

## Test Report

No.: SZXEC25000069801

Date: Jan 14, 2025

Page 1 of 7

Client Name: JIANGSU GOOD WORK MICROELECTRONIC TECHNOLOGY CO., LTD.

Client Address: BUILDING 1, NO. 3 GANJIANG ROAD, YANCHENG ECONOMIC AND TECHNOLOGICAL DEVELOPMENT ZONE, YANCHENG CITY, JIANGSU PROVINCE

Sample Name: Semiconductor Component

Model No.: 1N4007WS

Client Ref. Information: SMA SMAF SMB SMBF SMC SOD123 SOD123FL SOD323 SOD523  
SOD923 SOT-23 SOT23-3L SOT323 SOT523 SOT89 SOT223 DFN0603  
DFN1006 DFN1610 DFN3\*3 DFN5\*6 TO-277 TO-252 TO-263 TO252-4L  
TO-220 TO-220AB TO-220AC ITO-220AB ITO-220AC TO-247 TO-3P A-405  
DO-15 DO-27 DO-35 DO-41 R-1 R-3 R-6 LL34 MBF MBM MBS MDS LBS  
ABS TBS ABF UMB UMSB KMBF ULBF HBS DBS D3K DB-1 KBP KBL GBL  
GBJ KBJ KBU GBU WOL GBP KBPC3-8A KBPC10-50A GBPC GBPC-W  
KBPC-W S25-VB BR-35 SKBPC SOP-8 SMD-4 DIP-4 DO-213AA DO-213AB  
DO-218AB GF5045 TO-92 TO-126 TO-251 PDFN3\*3 PDFN5\*6 SOP-4  
SOT23-6 eSOP-8 SOP-16 eTSSOP-20 MSOP-8 TSSOP-14 SOT23-5  
QFN-16 MSOP-10 TSSOP-20 TSSOP-28 TSSOP-16 TSSOP-24 QFN-32  
QFN-40

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

SGS Job No.: SZP25-001067

Sample Receiving Date: Jan 08, 2025

Testing Period: Jan 08, 2025 ~ Jan 14, 2025

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

Ford Shi  
Approved Signatory

scan to see the report



EBA1DBD1



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 <https://www.sgs.com/en/Terms-and-Conditions>. 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](mailto:CN.Doccheck@sgs.com)

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

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, Jitua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 [www.sgsgroup.com.cn](http://www.sgsgroup.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](mailto:sgs.china@sgs.com)



## Test Report

No.: SZXEC25000069801

Date: Jan 14, 2025

Page 2 of 7

## Test Result(s):

## Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	SZX25-0000698-0001.C001	"Semiconductor Component"

## 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 and IEC 62321-12:2023, analysis was performed by ICP-OES/AAS, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit(s)	MDL	A1
Lead (Pb)	1000	mg/kg	2	64383 <sup>▲</sup>
Mercury (Hg)	1000	mg/kg	2	ND
Cadmium (Cd)	100	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	8	ND
Polybrominated biphenyls (PBB)	1000	mg/kg	-	ND
Monobrominated biphenyl (MonoBB)	-	mg/kg	25	ND
Dibrominated biphenyl (DiBB)	-	mg/kg	25	ND
Tribrominated biphenyl (TriBB)	-	mg/kg	25	ND
Tetrabrominated biphenyl (TetraBB)	-	mg/kg	25	ND
Pentabrominated biphenyl (PentaBB)	-	mg/kg	25	ND
Hexabrominated biphenyl (HexaBB)	-	mg/kg	25	ND
Heptabrominated biphenyl (HeptaBB)	-	mg/kg	25	ND
Octabrominated biphenyl (OctaBB)	-	mg/kg	25	ND
Nonabrominated biphenyl (NonaBB)	-	mg/kg	25	ND
Decabrominated biphenyl (DecaBB)	-	mg/kg	25	ND
Polybrominated diphenyl ethers (PBDE)	1000	mg/kg	-	ND
Monobrominated diphenyl ether (MonoBDE)	-	mg/kg	25	ND
Dibrominated diphenyl ether (DiBDE)	-	mg/kg	25	ND
Tribrominated diphenyl ether (TriBDE)	-	mg/kg	25	ND
Tetrabrominated diphenyl ether (TetraBDE)	-	mg/kg	25	ND
Pentabrominated diphenyl ether (PentaBDE)	-	mg/kg	25	ND
Hexabrominated diphenyl ether (HexaBDE)	-	mg/kg	25	ND
Heptabrominated diphenyl ether (HeptaBDE)	-	mg/kg	25	ND



SGS-CTI Standards Technical Service Co., Ltd.  
Shenzhen Branch

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 <https://www.sgs.com/en/Terms-and-Conditions>. 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](mailto: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.sgsgroup.com.cn](http://www.sgsgroup.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](mailto:sgs.china@sgs.com)



## Test Report

No.: SZXEC25000069801

Date: Jan 14, 2025

Page 3 of 7

Test Item(s)	Limit	Unit(s)	MDL	A1
Octabrominated diphenyl ether (OctaBDE)	-	mg/kg	25	ND
Nonabrominated diphenyl ether (NonaBDE)	-	mg/kg	25	ND
Decabrominated diphenyl ether (DecaBDE)	-	mg/kg	25	ND
Di-2-Ethyl Hexyl 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 ▲: According to the declaration from the client, Lead (Pb) is exempted by EU RoHS directive 2011/65/EU based on [ANNEX III 7(a)]: Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead).

