆緊圈_HF	1	I-U0036-1801603 Tube		
2	ø1.13 L/L BLACK cable+I-PEX MHF 1 Connector	1	Cable		
1	HT08 PCB	1	PCB		
Item	Name	Q'ty	Part #	Material / Finish	
Control Point		Drawn	Date	 HT08_ANT_HF	
File	to	Trista	03/16/22'		
Critical (Cpk & Cp) :	General	X, ±1.00	Design		Date
[M] = 0 Places		.XX ±0.50	Trista		03/16/22'
Major (OC Checked) :	Angles	X, ±0.60	Checked		Date
▼ = 0 Places		.XX ±1.0'	Louis		03/16/22'
Total Design Dimension :	Scale	1 : 1	Approved		Date
[T.M] = 0 Places	Sheet	1 of 1	Louis		03/16/22'
Unit	mm	3D File	Customer Drawing		
					

HALOGEN FREE

This document and information contained herein are the property of AWAN, copies are issued in strict confidence and shall not be reproduced or copied, or used as the basic of manufacture or sale of apparatus without permission

HSF相關均質拆分及測試點選擇參照
<HSF均質物質拆分作業圖示表>

符合AWAN環境管理物質技術標準
All materials meet the AWAN's spec. Environment - related substances management technical standard.

1

2

3

4

5

6

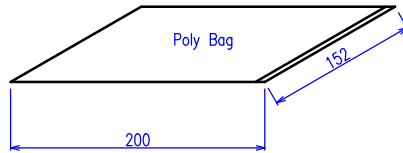
7

8

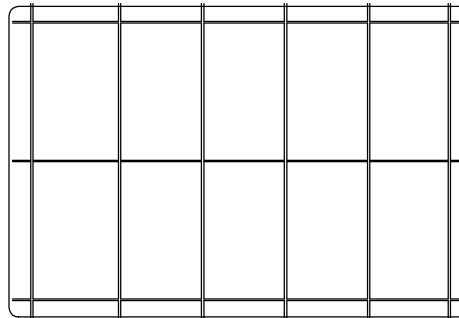
Rev.	EC#	Description	Drawn/Date	Checked/Date	Approved/Date
A		New Release	Forest 07/04/22*	Louis 07/04/22*	Louis 07/04/22*



Antenna X10



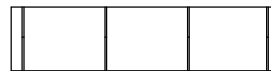
100 PCS/Square



2 2000 PCS Card Board in the carton
(2000Pcs Antenna in the Carton)

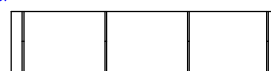
Card Board

2000 PCS/Carton



1000 PCS/Layer

Card Board A



1000 PCS/Layer

Card Board

Notes
1.0

- Packaging P/N see Table A
- Packaging quantity & N.W & G.W refer Table B

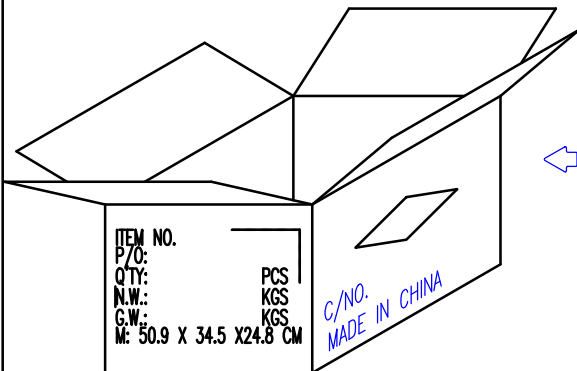
P-SE-CD307 5層板,6插槽x3插槽_隔板組(485x337)

TABLE A :

PART NAME	P/N	PCS
OUTER BOX	P-B0-0895D00	1
Card Board 490*330	P-B-045053100	2
Card Board A 720*340	P-B-070061300	1
3插槽_5層 337*113*71	P-B-072057509	12
5插槽_6層 492*113	P-B-060057516	6
PE袋	P-PE-B0140400000	200

TABLE B :

Part Number	PCS/Poly Bag	PCS/Square	PCS/Layer	PCS/Carton	N.W(kgs)	G.W(kgs)
A8P6P-100002	10	100	1000	2000		



HALOGEN FREE

This document and information contained herein are the property of AWAN, copies are issued in strict confidence and shall not be reproduced or copied, or used as the basic of manufacture or sale of apparatus without permission

HSF相關均須拆分及測試點選擇參照
<HSF均貨物實拆分作業圖示表>

Tolerances Unless Otherwise Specified		Drawn	Date		
General		Forest	07/04/22*		
Angles		Design	Forest 07/04/22*		
Scale		Checked	Louis 07/04/22*		
Sheet	1 or 2	Approved	Louis 03/04/22*	HT08	
Unit	mm	3D File		PACKAGE DRAWING	
		Drawn No.	P-ALP6P-XX-XX	Series	ALP6P
		Drawn	X1	Series	A3

符合AWAN環境管理物質技術標準
All materials meet the AWAN's spec. Environment - related substances management technical standard.

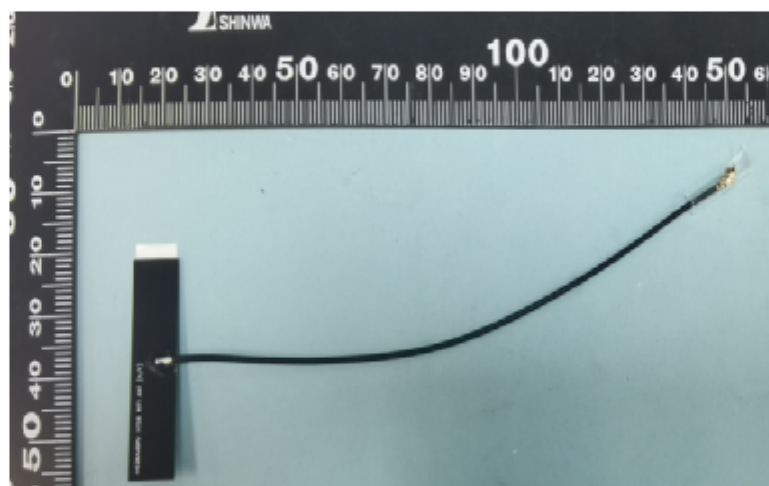
1. Description

1.1 Specifications

Antennas Type	Dipole Antenna for WIFI application	
Connector Type	I-PEX MHF1	
Impedance	50Ω	
Polarization	Linear	
Radiation pattern	Omni-directional	
Frequency	WIFI	2.40~2.50 GHz, 5.15-5.85 GHz
S11	WIFI	-9 Max

1.2 Antenna Picture

WIFI P/N: ALP6P-100002



2. Electrical Specification

2.1 Test Equipment

- A. VSWR and input impedance: Agilent 8720/8753 Network Analyzer
- B. Antenna gain and efficiency: ETS three-dimensional anechoic chamber

2.2 Test Setup

2.2.1 Frequency Range

- A. WiFi: 2.40~2.50 GHz ; 5.15~5.85 GHz

2.2.2 VSWR

- Step 1: The antenna is arranged on the customer provided test fixture.
- Step 2: The VSWR of the antenna is measured via Agilent 8720/8753 Network Analyzer (see figure. 1).



Figure.1

2.2.3 Radiation pattern and Gain

- A. The 3D chamber provides less than -40dB reflectivity from 800MHz to 6GHz and a 40cm diameter spherical quiet zone. The measurement results are calibrated using both dipoles and standard gain horns (see figure. 2).
- B. The antenna under tested is arranged in the turned table and a decoupling sleeve is used to reduce feed line radiation (see figure. 3).
- C. The measured results of the radiation patterns and antenna gain are obtained from the control system and showed on the monitor (see figure. 4 and 5).

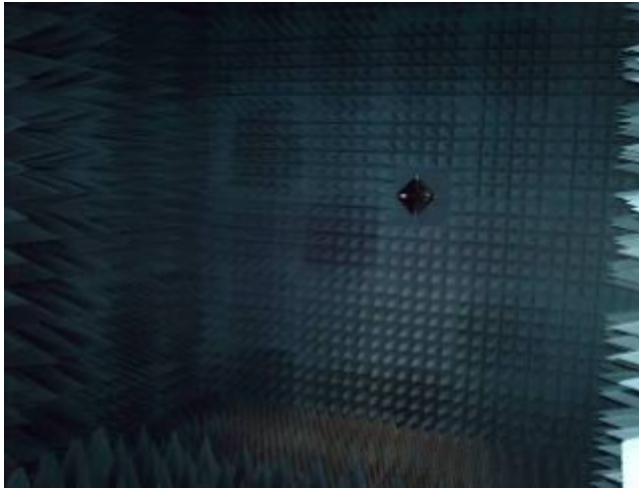


Figure.2

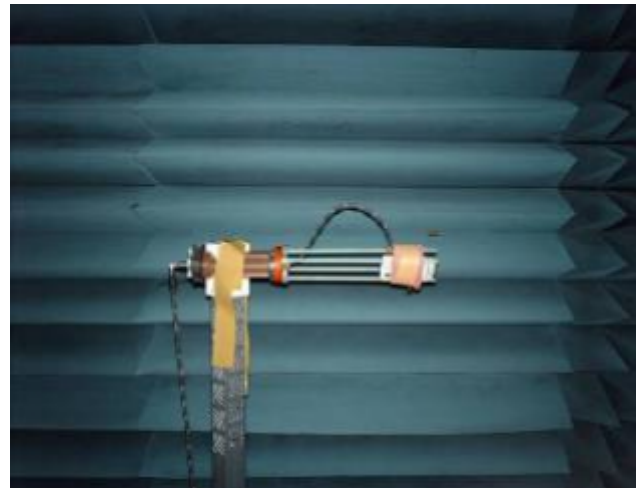


Figure.3



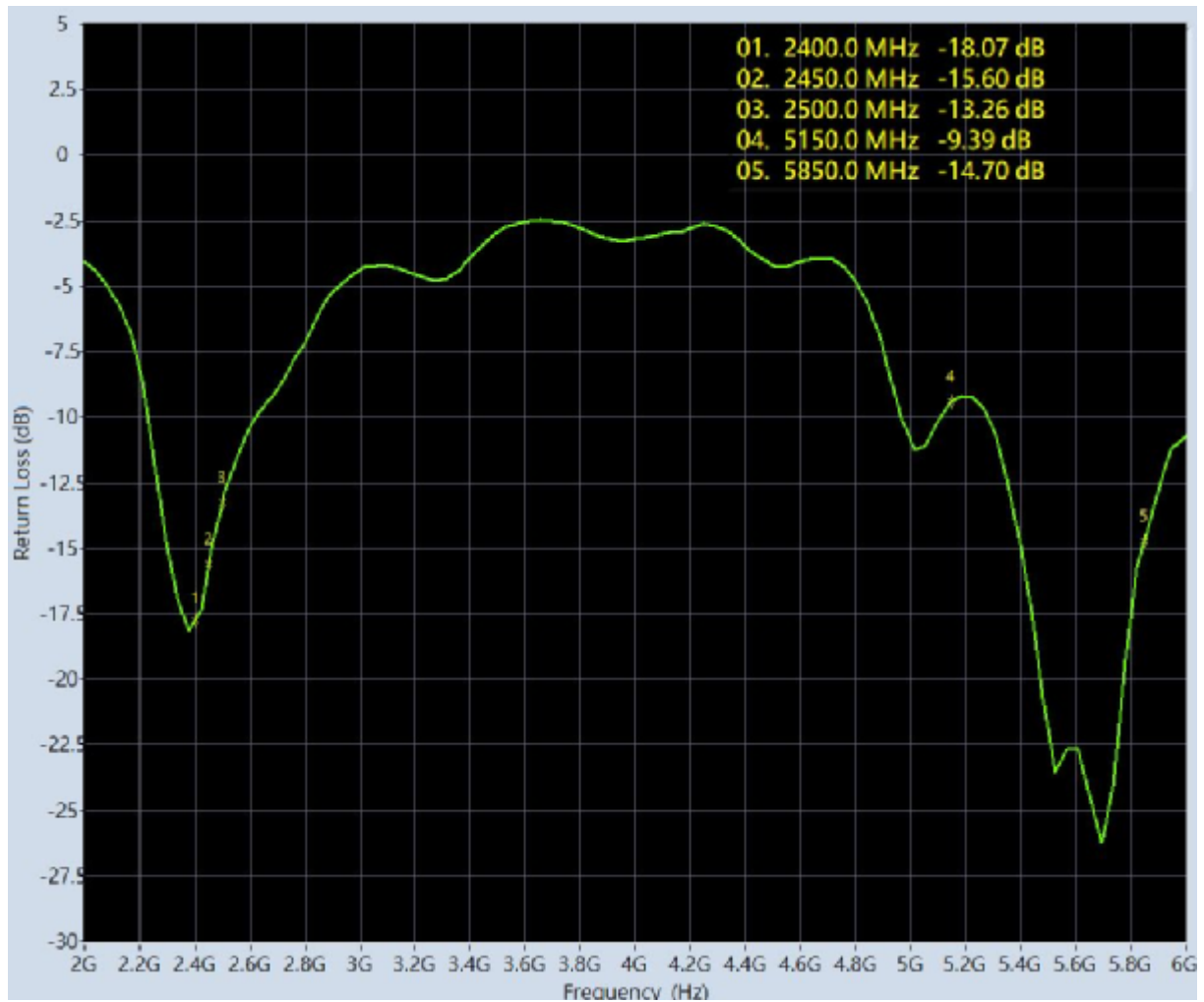
Figure.4



Figure.5

3. Performance Data

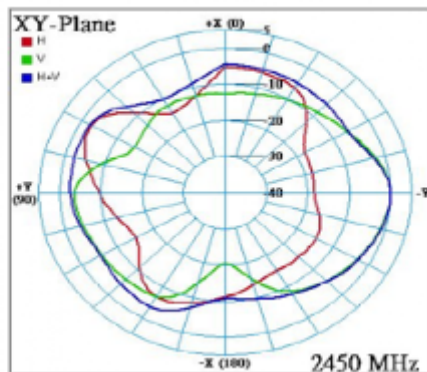
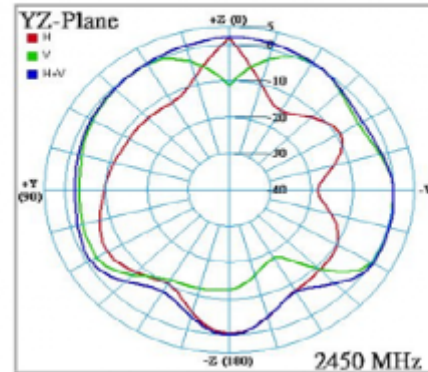
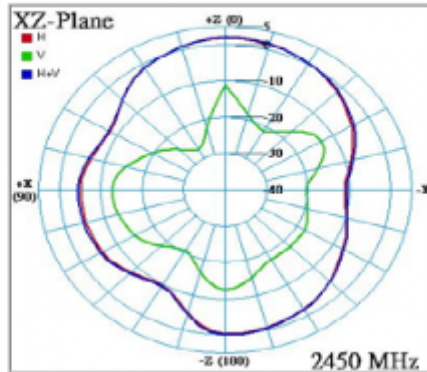
3.1 S11



