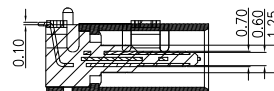
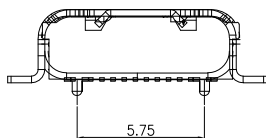
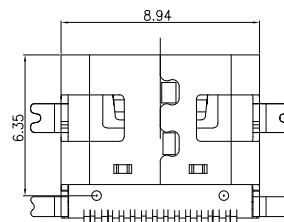
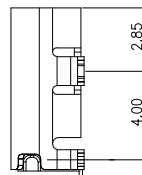
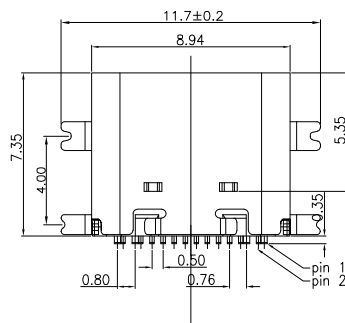
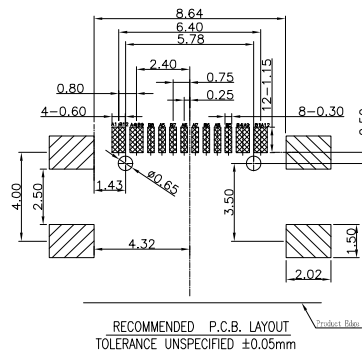
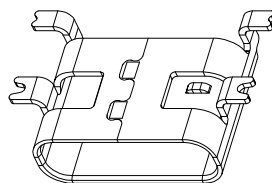
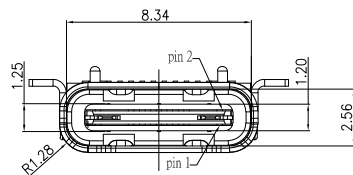


RoHS



主要技术参数:

1. 温度范围: $-30\sim 80^{\circ}\text{C}$
2. 额定负荷: 5V AC 3A
3. 接触电阻: $\leq 30\text{m}\Omega$
4. 绝缘电阻: $\geq 500\text{M}\Omega$
5. 耐压: AC 100V/min
6. 动作力: 5N~35N
7. 寿命: 1500次

其他要求

1. 产品应无错装。漏装零件等现象;
2. 零件表面应无裂纹、缺料、飞边等现象, 表面镀层应光亮美观
3. 未注尺寸公差按下表。

3	接 触 片	磷铜	镍 锡	
2	塑 胶	LCP	黑 色	
1	外 壳	不锈钢	镀 镍	
序号	部件名称	材 料	电 镀	备 注

发放部门

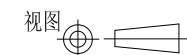
行政部
业务部
采购部
工程部
品质部
生产部

A1	GND	B12	GND
A4	VBUS	B9	VBUS
A5	CC1	B8	SBU2
A6	DP1	B7	DN2
A7	DN1	B6	DP2
A8	SBU1	B5	CC2
A9	VBUS	B4	VBUS
A12	GND	B1	GND
PIN	SIGNAL NAME	PIN	SIGNAL NAME

X.	±0.50	X.*	± 2°
.X	±0.30	.X.*	± 1°
.XX	±0.10	.XX.*	± 0.5°
.XXX	± 0.05		

标 记	处 数	更改文件号	签 字	日 期
设 计	C Y	日期	20.09.01	标准化
校 对	L P J	日期	20.09.01	审 定
工 艺		日期		
审 核	O F	日期	20.09.01	

深圳市富港科技有限公司



TYPE-C USB插座 无弹片

ST-C-TF1-16P-7.35

共 页 第 页

产品规格书	型号:	文件编号 Doc. No.	SPEC-TYPEC-01
		版本 Rev.	A
		页次 Sheet	1/7

1. 范围 Scope

该标准涵盖USB C TYPE连接器之功能要求及测试方法。

This specification covers the requirements for product performance and test methods USB C TYPE plug and receptacle Connectors.

2. 标准文件 Related Standards

- 2-1 IEC512
- 2-2 MIL-STD 202
- 2-3 EIA-364

3. 等级 Rating

- 3-1额定电压:5 V交流(rms)
Voltage Rating : 5 V AC (rms)
- 3-2温度范围:存储:-20℃+ 60℃
Temperature Range: storage : -20℃ to +60℃ ;
工作:-30℃+ 80℃ ;
operating : -30℃ to +80℃ ;
名义: : +20℃
Nominal : +20℃

4. 测试要求 Test Condition

- 4-1所有的测试应当执行详见下表条件,除非另有说明。
All tests shall be performed as bellow conditions unless otherwise specified.
- 4-2温度范围:+ 15℃+ 35℃
Temperature range : +15℃ to +35℃
- 4-3 湿度范围:25% - 85%
Humidity range: 25% to 85%

5. 产品外观 PRODUCT APPEARANCE			
项目 ITEM	描述 Description	测试方法 Test Methods	测试规格 Test Specification
5-1	产品外观 Examination of Product	依据 EIA364-18 测试 肉眼观察, 产品外形必须符合图纸要求。	产品外观良好, 无外观不良情形, 产品结构及尺寸须符合图纸设计要求。
		EIA364-18 Shall be confirmed with eyes in accordance with each drawing.	Outward appearance shall be good without such injurious problem and structure shall be meet the design and dimension requirement of drawing
6. 机械性能 MECHANICAL PERFORMANCE			
项目 ITEM	描述 Description	测试方法 Test Methods	测试规格 Test Specification
6-1	插入力 Insertion force	依据 EIA 364-13 测试方式 ,操作速度 12.5mm /min.	插拔力的范围: 5N-20 N The connector insertion force shall be the range from 5N to 20N
		EIA 364-13 Measure force at maximum rate of 12.5mm (0.492") per minute	
6-2	拔出力 Extraction force	依据EIA 364-13测试方式 , 测量力的速度达到最大12.5 mm /min.	拔出力的范围: 8N-20 N The connector extraction force shall be the range from 8N to 20N
		EIA 364-13 Measure force at maximum rate of 12.5mm(0.492") per minute	
6-3	耐插拔 Durability	依据EIA 364-09测试方式 插拔1500次循环, 手动插拔速度 200周期/ 小时.	必须满足以下条件后循环测试完成后: 接触电阻(40 mΩ,变化量10 mΩ(Max)后测试) 插入力(5到20N) 拔出力(8到20 N) 产品外观符合需求, 无破损及外形损伤。