More information about exemption can be found via the following link:

<https://rohs.sgsonline.com.cn/PDFLinks/en/RSTS-TP-037%20RoHS%20Exemption%20%28EN%29.pdf>

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-CS Standards Technical Service Co., Ltd.  
Shenzhen Branch Technical Service 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 <https://www.sgs.com/en/Terms-and-Conditions>. 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](mailto: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.sgsgroup.com.cn](http://www.sgsgroup.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](mailto:sgs.china@sgs.com)



## Test Report

No.: SZXEC25000069801

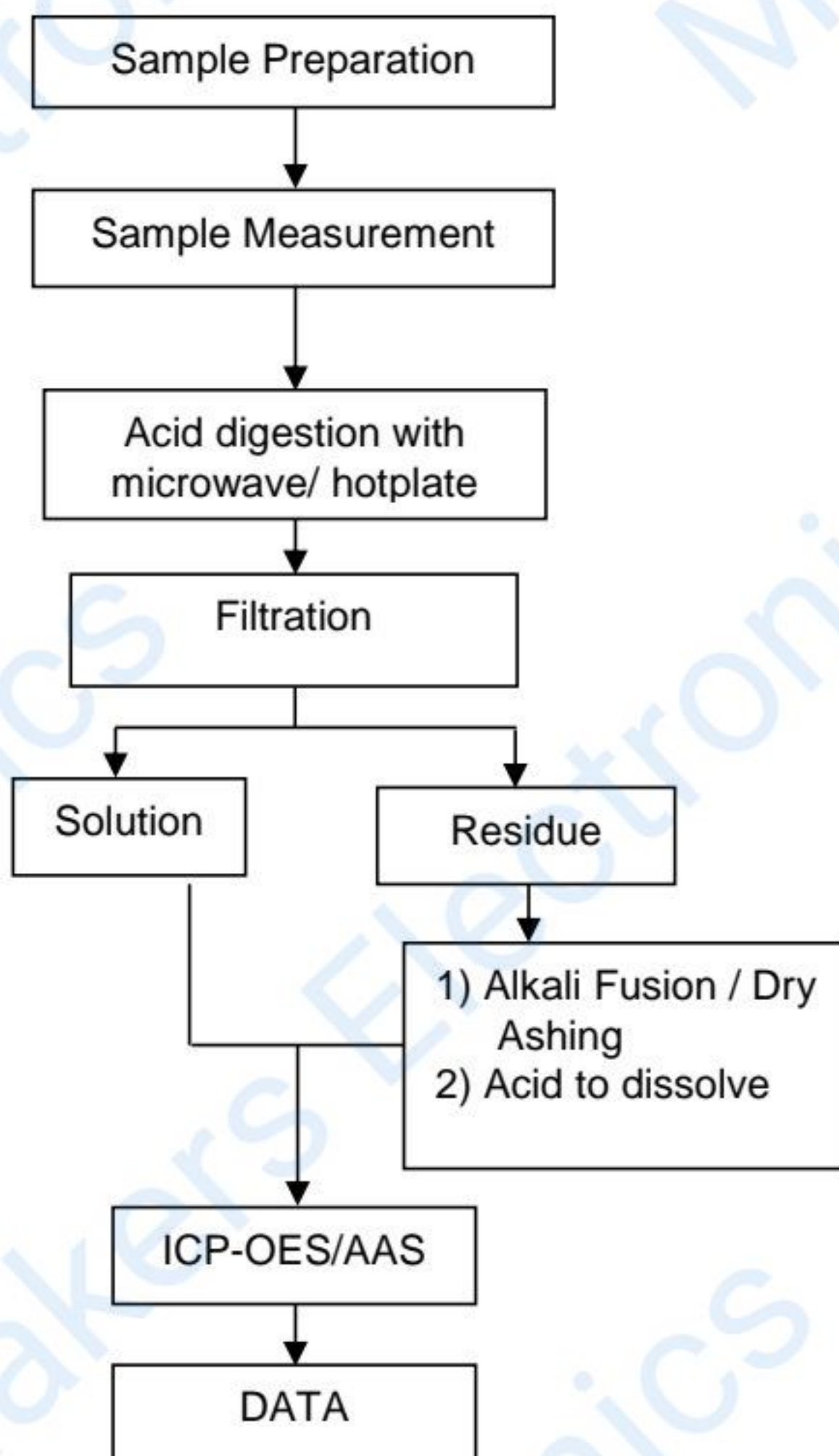
Date: Jan 14, 2025

Page 4 of 7

## ATTACHMENTS

## Elements Testing Flow Chart

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



SGS-CS Standards Technical Service Co., Ltd.  