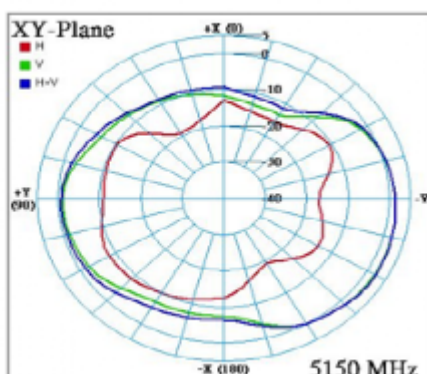
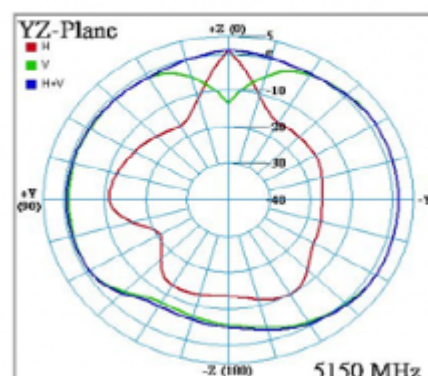
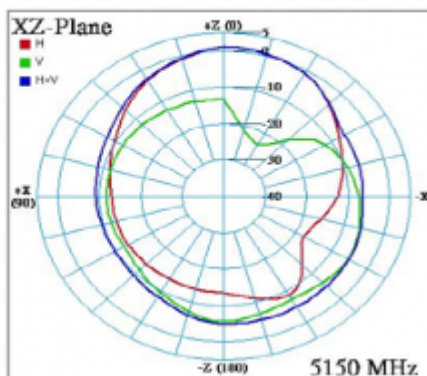
3.2 Radiation pattern & Gain (WIFI Antenna)

3.2.1 Antenna pattern

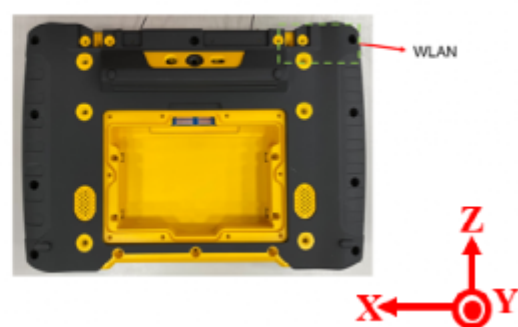
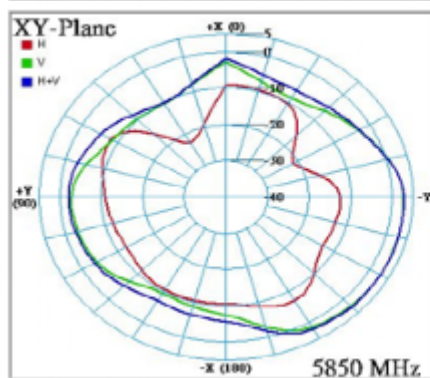
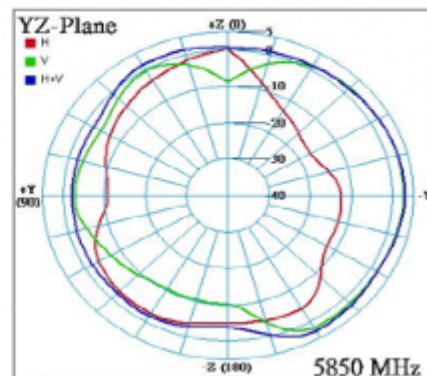
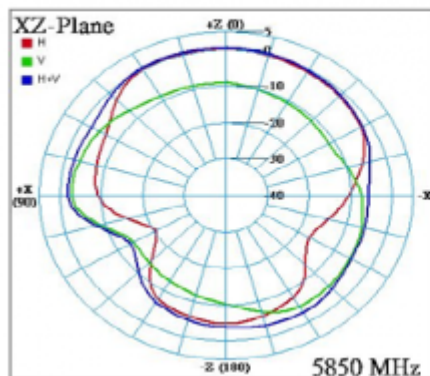
2450MHz



5150MHz



5850MHz

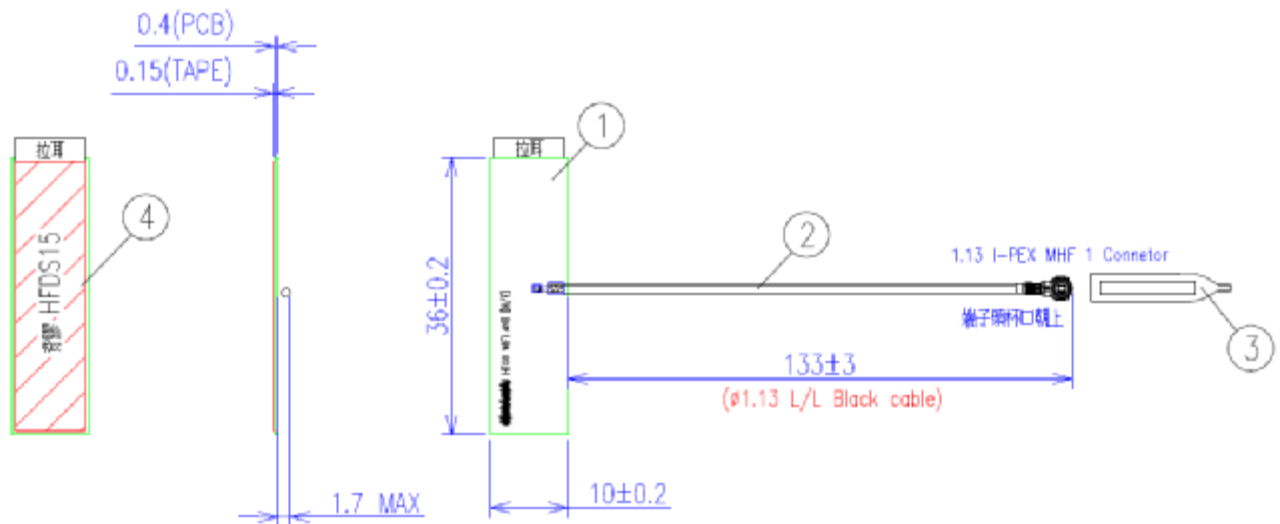


Antenna Gain/Efficiency (WiFi Antenna)

	Efficiency(dB)	Efficiency(%)	Peak EIRP(dBi)
2400MHz	-2.39	57.68	2.58
2450MHz	-2.65	54.33	2.63
2500MHz	-2.81	52.36	1.79
5150MHz	-2.44	57.02	2.72
5550MHz	-2.32	58.61	2.36
5850MHz	-2.24	59.70	2.91

4.Mechanical Specification

4.1 Assembly Drawing (WIFI Antenna)



Revision

Revision	Date	Change Notification	Notes
Rev.1	2022-07-06		

Test Report

No. SHAEC2124645101

Date: 19 Nov 2021

Page 1 of 4

SHANGHAI CHANGYUAN ELECTRONIC MATERIAL CO., LTD.

NO.1690#, JIAHAO ROAD, JIADING, SHANGHAI

The following sample(s) was/were submitted and identified on behalf of the clients as : Heat-shrinkable Tubing

SGS Job No. : SP21-035212 - SH
 Part No. (P/N) : CB-101(Transparent)
 Main Substance : EVA
 Date of Sample Received : 12 Nov 2021
 Testing Period : 12 Nov 2021 - 19 Nov 2021
 Test Requested : Selected test(s) as requested by client.
 Test Method : Please refer to next page(s).
 Test Results : Please refer to next page(s).

Signed for and on behalf of
 SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Carol Luo

Carol Luo
 Approved Signatory

scan to see the report



1112D58E



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
 Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.
 Testing Center-China

3rd Building, No.889 Yishan Road Xuhui District, Shanghai China 200233
 中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
 t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

Test Report

No. SHAEC2124645101

Date: 19 Nov 2021

Page 2 of 4

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	SHA21-246451.001	Transparent soft solid

Remarks :

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

Halogen

Test Method : With reference to EN 14582: 2016 , analysis was performed by IC.

Test Item(s)	Unit	MDL	001
Fluorine (F)	mg/kg	50	ND
Chlorine (Cl)	mg/kg	50	ND
Bromine (Br)	mg/kg	50	ND
Iodine (I)	mg/kg	50	ND



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

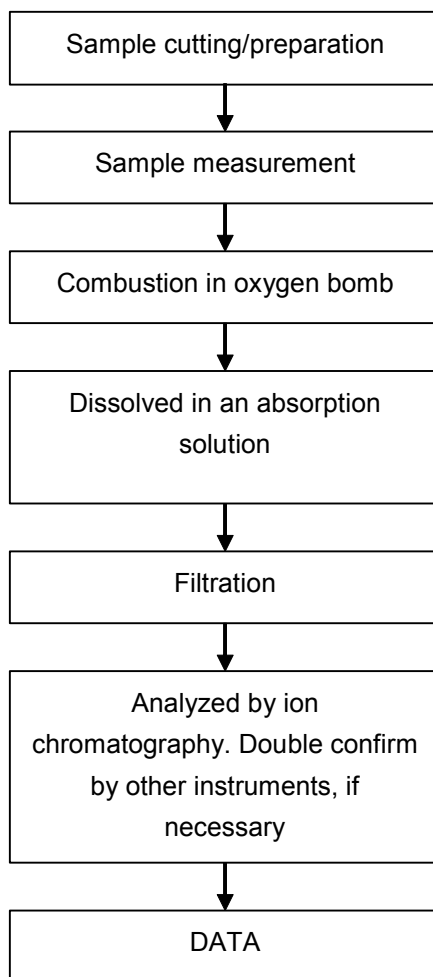
SGS-CSTC Shanghai Technical Services Co., Ltd.
Testing Center - China (Shanghai) Co., Ltd.

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

ATTACHMENTS

Halogen Testing (oxygen bomb) Flow Chart



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

Test Report

No. SHAEC2124645101

Date: 19 Nov 2021

Page 4 of 4

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



SGS-CSTC (Shanghai) Technical Services Co., Ltd.
Testing Center - China (Shanghai) Co., Ltd.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

Test Report

No. SHAEC2122534607

Date: 25 Oct 2021

Page 1 of 8

SHANGHAI CHANGYUAN ELECTRONIC MATERIAL CO., LTD.

NO.1690#, JIAHAO ROAD, JIADING, SHANGHAI

The following sample(s) was/were submitted and identified on behalf of the clients as : Heat-shrinkable Tubing

SGS Job No. : SP21-032464 - SH
 Part No. (P/N) : CB-101(Transparent)
 Main Substance : EVA
 Date of Sample Received : 19 Oct 2021
 Testing Period : 19 Oct 2021 - 25 Oct 2021
 Test Requested : Selected test(s) as requested by client.
 Test Method : Please refer to next page(s).
 Test Results : Please refer to next page(s).
 Conclusion : Based on the performed tests on submitted sample(s), the results of Cadmium, Lead, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of
 SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Jenny Lan

Jenny Lan
 Approved Signatory

scan to see the report



A8C0FE08



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.
 Testing Center-China Head Office

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
 Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

3rd Building, No.889 Yishan Road Xuhui District, Shanghai China 200233 t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgs.com.cn
 中国·上海·徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

Test Report

No. SHAEC2122534607

Date: 25 Oct 2021

Page 2 of 8

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	SHA21-225346.007	Transparent soft solid

Remarks :

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method : With reference to IEC 62321-4:2013+AMD1:2017, IEC62321-5:2013, IEC62321-7-2:2017, IEC 62321-6:2015 and IEC62321-8:2017, analyzed by ICP-OES, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit	MDL	007
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	8	ND
Sum of PBBs	1000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC (Shanghai) Technical Services (Shanghai) Co., Ltd.
Testing Center (China) Limited

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233 t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

Test Report

No. SHAEC2122534607

Date: 25 Oct 2021

Page 3 of 8

Test Item(s)	Limit	Unit	MDL	007
Pentabromodiphenyl ether	-	mg/kg	5	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND
Heptabromodiphenyl ether	-	mg/kg	5	ND
Octabromodiphenyl ether	-	mg/kg	5	ND
Nonabromodiphenyl ether	-	mg/kg	5	ND
Decabromodiphenyl ether	-	mg/kg	5	ND
Di-butyl Phthalate (DBP)	1000	mg/kg	50	ND
Benzyl Butyl Phthalate (BBP)	1000	mg/kg	50	ND
Di-2-Ethyl Hexyl Phthalate (DEHP)	1000	mg/kg	50	ND
Diisobutyl Phthalates (DIBP)	1000	mg/kg	50	ND

Notes :

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863. IEC 62321 series is equivalent to EN 62321 series
https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25
- (2) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

Phthalates Content

Test Method : With reference to EN 14372:2004, analysis was performed by GC-MS.