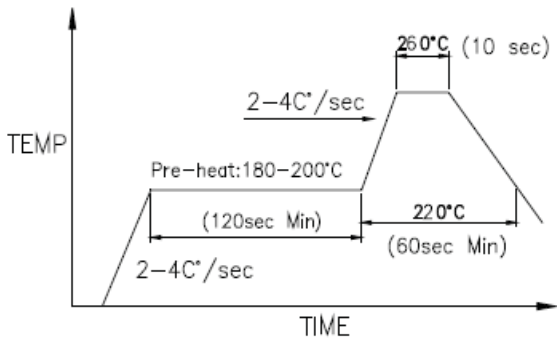
		EIA 364-09 Type C :1500 cycles cycle rate of 200cycles per hour manually	Must meet the following criteria after the cycle test is completed: - Contact resistance ($40\text{m}\Omega$, $\Delta 10\text{m}\Omega$ (Max) after test) - Insertion force (5N to 20N) - Extraction force (8N to 20N) - Visual inspection (no exposed base metal on contacts)
6-4	Cable 摇摆弯曲 Cable Flexing	依据 EIA 364-41 测试方式 电缆组件与尺寸 X =电缆外径 3.7, 并在两个平面 120 度来回 100 个循环。	弯曲过程中没有物理损坏或不连续 1ms 以上应发生在
		EIA 364-41 100 cycles in each of 2 planes 120 degree. Dimension x=3.7x cable diameter	No discontinuity over 1 micorsecond During flexing or physical damage allowed
6-5	Cable 负重测试 Cable Pull-Out	依据 EIA-364-38 测试方式 经受 40 N 轴向负荷为最小为 1 分钟	组件没有损伤和物理损坏
		EIA-364-38 40N steady state axial load for 1 minute	No discontinuity or physical damage allowed
6-6	四轴向测试 4-axes continuity test	8N 拉力一段 10 秒钟;标本必须服从 0°、90°、180°、270°四个方向。	组件没有间断大于 1us,没有物理损害
		8N tensile force for a period of 10 seconds Min;the specimen must subject to 0° , 90° , 180° , 270° direction. Force to be applied at end of overmold	No discontinuity greater than 1us and no physical damage to the specimen(one cable per test)
		EIA364-18 105° C without applied voltage for 120 hours. 105° C without applied voltage for 72 hours when used as preconditioning in EIA 364-1000. 01	Visual inspection,Test shall be done in sequences defined in EIA364-1000.01

7. 电气特性 ELECTRICAL PERFORMANCE

项目 ITEM	描述 Description	测试方法 Test Methods	测试规格 Test Specification
7-1	绝缘阻抗 Insulation Resistance	依据 EIA 364-21C 测试方式 加100V DC的电压于相邻两端子之间.	未交配和配对连接相邻触点间最低 500mΩ 绝缘电阻
		EIA 364-21C Unmated connectors, apply 100Volts DC between adjacent terminal or ground.	500mΩ minimum (unmated) between adjacent contacts and contacts as well
7-2	低电接触电阻 Low Level Contact Resistance	依据 EIA 364-23b 测试方式 一组对插好的连接器; 测试开路电压: 20mV max.; 测试短路电流: 100mA max..	接触电阻(40 mΩ, 测试后变化量10 mΩ(Max))
		EIA 364-23b 20mV Max. open circuit at 100mA Max.	40mΩ(Max) initial for VBUS and GND contacts and all other contacts; delta 10mΩ(Max) after test
7-3	耐电压 Dielectric withstanding Voltage	依据 EIA 364-20 测试方式 加100V AC的电压于相邻两端子之间 1分钟.	无击穿和飞弧现象
		EIA 364-20 Subjected to 100VAC (RMS) for 1 minute between adjacent terminals	There shall be no breakdown
7-4	接触额定电流 Contact current rating	5.0 A的电流应被共同施加到VBUS引脚和1.25 A通过相应的GND施加到VCONN引脚与返回路径引脚。0.25 A的最小电流也应分别适用于所有的连接PIN脚	当电流被施加到触点上, 温度上升不超过30℃的USB型-C下测试, 当在25℃的环境温度下测得的配套插头和插座的任何点
		EIA364-70 5.0A shall be applied collectively to VBUS pins and 1.25 A applied to the VCONN pin and 0.25 A the other contacts.	When the currents are applied to the contacts, the temperature rise shall not exceed 30 °C at any point on the USB Type-C mated plug and receptacle under test, when measured at an ambient temperature of 25 °C.