Shenzhen Branch Technical Service 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 <https://www.sgs.com/en/Terms-and-Conditions>. 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](mailto: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.sgsgroup.com.cn](http://www.sgsgroup.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](mailto:sgs.china@sgs.com)



## Test Report

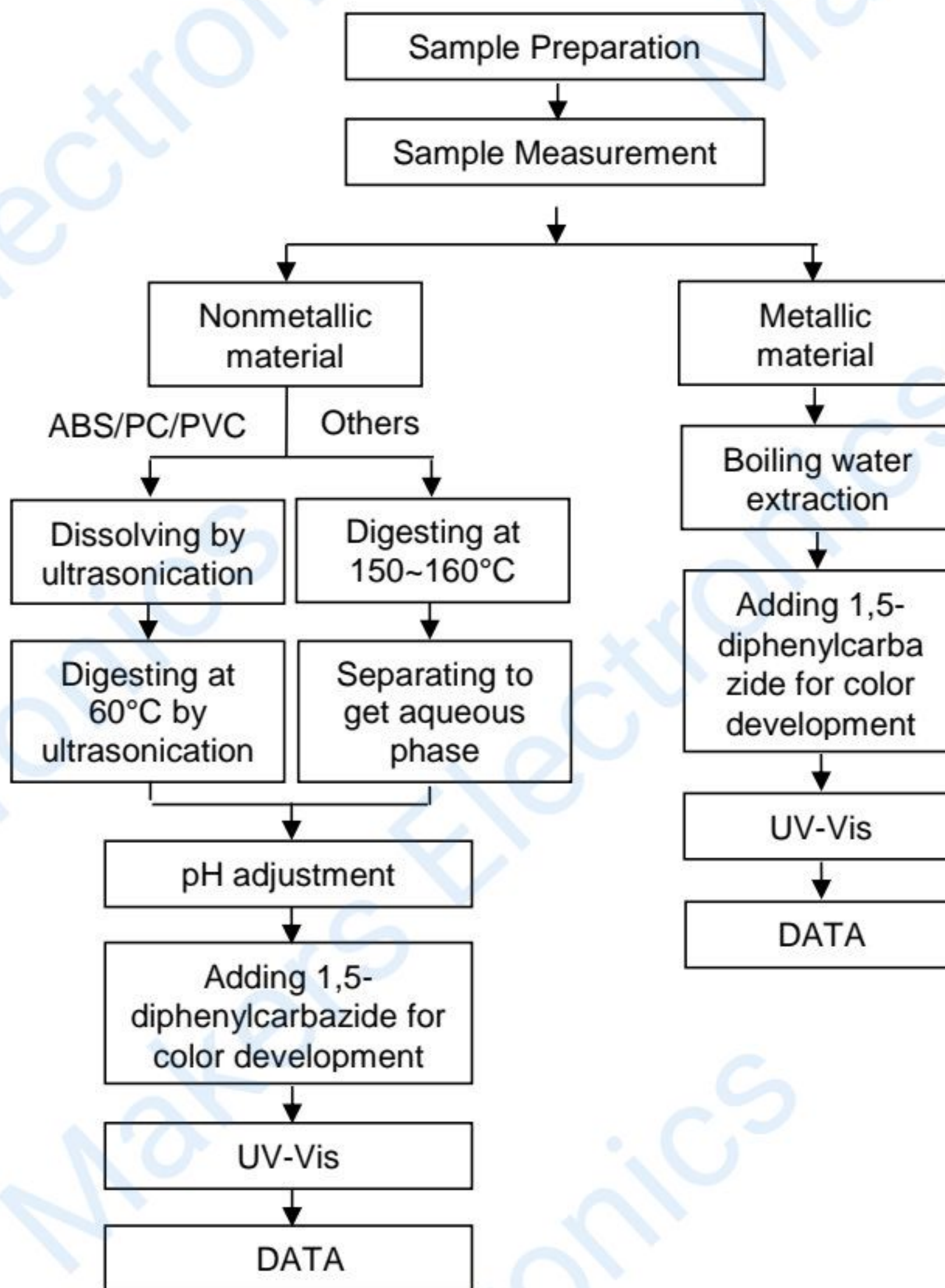
## ATTACHMENTS

No.: SZXEC25000069801

Date: Jan 14, 2025

Page 5 of 7

## Hexavalent Chromium (Cr(VI)) Testing Flow Chart



SGS-CS Standards Technical Service Co., Ltd.  
Shenzhen Branch 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 <https://www.sgs.com/en/Terms-and-Conditions>. 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](mailto: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.sgsgroup.com.cn](http://www.sgsgroup.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](mailto:sgs.china@sgs.com)