Test Item(s)	CAS NO.	Unit	MDL	007
Diisononyl Phthalate (DINP)	28553-12-0 /68515-48-0	%	0.01	ND
Diisodecyl Phthalate (DIDP)	26761-40-0 /68515-49-1	%	0.01	ND
Di-n-hexyl Phthalate (DnHP)	84-75-3	%	0.003	ND
Di-n-octyl Phthalate (DNOP)	117-84-0	%	0.003	ND



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC (Shanghai) Technical Services (Shanghai) Co., Ltd.
Testing Center - China (Shanghai) Co., Ltd.

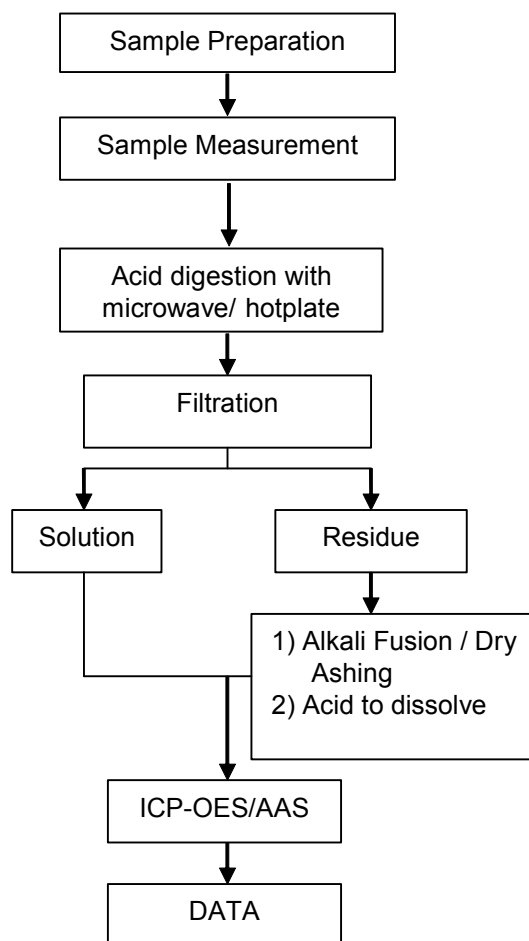
3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

ATTACHMENTS

Elements (IEC62321) Testing Flow Chart

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.

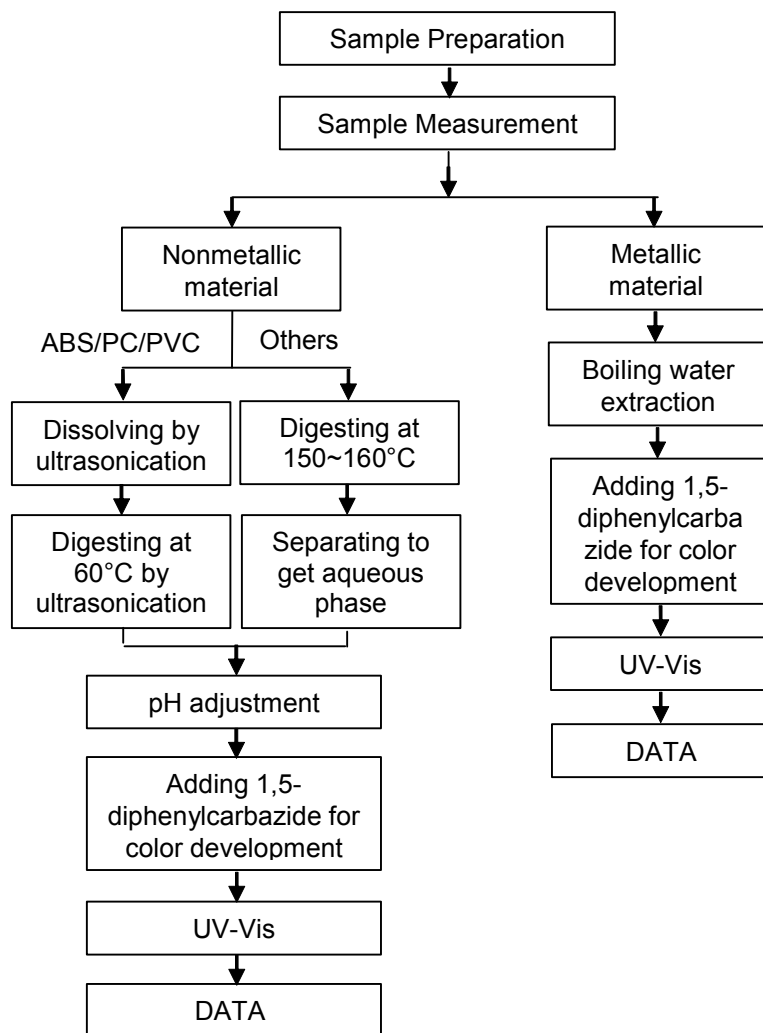


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

ATTACHMENTS

Hexavalent Chromium (Cr(VI)) Testing Flow Chart

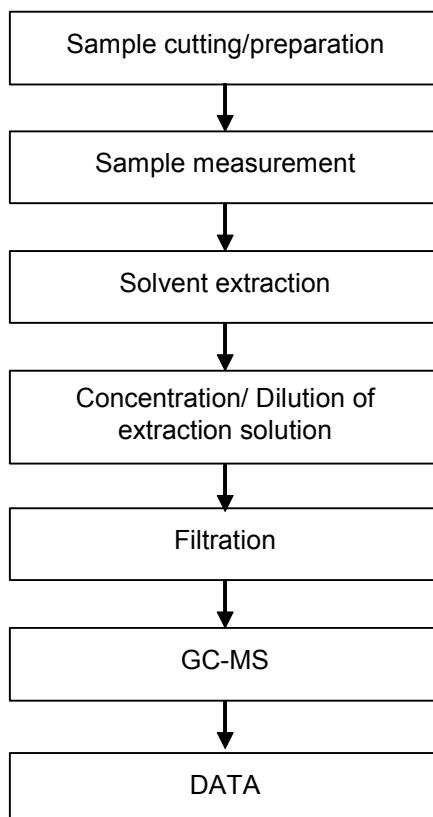


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

ATTACHMENTS

PBBs/PBDEs Testing Flow Chart



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

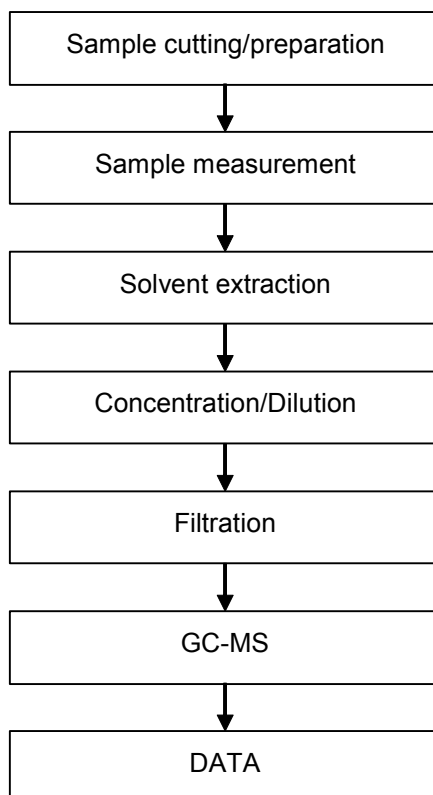
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

ATTACHMENTS

Phthalates Testing Flow Chart



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Test Report

No. SHAEC2122534607

Date: 25 Oct 2021

Page 8 of 8

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



SGS-CSTC (Shanghai) Co., Ltd.
Testing Center (China) Co., Ltd.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

Test Report

No. SHAEC2111264701

Date: 08 Jun 2021

Page 1 of 12

SUZHOU BANGYI TRADE CO.,LTD.

NO.108 FENGXIA ROAD,KUNSHAN CITY

The following sample(s) was/were submitted and identified on behalf of the clients as : SOLDER WIRE

SGS Job No. : SP21-017111 - SH

Model No. : SnCu0.7

Client Ref. Information : Sn99.99\SnAg3Cu0.5\Sn99.9\SnAg0.3Cu0.7

SOLDER BAR/PLATE/BALL

Date of Sample Received : 03 Jun 2021

Testing Period : 03 Jun 2021 - 08 Jun 2021

Test Requested : Selected test(s) as requested by client.

Test Method : Please refer to next page(s).

Test Results : Please refer to next page(s).

Conclusion : Based on the performed tests on submitted sample(s), the results of Cadmium, Lead, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Carol Luo

Carol Luo
Approved Signatory

scan to see the report



SHAEC2111264701



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233 t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

Test Report

No. SHAEC2111264701

Date: 08 Jun 2021

Page 2 of 12

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	SHA21-112647.001	Silver metal

Remarks :

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method : With reference to IEC 62321-4:2013+AMD1:2017, IEC62321-5:2013, IEC62321-7-1:2015, IEC 62321-6:2015 and IEC62321-8:2017, analyzed by ICP-OES, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit	MDL	001
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	23
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm ²	0.10	ND
Sum of PBBs	1000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233 t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

Test Report

No. SHAEC2111264701

Date: 08 Jun 2021

Page 3 of 12

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Pentabromodiphenyl ether	-	mg/kg	5	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND
Heptabromodiphenyl ether	-	mg/kg	5	ND
Octabromodiphenyl ether	-	mg/kg	5	ND
Nonabromodiphenyl ether	-	mg/kg	5	ND
Decabromodiphenyl ether	-	mg/kg	5	ND
Di-butyl Phthalate (DBP)	1000	mg/kg	50	ND
Benzyl Butyl Phthalate (BBP)	1000	mg/kg	50	ND
Di-2-Ethyl Hexyl Phthalate (DEHP)	1000	mg/kg	50	ND
Diisobutyl Phthalates (DIBP)	1000	mg/kg	50	ND

Notes :

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
IEC 62321 series is equivalent to EN 62321 series
https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25
- (2) ▽ = a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 µg/cm².
The sample coating is considered to contain CrVI
b. The sample is negative for CrVI if CrVI is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-CrVI based coating
c. The result between 0.10 µg/cm² and 0.13 µg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination
Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

Halogen

Test Method : With reference to EN 14582: 2016 , analysis was performed by IC.

<u>Test Item(s)</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Fluorine (F)	mg/kg	50	ND
Chlorine (Cl)	mg/kg	50	ND
Bromine (Br)	mg/kg	50	ND
Iodine (I)	mg/kg	50	ND

Element(s)

Test Method : With reference to US EPA Method 3050B:1996, analysis was performed by ICP-OES.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233 t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

Test Report

No. SHAEC2111264701

Date: 08 Jun 2021

Page 4 of 12

Test Item(s)	Unit	MDL	001
Beryllium (Be)	mg/kg	5	ND

Perfluorooctanesulfonate (PFOS) and its derivatives and Perfluorooctanoic Acid (PFOA)

Test Method : With reference to CEN/TS 15968:2010, analysis was performed by HPLC-MS.

Test Item(s)	CAS NO.	Unit	MDL	001
Perfluorooctane sulfonates (PFOS) and its derivatives	-	mg/kg	-	ND
PFOS [^]	1763-23-1	mg/kg	10	ND
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	mg/kg	10	ND
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	mg/kg	10	ND
2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol (EtFOSE)	1691-99-2	mg/kg	10	ND
2-(N-methylperfluoro-1-octanesulfonamido)-ethanol (MeFOSE)	24448-09-7	mg/kg	10	ND
Perfluorooctane Sulfonamide (PFOSA)	754-91-6	mg/kg	10	ND
Perfluorooctanoic Acid (PFOA) and its salts+	-	mg/kg	10	ND

Notes :

- (1) + PFOA refer to its salts including PFOA-Na (CAS No.: 335-95-5), PFOA-K (CAS No.: 2395-00-8), PFOA-Ag (CAS No.: 335-93-3), PFOA-F (CAS No.: 335-66-0) and APFO (CAS No.: 3825-26-1);
- (2) ^ PFOS including PFOS-K (CAS No.: 2795-39-3), PFOS-Li (CAS No.: 29457-72-5), PFOS-NH₄ (CAS No.: 29081-56-9), PFOS-NH(OH)₂ (CAS No.: 70225-14-8), PFOS-N(C₂H₅)₄ (CAS No.: 56773-42-3), PFOS-DDA (CAS No.: 251099-16-8) and POSF (CAS No.: 307-35-7)



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Shanghai Technical Services (Shanghai) Co., Ltd.
Testing Center - China (Shanghai) Co., Ltd.