8. 环境特性 ENVIROMENT PERFORMACE

项目 ITEM	描述 Description	测试方法 Test Methods	测试规格 Test Specification
8-1	溫度老化測試 temperature Life	依据EIA 364-17测试方式 温度寿命试验的温度和持续时间 105℃下 120 小时 温度寿命试验的温度和持续时间对预处理 105℃， 72 小时	外观: 无损伤; 试验后接触电阻最大: 40mΩ
		EIA 364-17 105° C without applied voltage for 120 hours. 105° C without applied voltage for 72 hours when used as preconditioning in EIA 364-1000.01.	Visual inspection,Test shall be done in sequences defined in EIA 364-1000.01.
8-2	冷熱衝擊測試 Thermal Shock	依据EIA 364-32方式测试 10 个周期- 55℃+ -85℃。USB 3.0 必须对插配合下 测试	外观没有损害
		EIA 364-32 10 Cycles - 55℃ and +85℃. The USB 3.0 connectors under test must be mated.	There shall be no evidence of any physical damage.
8-3	盐水喷雾 Salt Spray	MIL-STD-202F 101d 条件B测试 对插产品测试环境: 温度: 35±2℃, 盐 水浓度:重量比5±1%, 24 小时. 测试后常温水洗,干燥.	1) 要满足视觉要求, 没有 物理 损害。 2)要满足的要求, 额外的测 试 中指定在第五节测
		MIL-STD-202F, Method 101D, Test Condition B Subject mated connectors to 24 hours at 35 ℃ with 5%-Salt-solution concentration.	1).Shall meet visual requirement, show no physical damage. 2).Shall meet requirements of additional tests as specified in test sequence in Section 5
	恒温恒湿	依据 EIA 364-31方式测试 周期 25℃士 3℃之间对插产品在 80%士 3% 湿度 和 65℃士 3℃温度 50%士 3% 湿度,时间应 0.5 小 时和停顿时间 0.5 小时。24 个周期	目视检查,测试应在序列中 定义完成 EIA 364 - 1000.01

8-4	Cyclic Temperature and Humidity	EIA 364-31 cycle the connector or socket between $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ at $80\% \pm 3\% \text{RH}$ and $65^{\circ}\text{C} \pm 3^{\circ}\text{C}$ at $50\% \pm 3\% \text{RH}$, ramp times should be 0.5 hour and dwell times should be 1.0 hour. 24 cycles	Visual inspection, Test shall be done in sequences defined in EIA 364-1000.01.
8-5	焊接性 Solder ability	EIA 364-52 将产品Tail端浸入 $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ 的溶锡中 3 ± 1 秒	沾锡面积 95%以上, 无针孔。
		EIA 364-52 soldered at temperature $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ at a rate of $25.4\text{mm} \pm 6.35\text{mm}$ per second for in immersion duration 5s.	solder shall cover a minimum of 95% of the surface being immersed
8-6	耐回流焊热 Resistance to Reflow Soldering Heat		外观应无损伤(端子不应松动, 塑胶无变形, 起泡, 溶胶等不良) No damage.
8-7	高温保存 Temperature Life	EIA 364-17A 测试3 条件 A 对插产品测试环境: 温度: 80°C , 时间: 250 小时. 测试后常温水洗, 干燥.	1) 要满足视觉要求, 没有物理损害。 2) 要满足的要求, 额外的测试中指定在第五节测
		EIA 364-17 Test Condition 3 Method A, Subject mated connectors to temperature life at 80°C for 250 hours	1). Shall meet visual requirement, show no physical damage. 2). Shall meet requirements of additional tests as specified in test sequence in Section 5

Test Report

No.: SZXEC24000811639

Date: Apr 01, 2024

Page 1 of 5

Client Name: ZHEJIANG FUGANG ELECTRONICS CO.,LTD

Client Address: THE SECOND INDUSTRIAL PARK,DANXI TOWN,YUEQING CITY, ZHEJIANG PROVINCE

Sample Name: Stainlesssteel

The above sample(s) and information were provided by the client.

SGS Job No.: SZP24-011334

Sample Receiving Date: Mar 22, 2024

Testing Period: Mar 22, 2024 ~ Mar 28, 2024

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

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

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

Test Requirement	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium	Pass

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

Tina

Tina Fan
Approved Signatory

scan to see the report



55B73C20



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen 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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业区厂房4号101-901、2号101、3号101、3号301-501 邮编:518129 t(86-755)25328888 sgs.china@sgs.com

Test Report

No.: SZXEC24000811639

Date: Apr 01, 2024

Page 2 of 5

Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A4	SZX24-0008116-0001.C004	Silver-gray metal

Remarks:

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

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013 and IEC 62321-7-1:2015, analysis was performed by ICP-OES/AAS and UV-Vis.

Test Item(s)	Limit	Unit(s)	MDL	A4
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Cadmium (Cd)	100	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm ²	0.10	ND

Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) ▼ =
 - a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 µg/cm². The sample coating is considered to contain Cr(VI).
 - b. The sample is negative for Cr(VI) if Cr(VI) is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-Cr(VI) 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.

Remark: Results & photo(s) of this report refer to test report SZXEC24000811637.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.



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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com.cn
 中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

Test Report

No.: SZXEC24000811639

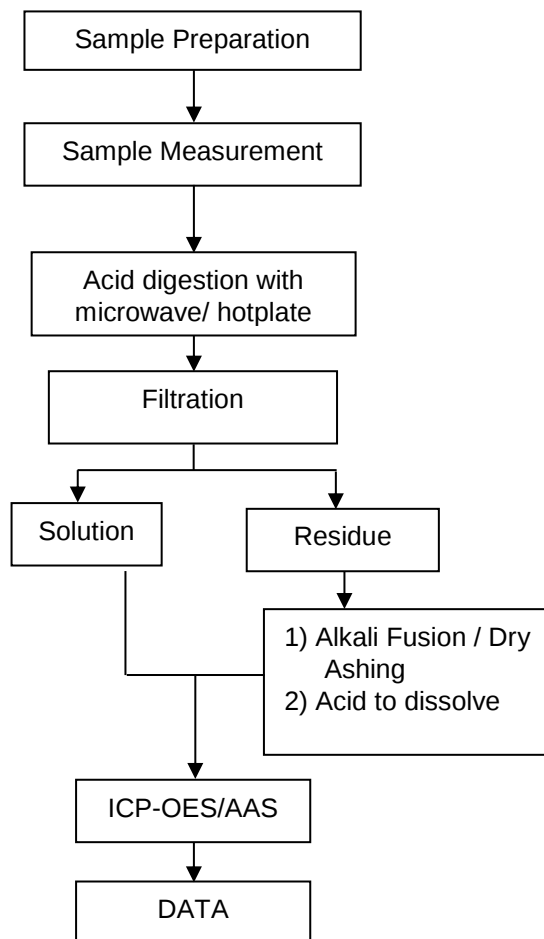
Date: Apr 01, 2024

Page 3 of 5

ATTACHMENTS

Elements Testing Flow Chart

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



SGS-CTS Standards Technical Services Co., Ltd.
Shenzhen 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-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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

Test Report

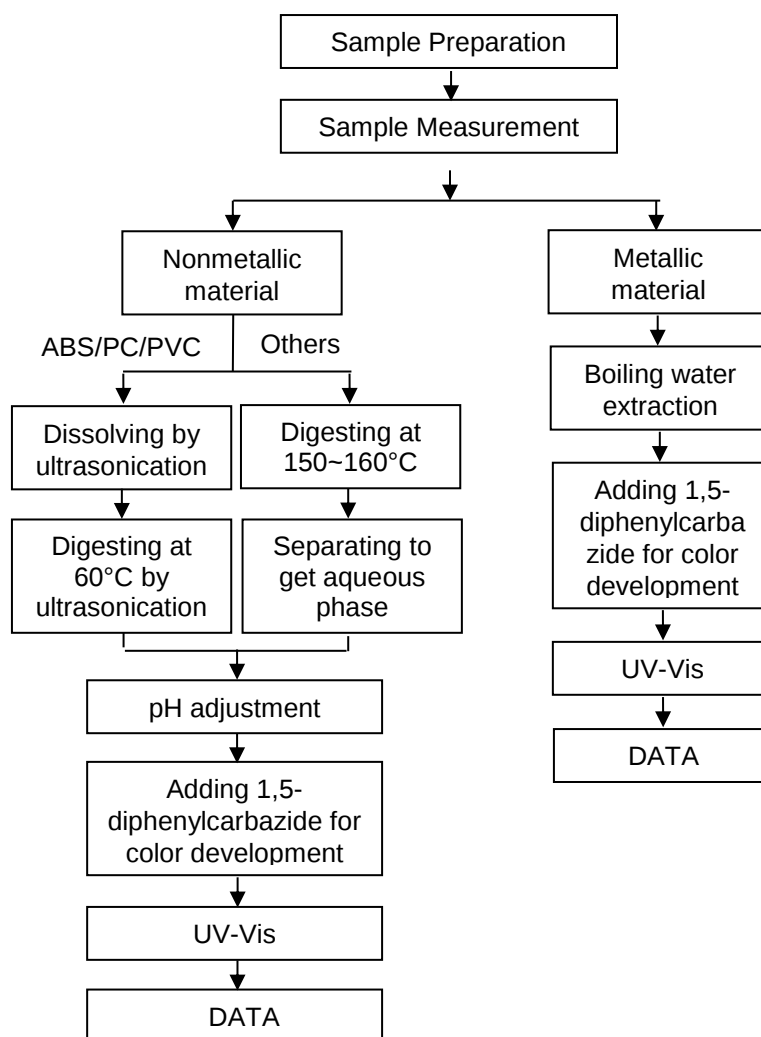
No.: SZXEC24000811639

Date: Apr 01, 2024

Page 4 of 5

ATTACHMENTS

Hexavalent Chromium (Cr(VI)) Testing Flow Chart



SGS-CTC Standards Technical Services Co., Ltd.
Shenzhen 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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江灏(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

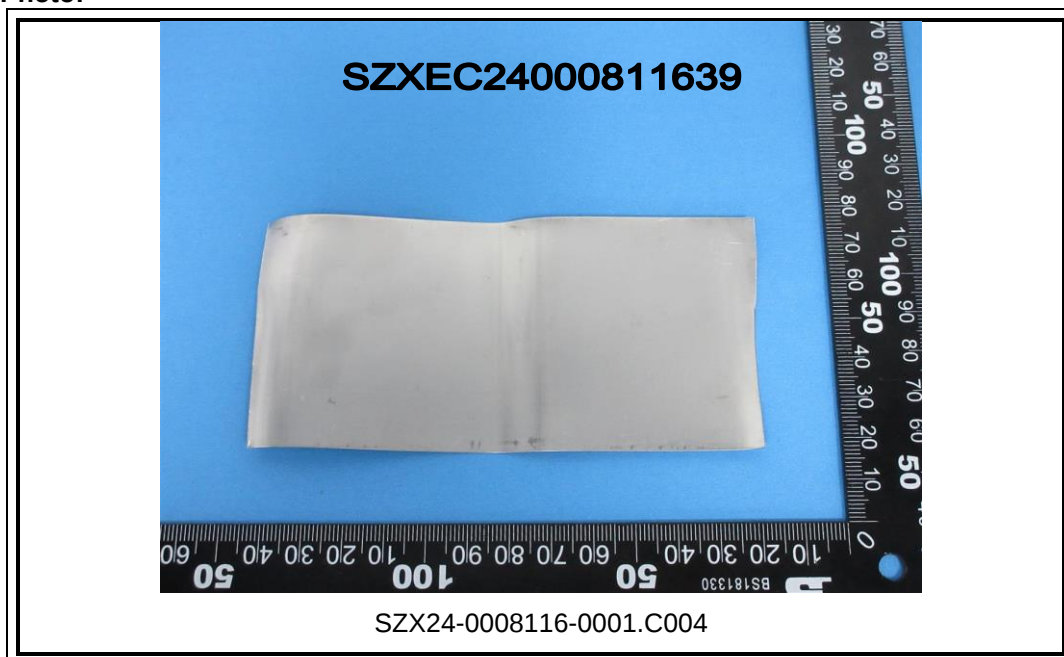
Test Report

No.: SZXEC24000811639

Date: Apr 01, 2024

Page 5 of 5

Sample Photo:



SGS authenticate the photo on original report only

*** End of Report ***



SGS-Standard Technical Services Co., Ltd.
Shenzhen 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-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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

Test Report

No.: SZXEC24000808723

Date: Apr 01, 2024

Page 1 of 8

Client Name: ZHEJIANG FUGANG ELECTRONICS CO.,LTD

Client Address: THE SECOND INDUSTRIAL PARK,DANXI TOWN,YUEQING CITY, ZHEJIANG PROVINCE

Sample Name: LCP Plastic

The above sample(s) and information were provided by the client.