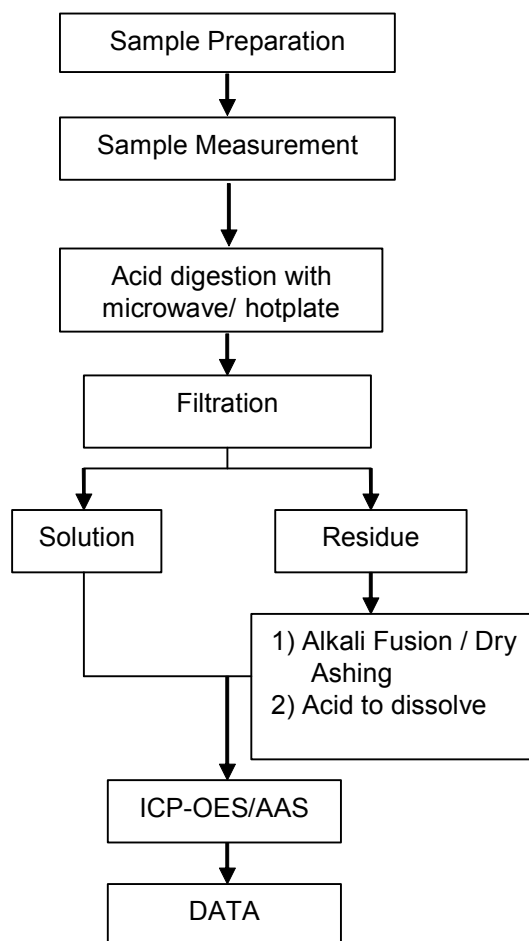
3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

ATTACHMENTS

Elements (IEC62321) Testing Flow Chart

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.

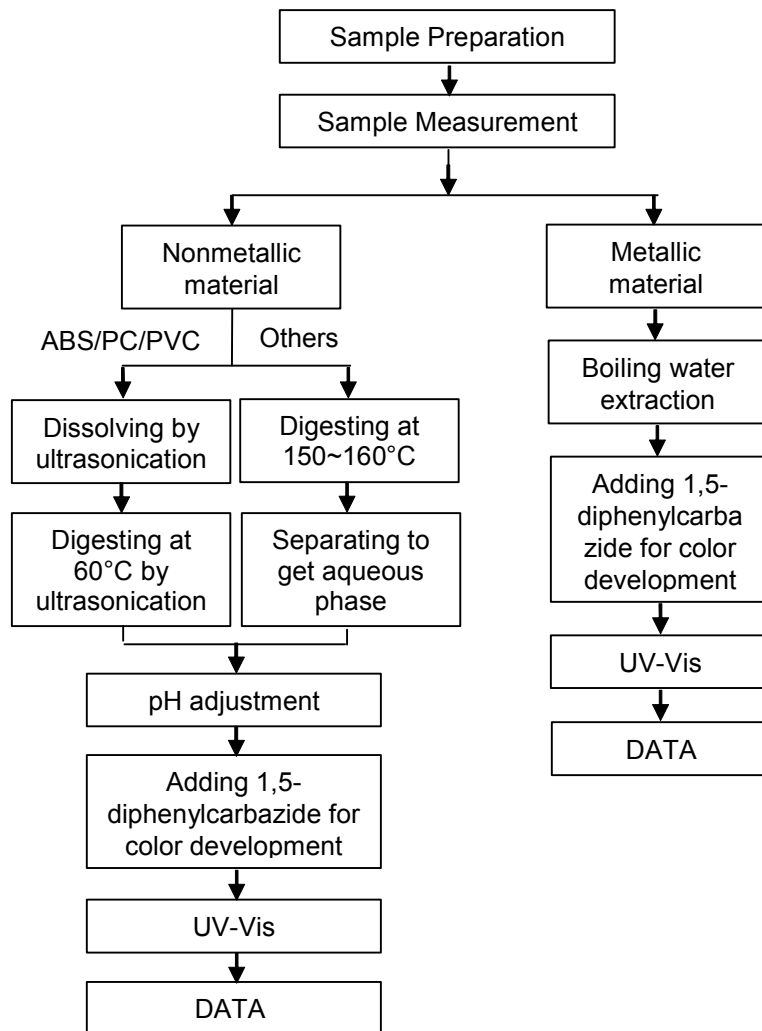


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

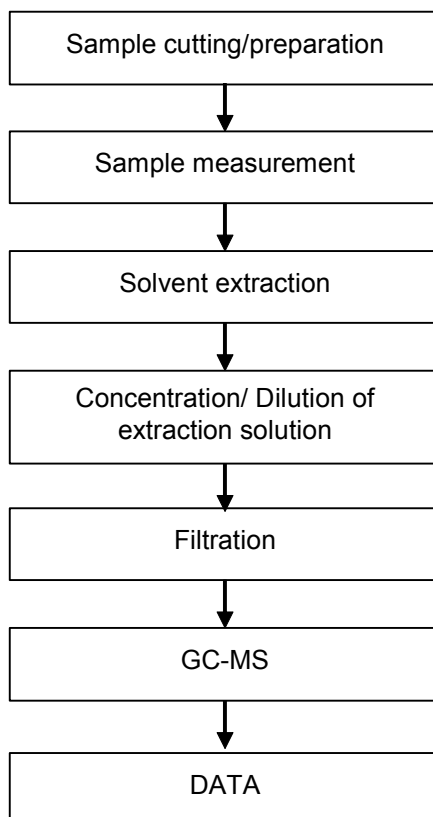
ATTACHMENTS

Hexavalent Chromium (Cr(VI)) Testing Flow Chart



ATTACHMENTS

PBBs/PBDEs Testing Flow Chart

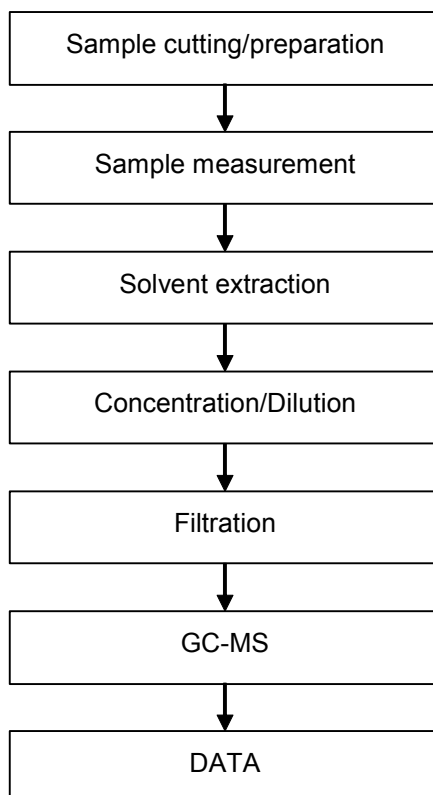


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

ATTACHMENTS

Phthalates Testing Flow Chart



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

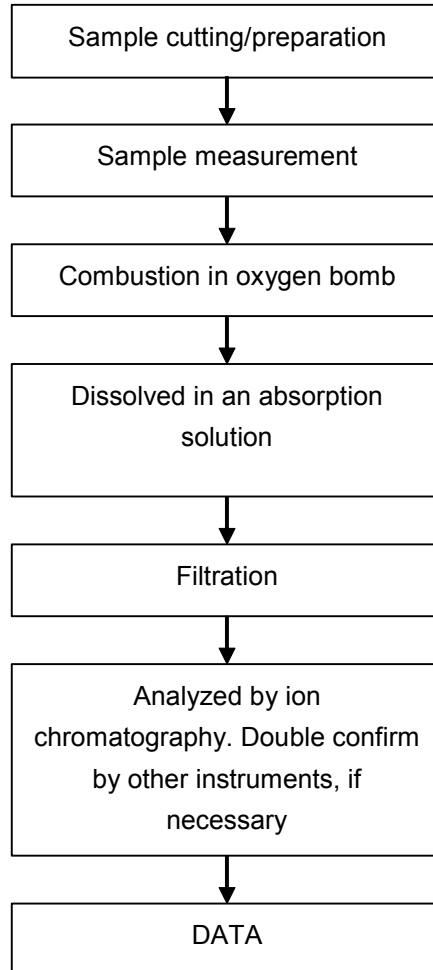
SGS-CSTC Shanghai Technical Services Co., Ltd.
Testing Center (China) Co., Ltd.

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

ATTACHMENTS

Halogen Testing (oxygen bomb) Flow Chart



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

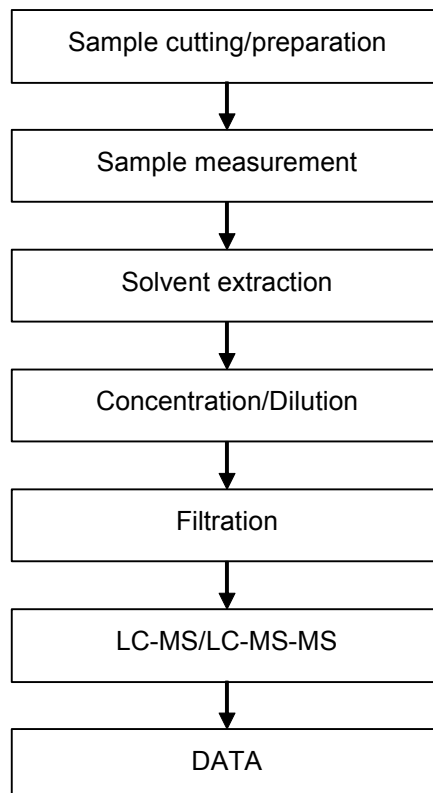
SGS-CSTC Technical Services (Shanghai) Co., Ltd.
Testing Center - China (Shanghai) Co., Ltd.

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgsgroup.com.cn
t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

ATTACHMENTS

PFASs/ PFOS/PFOA Testing Flow Chart

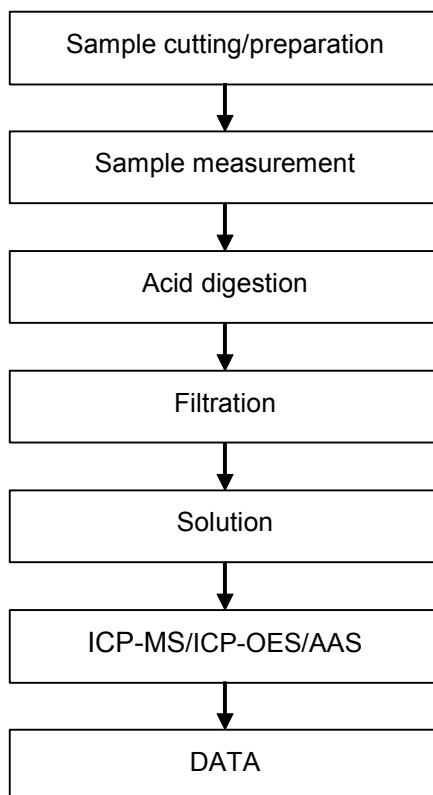


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

ATTACHMENTS

Elements Testing Flow Chart



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Test Report

No. SHAEC2111264701

Date: 08 Jun 2021

Page 12 of 12

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



SGS CSTC (Shanghai) Co., Ltd.
Testing Center (China) Co., Ltd.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgs.com.cn
t HL (86-21) 61402594 f HL (86-21) 61156899 e sgs.china@sgs.com

检测报告



报告编号 A2220193377101004C

第 1 页 共 7 页

报告抬头公司名称 南通赛可特电子有限公司

地 址 南通市通州区高新技术开发区金鼎路26号

以下测试之样品及样品信息由申请者提供并确认

样品名称 防氧化剂

样品型号 SA903

样品接收日期 2022.05.18

样品检测日期 2022.05.18-2022.05.26

检测要求 根据客户要求, 对所提交样品中的铅(Pb), 镉(Cd), 汞(Hg), 六价铬(Cr(VI)), 多溴联苯(PBBs), 多溴二苯醚(PBDEs), 邻苯二甲酸酯(DBP, BBP, DEHP, DIBP), 氟(F), 氯(Cl), 溴(Br), 碘(I)进行测试。

检测依据 请参见下页。

检测结果 请参见下页。



张绍祥
郑晴涛

郑晴涛

技术经理

华测检测集团股份有限公司

审 核

方理松

日 期

2022.05.26

No. R411771742

广东省深圳市宝安区新安街道兴东社区华测检测大楼

检测报告

报告编号A2220193377101004C

第 2 页 共 7 页

检测依据

测试项目	测试方法	测试仪器
铅 (Pb)	IEC 62321-5:2013	ICP-OES
镉 (Cd)	IEC 62321-5:2013	ICP-OES
汞 (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
六价铬 (Cr (VI))	IEC 62321-7-2:2017和/或IEC 62321-5:2013测试总铬含量	UV-Vis/ICP-OES
多溴联苯 (PBBs)	IEC 62321-6:2015	GC-MS
多溴二苯醚 (PBDEs)	IEC 62321-6:2015	GC-MS
邻苯二甲酸酯 (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS
氟 (F)	参考EN 14582:2016	IC
氯 (Cl)	参考EN 14582:2016	IC
溴 (Br)	参考EN 14582:2016	IC
碘 (I)	参考EN 14582:2016	IC

检测报告

报告编号 A2220193377101004C 第 3 页 共 7 页
检测结果

测试项目	结果	方法检出限
铅 (Pb)	N. D.	2 mg/kg
镉 (Cd)	N. D.	2 mg/kg
汞 (Hg)	N. D.	2 mg/kg
六价铬 (Cr(VI))	N. D.	8 mg/kg

测试项目	结果	方法检出限
多溴联苯 (PBBs)		
一溴联苯	N. D.	5 mg/kg
二溴联苯	N. D.	5 mg/kg
三溴联苯	N. D.	5 mg/kg
四溴联苯	N. D.	5 mg/kg
五溴联苯	N. D.	5 mg/kg
六溴联苯	N. D.	5 mg/kg
七溴联苯	N. D.	5 mg/kg
八溴联苯	N. D.	5 mg/kg
九溴联苯	N. D.	5 mg/kg
十溴联苯	N. D.	5 mg/kg