SGS Job No.: SZP24-011334

Sample Receiving Date: Mar 22, 2024

Testing Period: Mar 22, 2024 ~ Mar 28, 2024

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

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

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

Test Requirement	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	Pass

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

Tina

Tina Fan
Approved Signatory

scan to see the report



64DB15DA



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen 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-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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755)25328888 sgs.china@sgs.com

Test Report

No.: SZXEC24000808723

Date: Apr 01, 2024

Page 2 of 8

Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A2	SZX24-0008087-0001.C002	Yellow plastic grains

Remarks:

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

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)

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

Test Item(s)	Limit	Unit(s)	MDL	A2
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Cadmium (Cd)	100	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	8	ND
Polybromobiphenyl (PBB)	1000	mg/kg	-	ND
Monobrominated biphenyl (MonoBB)	-	mg/kg	5	ND
Dibrominated biphenyl (DiBB)	-	mg/kg	5	ND
Tribrominated biphenyl (TriBB)	-	mg/kg	5	ND
Tetrabrominated biphenyl (TetraBB)	-	mg/kg	5	ND
Pentabrominated biphenyl (PentaBB)	-	mg/kg	5	ND
Hexabrominated biphenyl (HexaBB)	-	mg/kg	5	ND
Heptabrominated biphenyl (HeptaBB)	-	mg/kg	5	ND
Octabrominated biphenyl (OctaBB)	-	mg/kg	5	ND
Nonabrominated biphenyl (NonaBB)	-	mg/kg	5	ND
Decabrominated biphenyl (DecaBB)	-	mg/kg	5	ND
Polybromodiphenyl ether (PBDE)	1000	mg/kg	-	ND
Monobrominated diphenyl ether (MonoBDE)	-	mg/kg	5	ND
Dibrominated diphenyl ether (DiBDE)	-	mg/kg	5	ND
Tribrominated diphenyl ether (TriBDE)	-	mg/kg	5	ND
Tetrabrominated diphenyl ether (TetraBDE)	-	mg/kg	5	ND
Pentabrominated diphenyl ether (PentaBDE)	-	mg/kg	5	ND
Hexabrominated diphenyl ether (HexaBDE)	-	mg/kg	5	ND
Heptabrominated diphenyl ether (HeptaBDE)	-	mg/kg	5	ND



SGS-CTC (Shenzhen) Technical Services Co., Ltd.
Shenzhen 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-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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号101、3号301-501 邮编:518129 t (86-755) 25328888 sgs.china@sgs.com

Test Report

No.: SZXEC24000808723

Date: Apr 01, 2024

Page 3 of 8

Test Item(s)	Limit	Unit(s)	MDL	A2
Octabrominated diphenyl ether (OctaBDE)	-	mg/kg	5	ND
Nonabrominated diphenyl ether (NonaBDE)	-	mg/kg	5	ND
Decabrominated diphenyl ether (DecaBDE)	-	mg/kg	5	ND
Bis-(2-ethylhexyl) Phthalate(DEHP)	1000	mg/kg	50	ND
Benzyl Butyl Phthalate(BBP)	1000	mg/kg	50	ND
Dibutyl Phthalate(DBP)	1000	mg/kg	50	ND
Diisobutyl Phthalate(DIBP)	1000	mg/kg	50	ND

Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) 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.

Remark: Results & photo(s) of this report refer to test report SZXEC24000808720.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule ($w=0$) stated in ILAC-G8:09/2019.



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen 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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com.cn
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江源(坂田)工业厂区厂房4号101-901、2号101、3号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

Test Report

No.: SZXEC24000808723

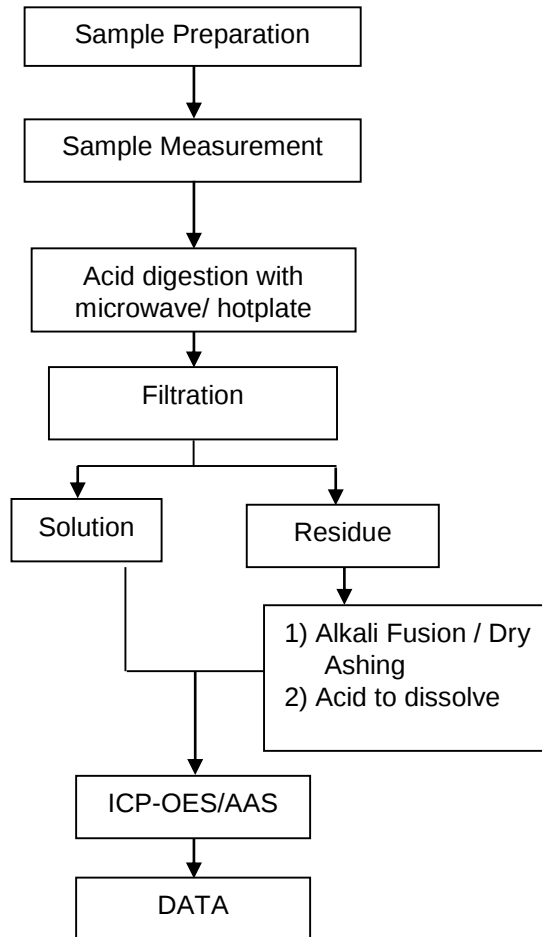
Date: Apr 01, 2024

Page 4 of 8

ATTACHMENTS

Elements Testing Flow Chart

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

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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江源(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

Test Report

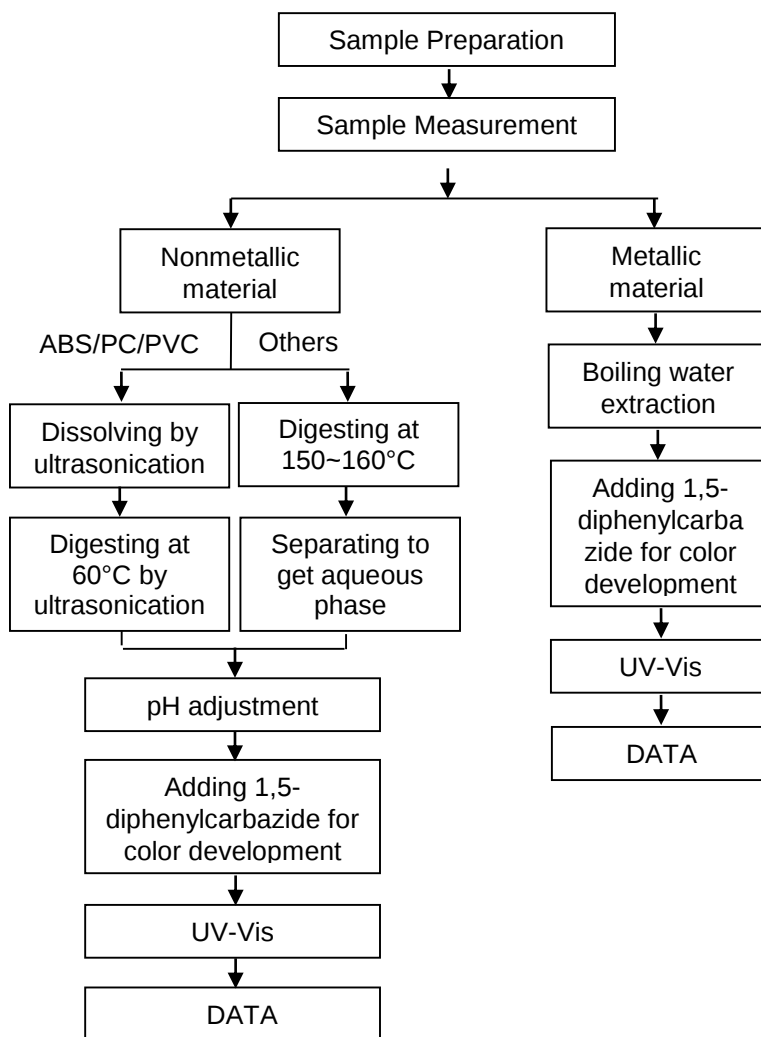
ATTACHMENTS

No.: SZXEC24000808723

Date: Apr 01, 2024

Page 5 of 8

Hexavalent Chromium (Cr(VI)) Testing Flow Chart



SGS-STS Standards Technical Services Co., Ltd.
Shenzhen 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-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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com.cn
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江源(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

Test Report

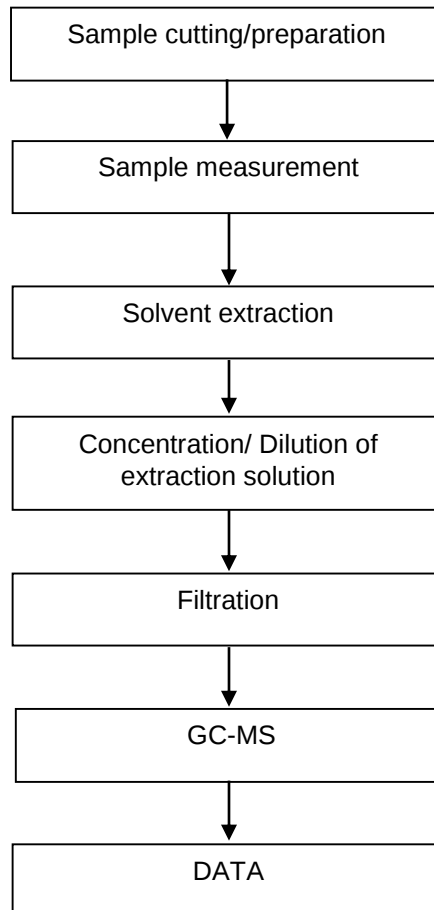
ATTACHMENTS

No.: SZXEC24000808723

Date: Apr 01, 2024

Page 6 of 8

PBB/PBDE 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-CTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center Chemical Laboratory

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江源(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

Test Report

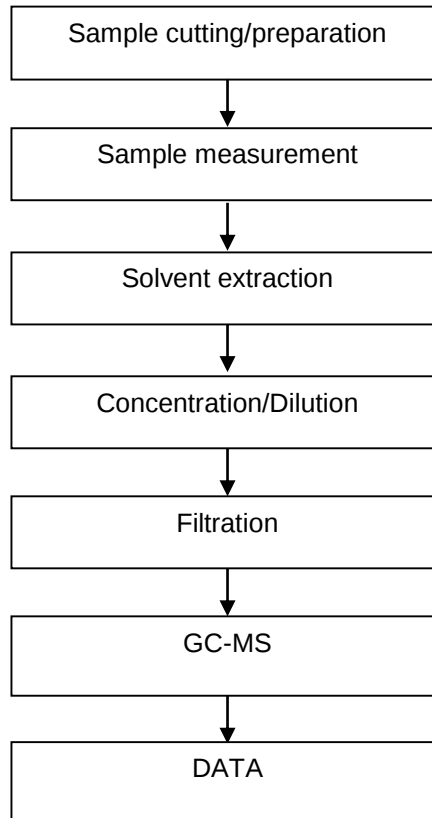
ATTACHMENTS

No.: SZXEC24000808723

Date: Apr 01, 2024

Page 7 of 8

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 Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center Chemical Laboratory