测试项目	结果	方法检出限
多溴二苯醚 (PBDEs)		
一溴二苯醚	N. D.	5 mg/kg
二溴二苯醚	N. D.	5 mg/kg
三溴二苯醚	N. D.	5 mg/kg
四溴二苯醚	N. D.	5 mg/kg
五溴二苯醚	N. D.	5 mg/kg
六溴二苯醚	N. D.	5 mg/kg
七溴二苯醚	N. D.	5 mg/kg
八溴二苯醚	N. D.	5 mg/kg
九溴二苯醚	N. D.	5 mg/kg
十溴二苯醚	N. D.	5 mg/kg

检测报告

报告编号 A2220193377101004C

第 4 页 共 7 页

检测结果

测试项目	结果	方法检出限
邻苯二甲酸酯 (DBP, BBP, DEHP, DIBP)		
邻苯二甲酸二丁酯 (DBP) CAS#:84-74-2	N. D.	50 mg/kg
邻苯二甲酸丁基苄基酯 (BBP) CAS#:85-68-7	N. D.	50 mg/kg
邻苯二甲酸二(2-乙基)己酯 (DEHP) CAS#:117-81-7	N. D.	50 mg/kg
邻苯二甲酸二异丁酯 (DIBP) CAS#:84-69-5	N. D.	50 mg/kg
测试项目	结果	方法检出限
氟 (F)	N. D.	10 mg/kg
氯 (Cl)	475 mg/kg	10 mg/kg
溴 (Br)	N. D.	10 mg/kg
碘 (I)	N. D.	10 mg/kg

样品/部位描述 蓝色液体

备注: 对于检测铅, 镉, 汞之样品已消解完全。

-N.D. = 未检出 (小于方法检出限)

-mg/kg = ppm = 百万分之一

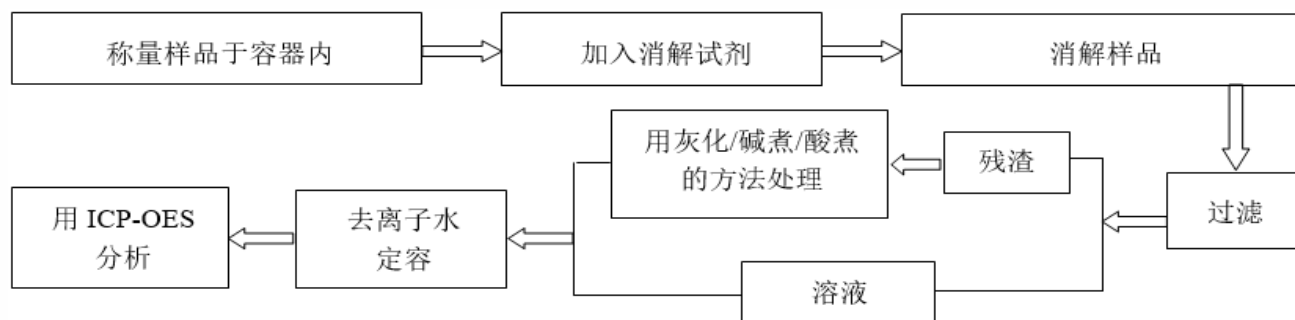
检测报告

报告编号 A2220193377101004C

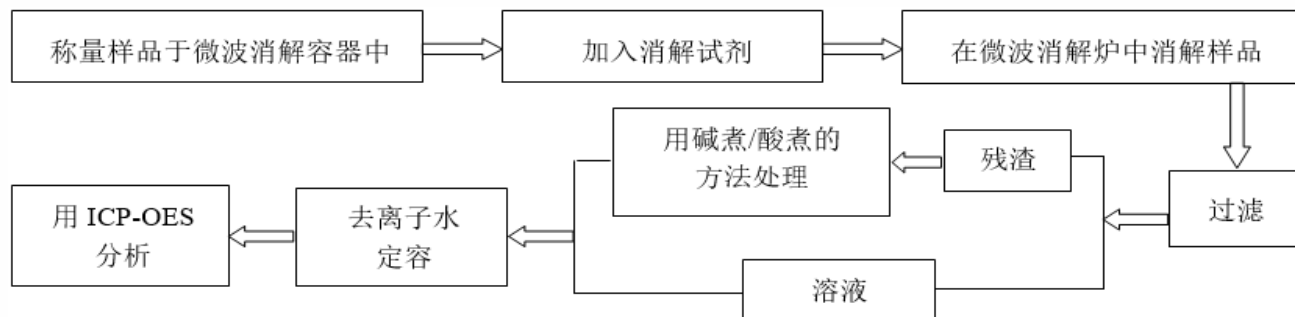
第 5 页 共 7 页

检测流程

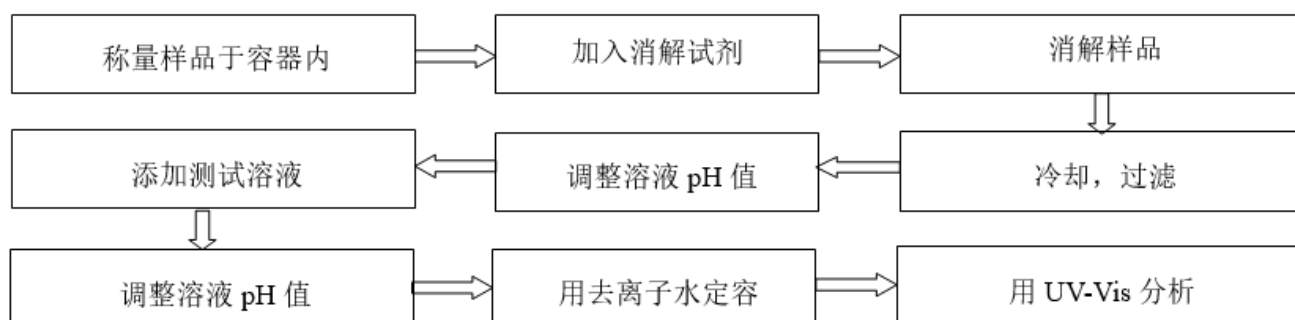
1. 铅(Pb), 镉(Cd), 铬(Cr)



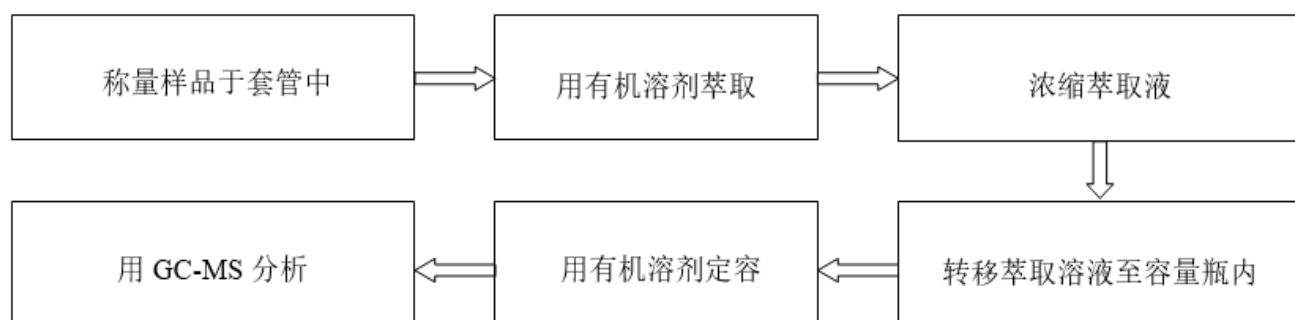
2. 汞(Hg)



3. 六价铬(Cr(VI))



4. 多溴联苯(PBBs), 多溴二苯醚(PBDEs)

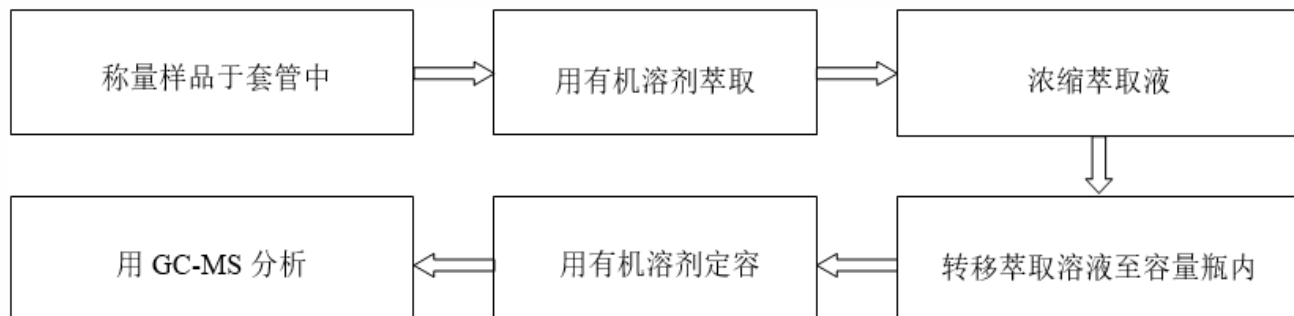


检测报告

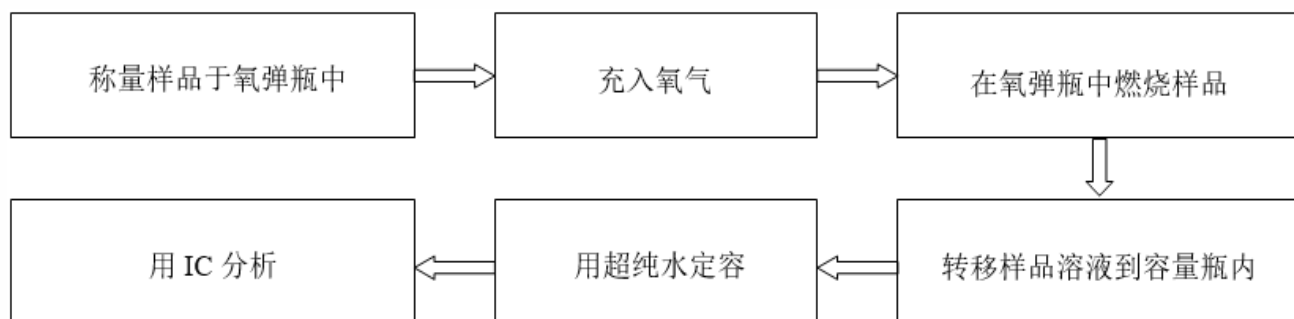
报告编号 A2220193377101004C

第 6 页 共 7 页

5. 邻苯二甲酸酯(DBP, BBP, DEHP, DIBP)



6. 氟(F), 氯(Cl), 溴(Br), 碘(I)

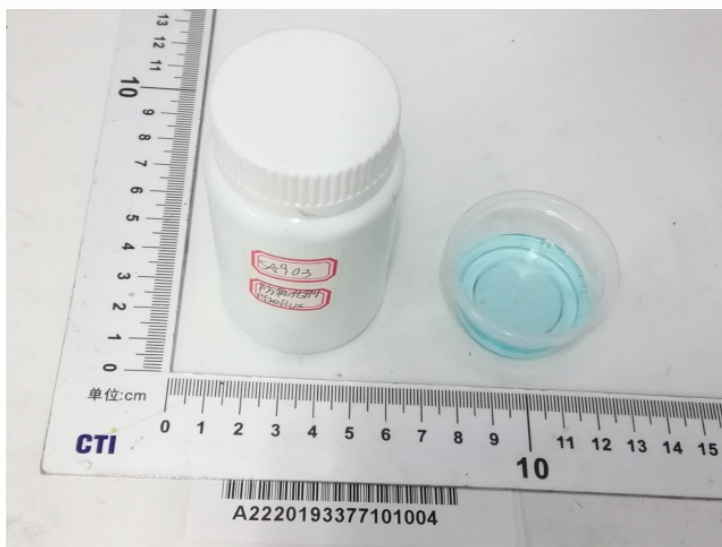


检测报告

报告编号 A2220193377101004C

第 7 页 共 7 页

样品图片



声明:

1. 检测报告无批准人签字、“专用章”及报告骑缝章无效;
2. 报告抬头公司名称及地址、样品及样品信息由申请者提供, 申请者应对其真实性负责, CTI未核实其真实性;
3. 本报告检测结果仅对受测样品负责;
4. 未经CTI书面同意, 不得部分复制本报告。

*** 报告结束 ***



Test Report

Report No. A2220193377101004

Page 1 of 7

Company Name shown on Report NANATONG CIRCUIT ELECTRONIC.CO.,LTD

Address JINDING ROAD NO.26 HIGH-TECH INDUSTRIAL DEVELOPMENT ZONE,
TONGZHOU DISTRICT, NANTONG CITY

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant

Sample Name Pfreflux
Part No. SA903
Sample Received Date May 18, 2022
Testing Period May 18, 2022 to May 26, 2022

Test Requested As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I) in the submitted sample(s).

Test Method Please refer to the following page(s).

Test Result(s) Please refer to the following page(s).



Tested by

Kid Zhang

Approved by

Hill Zheng

Hill Zheng
Technical Manager

Reviewed by

Anso Fang

Date

May 26, 2022

No. R411771742

Centre Testing International Group Co.,Ltd.

CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

Test Report

Report No. A2220193377101004

Page 2 of 7

Test Method

Test Item(s)	Test Method	Measured Equipment(s)
Lead (Pb)	IEC 62321-5:2013	ICP-OES
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
Hexavalent Chromium (Cr(VI))	IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS
Fluorine (F)	Refer to EN 14582:2016	IC
Chlorine (Cl)	Refer to EN 14582:2016	IC
Bromine (Br)	Refer to EN 14582:2016	IC
Iodine (I)	Refer to EN 14582:2016	IC

Test Report

Report No. A2220193377101004

Page 3 of 7

Test Result(s)

Tested Item(s)	Result	MDL
Lead (Pb)	N.D.	2 mg/kg
Cadmium (Cd)	N.D.	2 mg/kg
Mercury (Hg)	N.D.	2 mg/kg
Hexavalent Chromium (Cr(VI))	N.D.	8 mg/kg
Tested Item(s)	Result	MDL
Polybrominated Biphenyls (PBBs)		
Monobromobiphenyl	N.D.	5 mg/kg
Dibromobiphenyl	N.D.	5 mg/kg
Tribromobiphenyl	N.D.	5 mg/kg
Tetrabromobiphenyl	N.D.	5 mg/kg
Pentabromobiphenyl	N.D.	5 mg/kg
Hexabromobiphenyl	N.D.	5 mg/kg
Heptabromobiphenyl	N.D.	5 mg/kg
Octabromobiphenyl	N.D.	5 mg/kg
Nonabromobiphenyl	N.D.	5 mg/kg
Decabromobiphenyl	N.D.	5 mg/kg
Tested Item(s)	Result	MDL
Polybrominated Diphenyl Ethers (PBDEs)		
Monobromodiphenyl ether	N.D.	5 mg/kg
Dibromodiphenyl ether	N.D.	5 mg/kg
Tribromodiphenyl ether	N.D.	5 mg/kg
Tetrabromodiphenyl ether	N.D.	5 mg/kg
Pentabromodiphenyl ether	N.D.	5 mg/kg
Hexabromodiphenyl ether	N.D.	5 mg/kg
Heptabromodiphenyl ether	N.D.	5 mg/kg
Octabromodiphenyl ether	N.D.	5 mg/kg
Nonabromodiphenyl ether	N.D.	5 mg/kg
Decabromodiphenyl ether	N.D.	5 mg/kg

Test Report

Report No. A2220193377101004

Page 4 of 7

Test Result(s)

Tested Item(s)	Result	MDL
Phthalates (DBP, BBP, DEHP, DIBP)		
Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	50 mg/kg
Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	50 mg/kg
Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg
Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg
Tested Item(s)	Result	MDL
Fluorine (F)	N.D.	10 mg/kg
Chlorine (Cl)	475 mg/kg	10 mg/kg
Bromine (Br)	N.D.	10 mg/kg
Iodine (I)	N.D.	10 mg/kg

Sample/Part Description Blue liquid**Remark:** The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL)

-mg/kg = ppm = parts per million

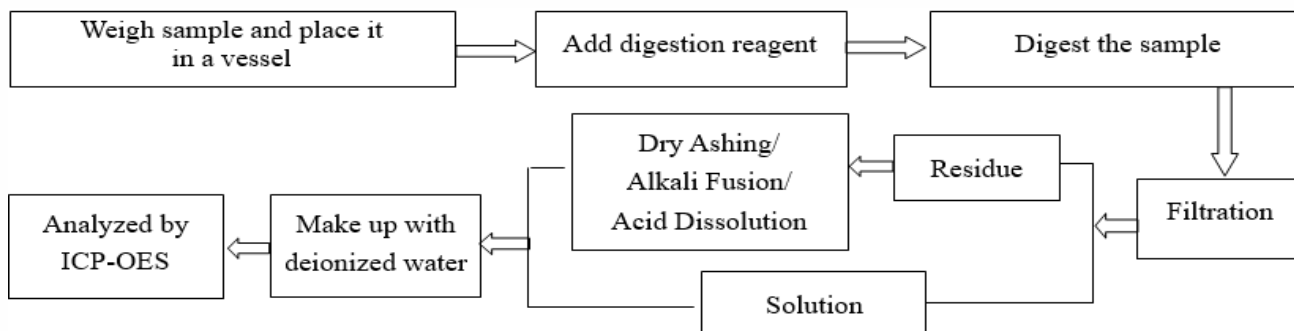
Test Report

Report No. A2220193377101004

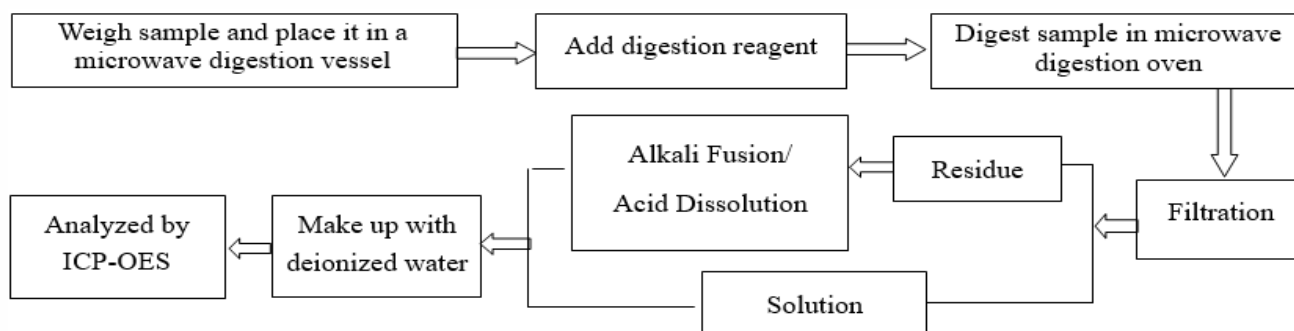
Page 5 of 7

Test Process

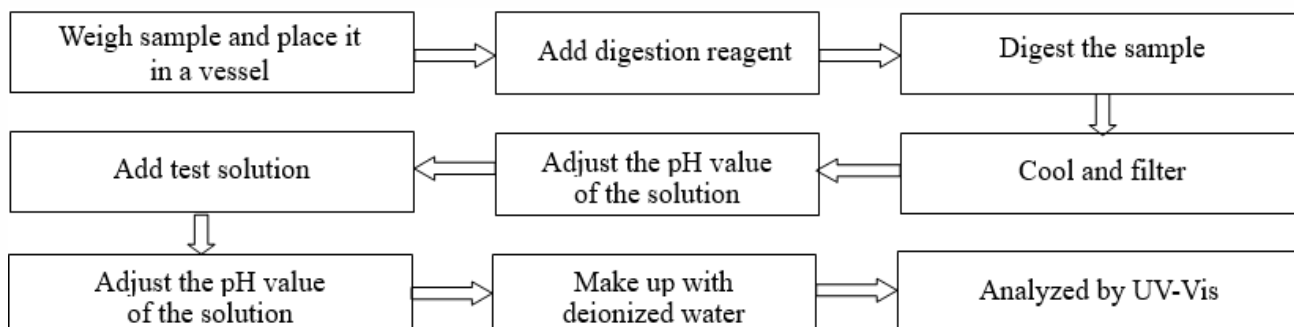
1. Lead (Pb), Cadmium (Cd), Chromium (Cr)



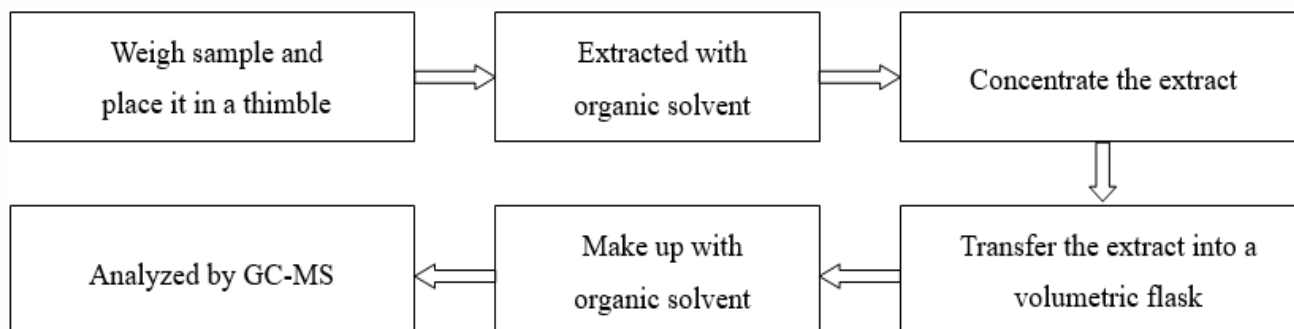
2. Mercury (Hg)



3. Hexavalent Chromium (Cr(VI))



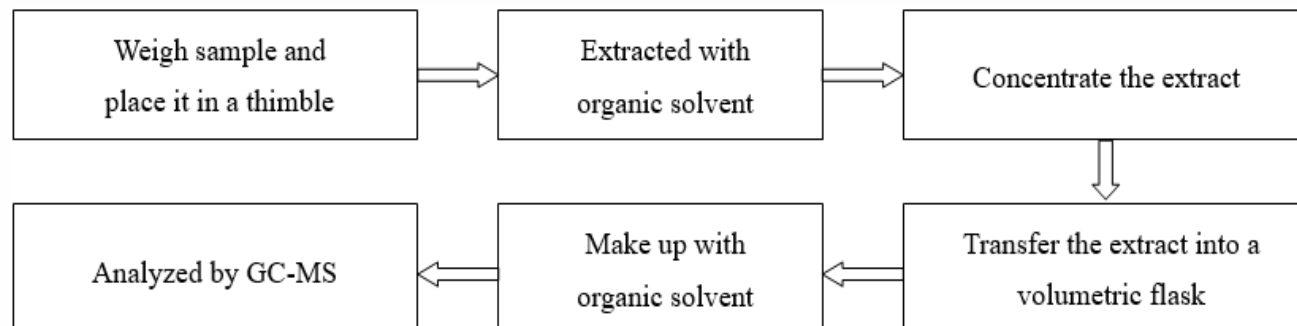
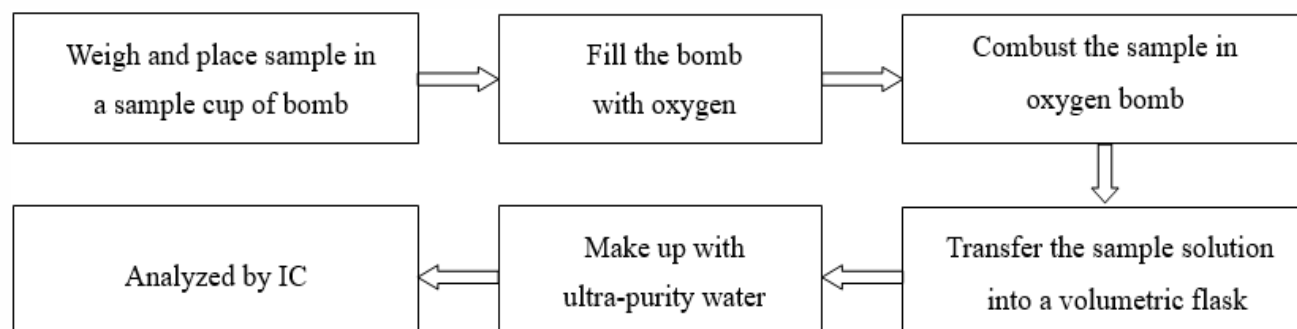
4. Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)



Test Report

Report No. A2220193377101004

Page 6 of 7

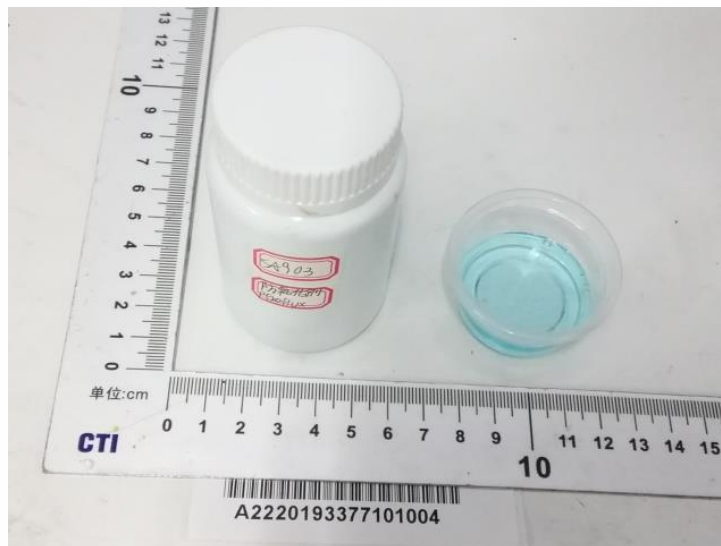
5. Phthalates (DBP, BBP, DEHP, DIBP)**6. Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I)**

Test Report

Report No. A2220193377101004

Page 7 of 7

Photo(s) of the sample(s)



Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full;
5. In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

*** End of report ***

Test Report

No. CANML2123484903

Date: 20 Dec 2021

Page 1 of 4

JIANGSU KUANGSHUN PHOTSENSITIVITY NEW-MATERIAL STOCK CO., LTD.

HUACHENG ROAD 18, QINGYANG INDUSTRIED AREA, JIANGYIN CITY, JIANGSU PROVINCE

The following sample(s) was/were submitted and identified on behalf of the clients as : Thermal Curable Marking ink

SGS Job No. : XMIN2112013477PC - XM
 Model No. : KSM-388W-HF/KSM-28-HF
 Client Ref. Info. : 150 ° C, 60minutes curable mixture
 Date of Sample Received : 13 Dec 2021
 Testing Period : 13 Dec 2021 - 20 Dec 2021
 Test Requested : Selected test(s) as requested by client.
 Test Method : Please refer to next page(s).
 Test Results : Please refer to next page(s).