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江源(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

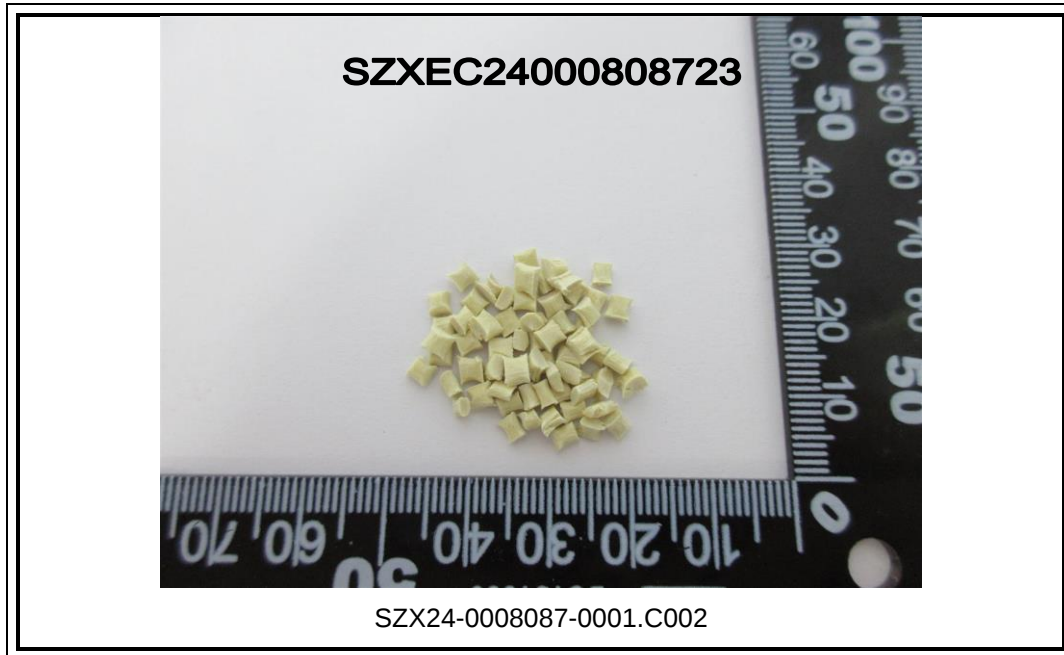
Test Report

No.: SZXEC24000808723

Date: Apr 01, 2024

Page 8 of 8

Sample Photo:



SGS authenticate the photo on original report only

*** End of Report ***



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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

Test Report

No.: SZXEC24000812103

Date: Apr 01, 2024

Page 1 of 5

Client Name: ZHEJIANG FUGANG ELECTRONICS CO.,LTD

Client Address: THE SECOND INDUSTRIAL PARK,DANXI TOWN,YUEQING CITY, ZHEJIANG PROVINCE

Sample Name: Phosphor Bronze

The above sample(s) and information were provided by the client.

SGS Job No.: SZP24-011334

Sample Receiving Date: Mar 22, 2024

Testing Period: Mar 22, 2024 ~ Mar 28, 2024

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

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

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

Test Requirement	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium	Pass

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

Tina

Tina Fan
Approved Signatory

scan to see the report



D3EEA0CA



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen 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-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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号101、3号301-501 邮编:518129 t(86-755)25328888 sgs.china@sgs.com

Test Report

No.: SZXEC24000812103

Date: Apr 01, 2024

Page 2 of 5

Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	SZX24-0008121-0001.C001	Copper-colored metal

Remarks:

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

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013 and IEC 62321-7-1:2015, analysis was performed by ICP-OES/AAS and UV-Vis.

Test Item(s)	Limit	Unit(s)	MDL	A1
Lead (Pb)	1000	mg/kg	2	25
Mercury (Hg)	1000	mg/kg	2	ND
Cadmium (Cd)	100	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm ²	0.10	ND

Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) ▼ =
 - a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 µg/cm². The sample coating is considered to contain Cr(VI).
 - b. The sample is negative for Cr(VI) if Cr(VI) is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-Cr(VI) 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.

Remark: Results & photo(s) of this report refer to test report SZXEC24000812101.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.



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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com.cn
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

Test Report

No.: SZXEC24000812103

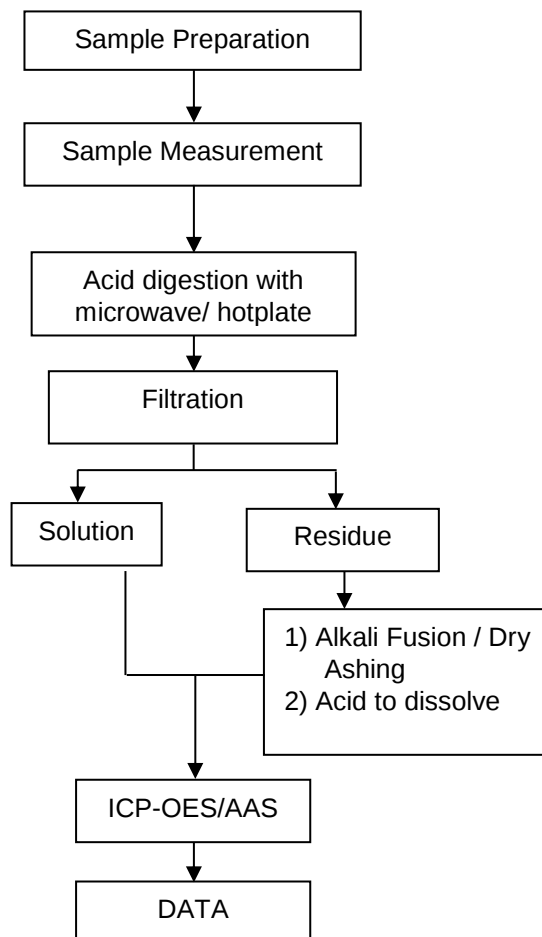
Date: Apr 01, 2024

Page 3 of 5

ATTACHMENTS

Elements Testing Flow Chart

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



SGS-CTS Standards Technical Services Co., Ltd.
Shenzhen 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-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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com.cn
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