Signed for and on behalf of
 SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Trophy Zhang

Trophy Zhang
 Approved Signatory

scan to see the report



CANML2123484903



SGS-CSTC Standards Technical Services Co., Ltd.
 Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kezhu Road, Sciotech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
 中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
 t (86-20) 82155555 sgs.china@sgs.com

Test Report

No. CANML2123484903

Date: 20 Dec 2021

Page 2 of 4

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN21-234849.001	White solid

Remarks :

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

Halogen

Test Method : With reference to EN 14582:2016, analysis was performed by IC.

Test Item(s)	Unit	MDL	001
Fluorine (F)	mg/kg	50	ND
Chlorine (Cl)	mg/kg	50	744
Bromine (Br)	mg/kg	50	ND
Iodine (I)	mg/kg	50	ND



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

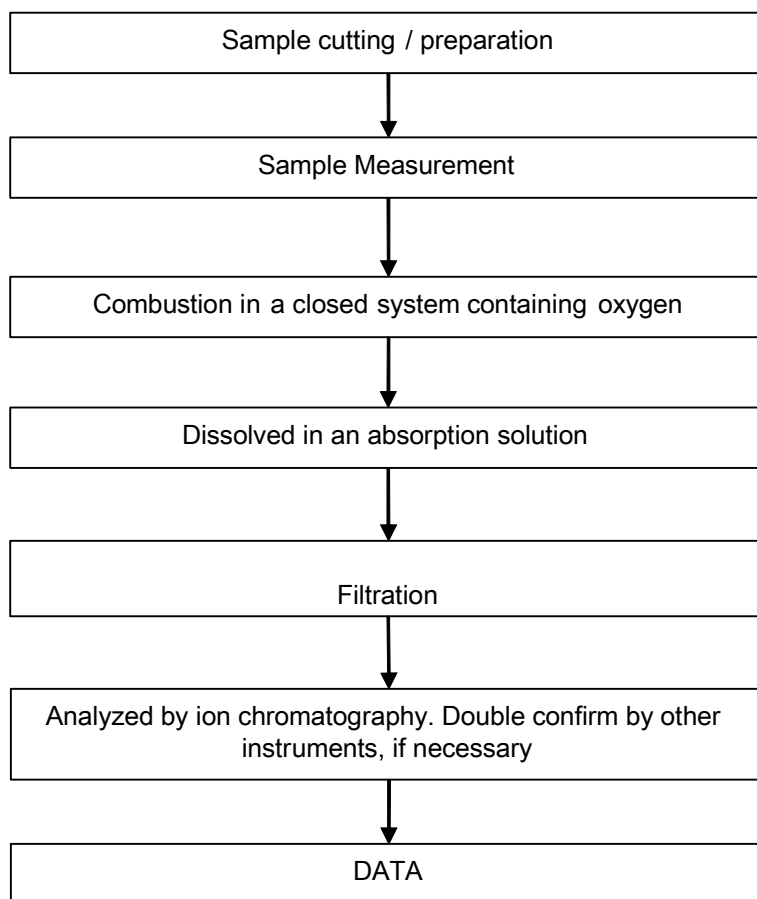
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road, Sciencetech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

ATTACHMENTS

Halogen Testing Flow Chart



Test Report

No. CANML2123484903

Date: 20 Dec 2021

Page 4 of 4

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgs.com.cn
t (86-20) 82155555 sgs.china@sgs.com



测试报告

No. CANML2123484904

日期: 2021年12月20日 第1页,共4页

江苏广信感光新材料股份有限公司
江阴市青阳镇工业集中区华澄路18号

以下测试之样品是由申请者所提供及确认: 热固化标记油墨

SGS工作编号: XMIN2112013477PC - XM
型号: KSM-388W-HF/KSM-28-HF
客户参考信息: 以150°C,60分钟固化
样品接收日期: 2021年12月13日
测试周期: 2021年12月13日 - 2021年12月20日
测试要求: 根据客户要求测试
测试方法: 请参见下一页
测试结果: 请参见下一页

通标标准技术服务有限公司广州分公司
授权签名

张浩华

Trophy Zhang 张浩华
批准签署人

扫码查看在线报告



CANML2123484904



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

198 Kezhu Road, Sciotech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

测试报告

No. CANML2123484904

日期: 2021年12月20日 第2页,共4页

测试结果:

测试样品描述:

样品编号	SGS样品ID	描述
SN1	CAN21-234849.001	白色固体

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
 (2) MDL = 检测极限值
 (3) ND = 未检出 (< MDL)
 (4) "-" = 未规定

卤素

测试方法: 参考EN 14582:2016, 用 IC分析。

测试项目	单位	MDL	001
氟 (F)	mg/kg	50	ND
氯 (Cl)	mg/kg	50	744
溴 (Br)	mg/kg	50	ND
碘 (I)	mg/kg	50	ND

除非另有说明, 此报告结果仅对测试的样品负责。本报告未经本公司书面许可, 不可部分复制。
 检测报告仅用于客户科研、教学、内部质量控制、产品研发等目的, 仅供内部参考。



SGS-CSTC Standards Technical Services Co., Ltd.
 Guangzhou Branch Testing Center Chemical Laboratory

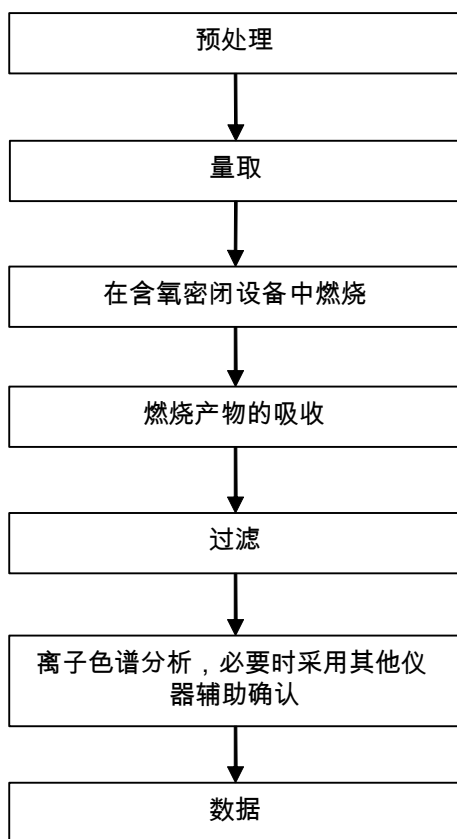
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
 Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kezhu Road, Sciencetech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
 中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
 t (86-20) 82155555 sgs.china@sgs.com

附件

Halogen 测试流程图



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

测试报告

No. CANML2123484904

日期: 2021年12月20日 第4页,共4页

样品照片:



此照片仅限于随SGS正本报告使用

*** 报告完 ***



SGS-CTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kezhu Road, Sciotech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

测试报告

No. CANML2123484902

日期: 2021年12月20日 第1页,共12页

江苏广信感光新材料股份有限公司
江阴市青阳镇工业集中区华澄路18号

以下测试之样品是由申请者所提供及确认: 热固化标记油墨

SGS工作编号: XMIN2112013477PC - XM

型号: KSM-388W-HF/KSM-28-HF

客户参考信息: 以150°C,60分钟固化

样品接收日期: 2021年12月13日

测试周期: 2021年12月13日 - 2021年12月20日

测试要求: 根据客户要求测试

测试方法: 请参见下一页

测试结果: 请参见下一页

结论: 基于所送样品进行的测试, 镉、铅、汞、六价铬、多溴联苯(PBBs)、多溴二苯醚(PBDEs)、邻苯二甲酸酯(如邻苯二甲酸二丁酯(DBP)、邻苯二甲酸丁苄酯(BBP)、邻苯二甲酸二(2-乙基己基)酯(DEHP)和邻苯二甲酸二异丁酯(DIBP))的测试结果符合欧盟RoHS指令2011/65/EU附录II的修正指令(EU) 2015/863的限值要求。

通标标准技术服务有限公司广州分公司
授权签名

张浩华

Trophy Zhang 张浩华
批准签署人

扫码查看在线报告



CANML2123484902



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kezhu Road, Sciotech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

测试报告

No. CANML2123484902

日期: 2021年12月20日 第2页,共12页

测试结果:

测试样品描述:

样品编号	SGS样品ID	描述
SN1	CAN21-234849.001	白色固体

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 检测极限值
- (3) ND = 未检出 (< MDL)
- (4) "-" = 未规定

RoHS指令2011/65/EU附录II的修正指令(EU) 2015/863

测试方法: 参考IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 和 IEC 62321-8:2017, 采用 ICP-OES, UV-Vis 和 GC-MS 进行分析。

测试项目	限值	单位	MDL	001
镉 (Cd)	100	mg/kg	2	ND
铅 (Pb)	1,000	mg/kg	2	ND
汞 (Hg)	1,000	mg/kg	2	ND
六价铬(Cr(VI))	1,000	mg/kg	8	ND
多溴联苯之和(PBBs)	1,000	mg/kg	-	ND
一溴联苯	-	mg/kg	5	ND
二溴联苯	-	mg/kg	5	ND
三溴联苯	-	mg/kg	5	ND
四溴联苯	-	mg/kg	5	ND
五溴联苯	-	mg/kg	5	ND
六溴联苯	-	mg/kg	5	ND
七溴联苯	-	mg/kg	5	ND
八溴联苯	-	mg/kg	5	ND
九溴联苯	-	mg/kg	5	ND
十溴联苯	-	mg/kg	5	ND
多溴二苯醚之和(PBDEs)	1,000	mg/kg	-	ND
一溴二苯醚	-	mg/kg	5	ND
二溴二苯醚	-	mg/kg	5	ND
三溴二苯醚	-	mg/kg	5	ND
四溴二苯醚	-	mg/kg	5	ND
五溴二苯醚	-	mg/kg	5	ND



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

198 Kezhu Road, Sciencetech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

测试报告

No. CANML2123484902

日期: 2021年12月20日 第3页,共12页

测试项目	限值	单位	MDL	001
六溴二苯醚	-	mg/kg	5	ND
七溴二苯醚	-	mg/kg	5	ND
八溴二苯醚	-	mg/kg	5	ND
九溴二苯醚	-	mg/kg	5	ND
十溴二苯醚	-	mg/kg	5	ND
邻苯二甲酸二丁酯 (DBP)	1,000	mg/kg	50	ND
邻苯二甲酸丁苄酯(BBP)	1,000	mg/kg	50	ND
邻苯二甲酸二(2-乙基己基)酯(DEHP)	1,000	mg/kg	50	ND
邻苯二甲酸二异丁酯(DIBP)	1,000	mg/kg	50	ND

备注:

(1)最大允许极限值引用自RoHS指令(EU) 2015/863。

(2) IEC 62321 系列等同于 EN 62321 系列

https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

(3) 2021年7月22号开始, DEHP, BBP, DBP 和 DIBP的限制适用于医疗器械, 包括体外医疗器械, 监控仪表, 包括工业监测和控制仪器。

聚氯乙烯(PVC)

测试方法: SGS内部方法(SGS-CCL-TOP-066-01), 采用FTIR进行分析。

测试项目	CAS NO.	单位	MDL	001
聚氯乙烯(PVC)	9002-86-2	-	-	阴性

备注:

(1) 阴性 = 未检测到, 阳性 = 已检测到

六溴环十二烷(HBCDD)

测试方法: SGS 内部方法(GZTC CHEM-TOP-073, 参考EPA 3550C:2007), 采用GC-MS进行分析。

测试项目	CAS NO.	单位	MDL	001
六溴环十二烷(HBCDD) 及其非对映异构体(α -HBCDD, β -HBCDD, γ -HBCDD)	25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8	mg/kg	10	ND

全氟辛酸(PFOA)及其盐 & 全氟辛烷磺酸 (PFOS)及其衍生物



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kezhu Road, Sciotech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

测试报告

No. CANML2123484902

日期: 2021年12月20日 第4页,共12页

测试方法: 参考CEN/TS 15968:2010, 采用LC-MS或LC-MS/MS进行分析。

测试项目	CAS NO.	单位	MDL	001
全氟辛酸 (PFOA) 及其盐+	335-67-1	mg/kg	0.010	ND
全氟辛酸磺酸 (PFOS) [^]	1763-23-1	mg/kg	0.01	ND
全氟辛基磺酰胺(PFOSA)	754-91-6	mg/kg	0.01	ND
N-甲基全氟辛酸磺酰胺(MeFOSA)	31506-32-8	mg/kg	0.01	ND
N-乙基全氟辛酸磺酰胺(EtFOSA)	4151-50-2	mg/kg	0.01	ND
2-(N-甲基全氟辛基磺酰胺)乙醇(MeFOSE)	24448-09-7	mg/kg	0.01	ND
2-(N-乙基全氟辛基磺酰胺)乙醇(EtFOSE)	1691-99-2	mg/kg	0.01	ND
全氟辛酸磺酸 (PFOS) 及其衍生物	-	mg/kg	-	ND

备注:

- (1) + PFOA 及其盐包含PFOA-Na (CAS No.: 335-95-5), PFOA-K (CAS No.: 2395-00-8), PFOA-Ag (CAS No.: 335-93-3), PFOA-F (CAS No.: 335-66-0) 和 APFO (CAS No.: 3825-26-1);
- (2) ^ 全氟辛酸磺酸 (PFOS) 包含 PFOS-K (CAS No.: 2795-39-3), PFOS-Li (CAS No.: 29457-72-5), PFOS-NH₄ (CAS No.: 29081-56-9), PFOS-NH(OH)₂ (CAS No.: 70225-14-8), PFOS-N(C₂H₅)₄ (CAS No.: 56773-42-3), PFOS-DDA (CAS No.: 251099-16-8) 和 POSF (CAS No.: 307-35-7)

邻苯二甲酸盐(或酯)

测试方法: 参考EN 14372: 2004的方法测定, 采用GC-MS进行分析。

测试项目	CAS NO.	单位	MDL	001
邻苯二甲酸二丁酯 (DBP)	84-74-2	%(w/w)	0.003	ND
邻苯二甲酸丁苄酯 (BBP)	85-68-7	%(w/w)	0.003	ND
邻苯二甲酸二(2-乙基己基)酯 (DEHP)	117-81-7	%(w/w)	0.003	ND
邻苯二甲酸二异壬酯 (DINP)	28553-12-0 / 68515-48-0	%(w/w)	0.010	ND
邻苯二甲酸二正辛酯 (DNOP)	117-84-0	%(w/w)	0.003	ND
邻苯二甲酸二异癸酯 (DIDP)	26761-40-0 / 68515-49-1	%(w/w)	0.010	ND
邻苯二甲酸二甲酯 (DMP)	131-11-3	%(w/w)	0.003	ND
邻苯二甲酸二乙酯 (DEP)	84-66-2	%(w/w)	0.003	ND
邻苯二甲酸二异丁酯 (DIBP)	84-69-5	%(w/w)	0.003	ND
邻苯二甲酸二壬酯 (DNP)	84-76-4	%(w/w)	0.003	ND
邻苯二甲酸二异辛酯 (DIOP)	27554-26-3	%(w/w)	0.010	ND
邻苯二甲酸二丙酯 (DPrP)	131-16-8	%(w/w)	0.003	ND
邻苯二甲酸二环己酯 (DCHP)	84-61-7	%(w/w)	0.003	ND
邻苯二甲酸二戊酯 (DPENP/ DnPP)	131-18-0	%(w/w)	0.003	ND



SGS-CTC (Shanghai) Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kezhu Road, Sciotech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

测试报告

No. CANML2123484902

日期: 2021年12月20日 第5页,共12页

测试项目	CAS NO.	单位	MDL	001
邻苯二甲酸二苄酯 (DBzP)	523-31-9	%(w/w)	0.003	ND
邻苯二甲酸二苯酯 (DPhP)	84-62-8	%(w/w)	0.003	ND
邻苯二甲酸二正己酯 (DnHP)	84-75-3	%(w/w)	0.003	ND

备注:

(1) DBP、BBP、DEHP、DIBP参考信息: 欧盟决议(EC) No 1907/2006 REACH 附录XVII及其修正案(EU) 2018/2005 第51条:

i) 不允许DBP、BBP、DEHP、DIBP单一质量浓度或质量浓度总和等于或高于0.1%的可塑性物料用于玩具和儿童护理品。

ii) 当玩具和儿童护理品中的可塑性物料含DBP、BBP、DEHP单一质量浓度或质量浓度总和等于或高于0.1%时, 不得投放市场。另外, 当玩具和儿童护理品中的可塑性物料含DIBP单一质量浓度或DBP、BBP、DEHP、DIBP质量浓度总和等于或高于0.1%时, 2020年7月7日后不得投放市场。

iii) 当成品中的可塑性物料含DBP、BBP、DEHP、DIBP单一质量浓度或质量浓度总和等于或高于0.1%时, 2020年7月7日后不得投放市场。

详细信息请参见Regulation (EU) 2018/2005

(2) DINP、DNOP、DIDP参考信息: 欧盟决议(EC) No 1907/2006 REACH 附录XVII及修正案(EU) 2015/326 第52条:

i) 不允许DINP、DNOP、DIDP质量浓度高于0.1%的可塑性物料用于可放入儿童口中的玩具和儿童护理品。

ii) 当可放入儿童口中的玩具和儿童护理品中的可塑性物料含DINP, DNOP, DIDP质量浓度高于0.1%时, 不得投放市场。

详细信息请参见Regulation (EU) 2015/326

除非另有说明, 此报告结果仅对测试的样品负责。本报告未经本公司书面许可, 不可部分复制。

检测报告仅用于客户科研、教学、内部质量控制、产品研发等目的, 仅供内部参考。



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

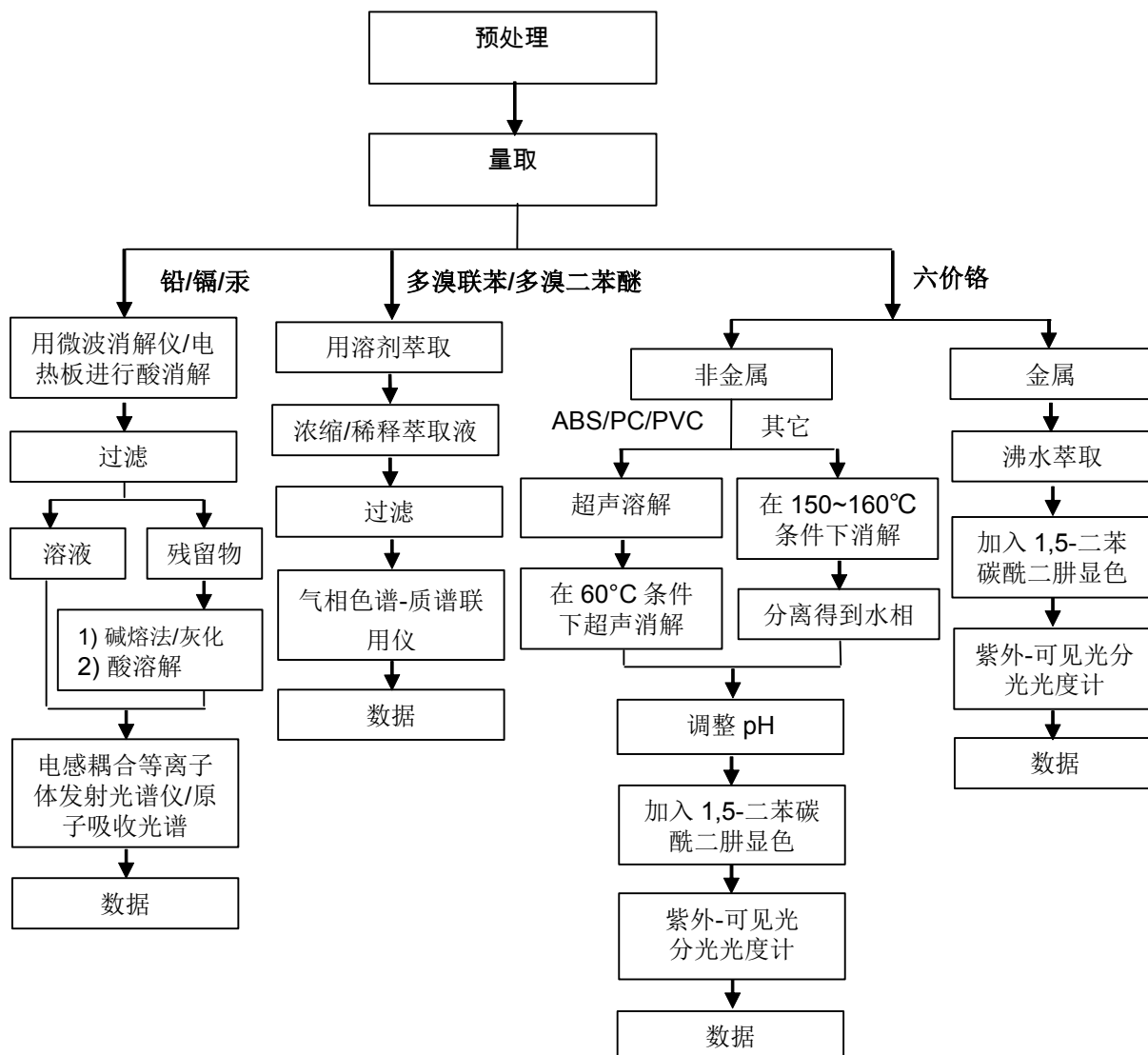
198 Kezhu Road, Sciotech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

附件

Pb/Cd/Hg/Cr⁶⁺/PBBs/PBDEs 测试流程图

1) 样品按照下述流程被完全消解（六价铬和多溴联苯/多溴二苯醚测试除外）。



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

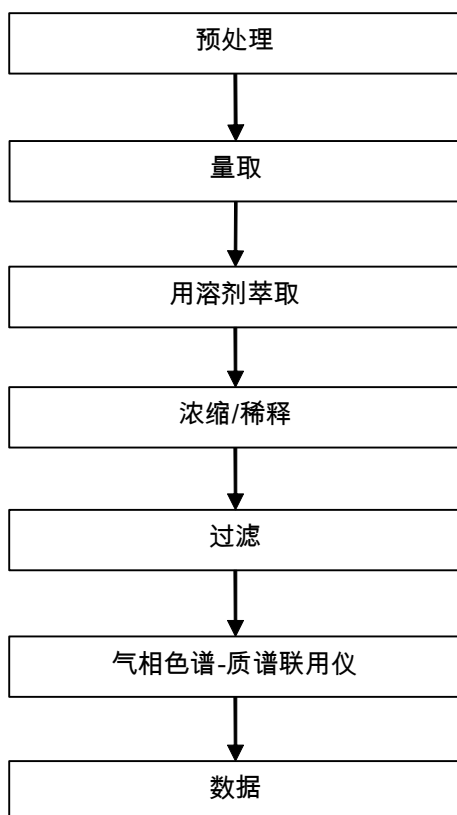
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kezhu Road, Sciotech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgs.com.cn
t (86-20) 82155555 sgs.china@sgs.com

附件

Phthalates 测试流程图

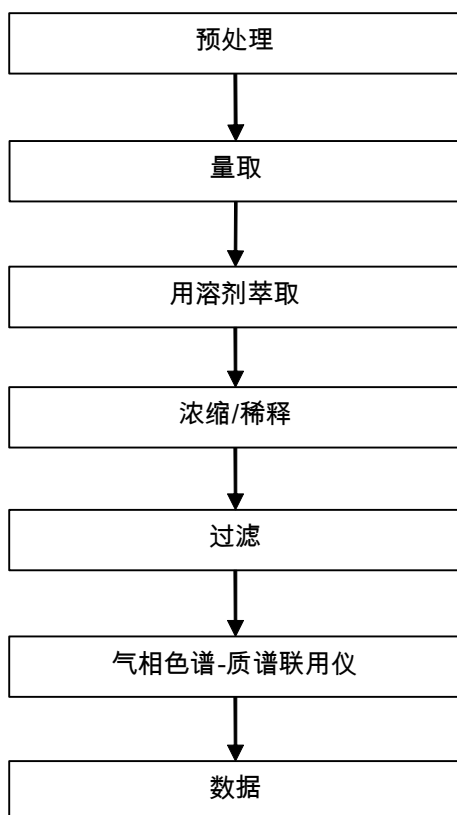


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

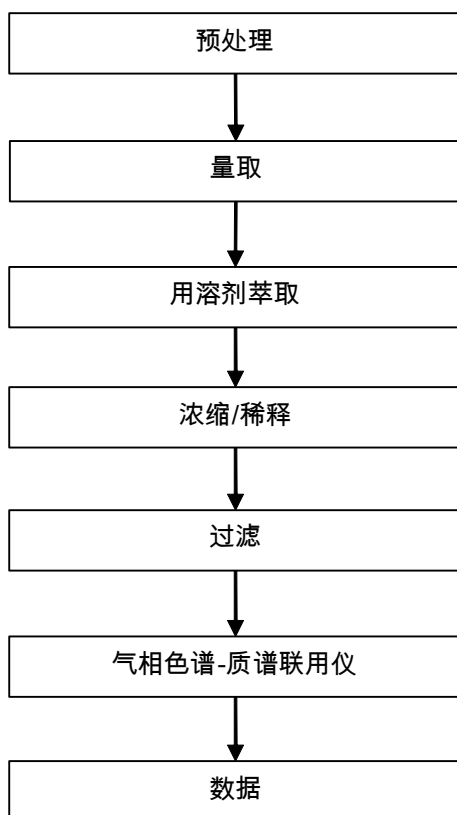
附件

Phthalates 测试流程图



附件

HBCDD 测试流程图

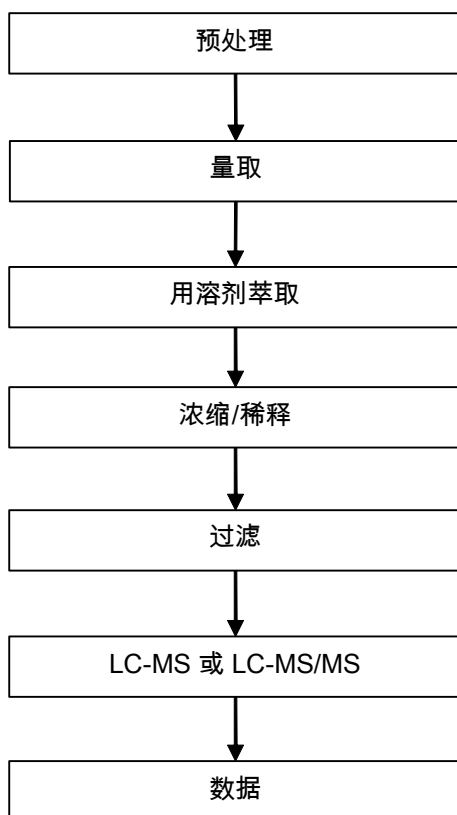


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

附件

PFOA / PFOS 测试流程图



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

附件

PVC 测试流程图