Test Report

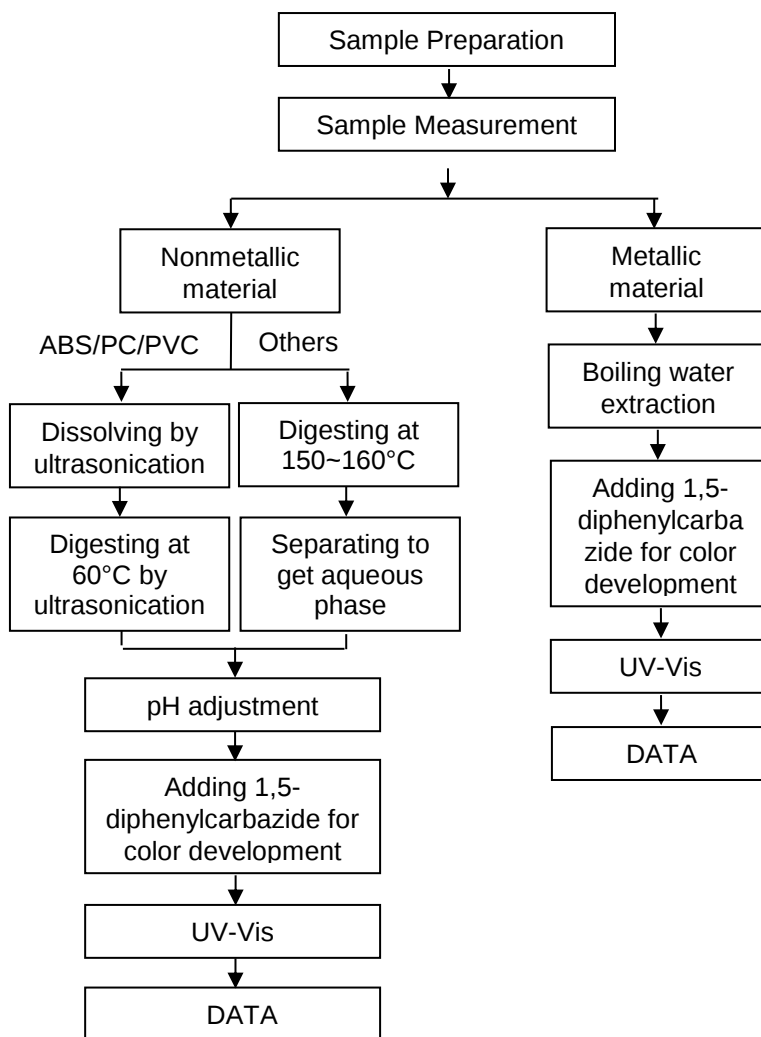
ATTACHMENTS

No.: SZXEC24000812103

Date: Apr 01, 2024

Page 4 of 5

Hexavalent Chromium (Cr(VI)) Testing Flow Chart



SGS-CSI Standards Technical Services Co., Ltd.
Shenzhen 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-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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江灏(坂田)工业厂区厂房4号101-901、2号101、3号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

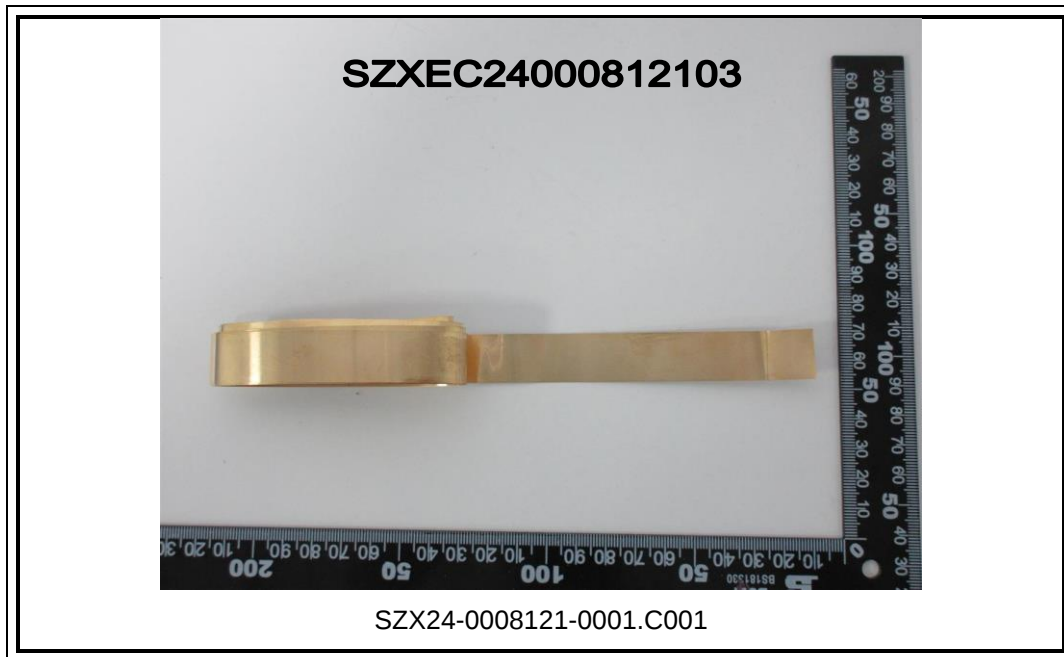
Test Report

No.: SZXEC24000812103

Date: Apr 01, 2024

Page 5 of 5

Sample Photo:



SGS authenticate the photo on original report only

*** End of Report ***



SGS-CSI Standards Technical Services Co., Ltd.
Shenzhen 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

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com