## Test Report

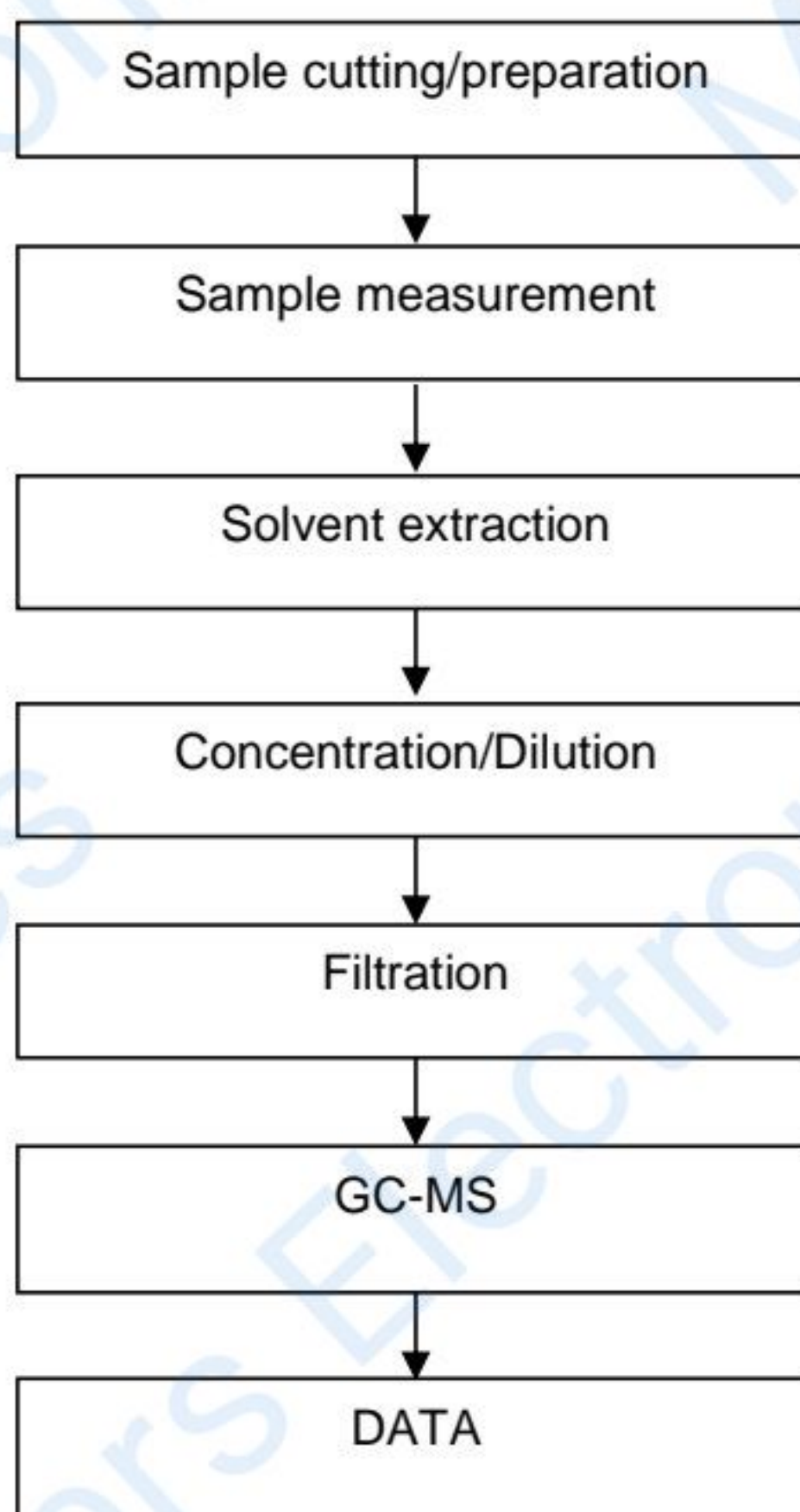
No.: SZXEC25000069801

Date: Jan 14, 2025

Page 6 of 7

## ATTACHMENTS

## PBB/PBDE/Phthalates Testing Flow Chart



SGS-CS Standards Technical Service Co., Ltd.  
Shenzhen Branch Technical Service 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 <https://www.sgs.com/en/Terms-and-Conditions>. 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](mailto: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.sgsgroup.com.cn](http://www.sgsgroup.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](mailto:sgs.china@sgs.com)



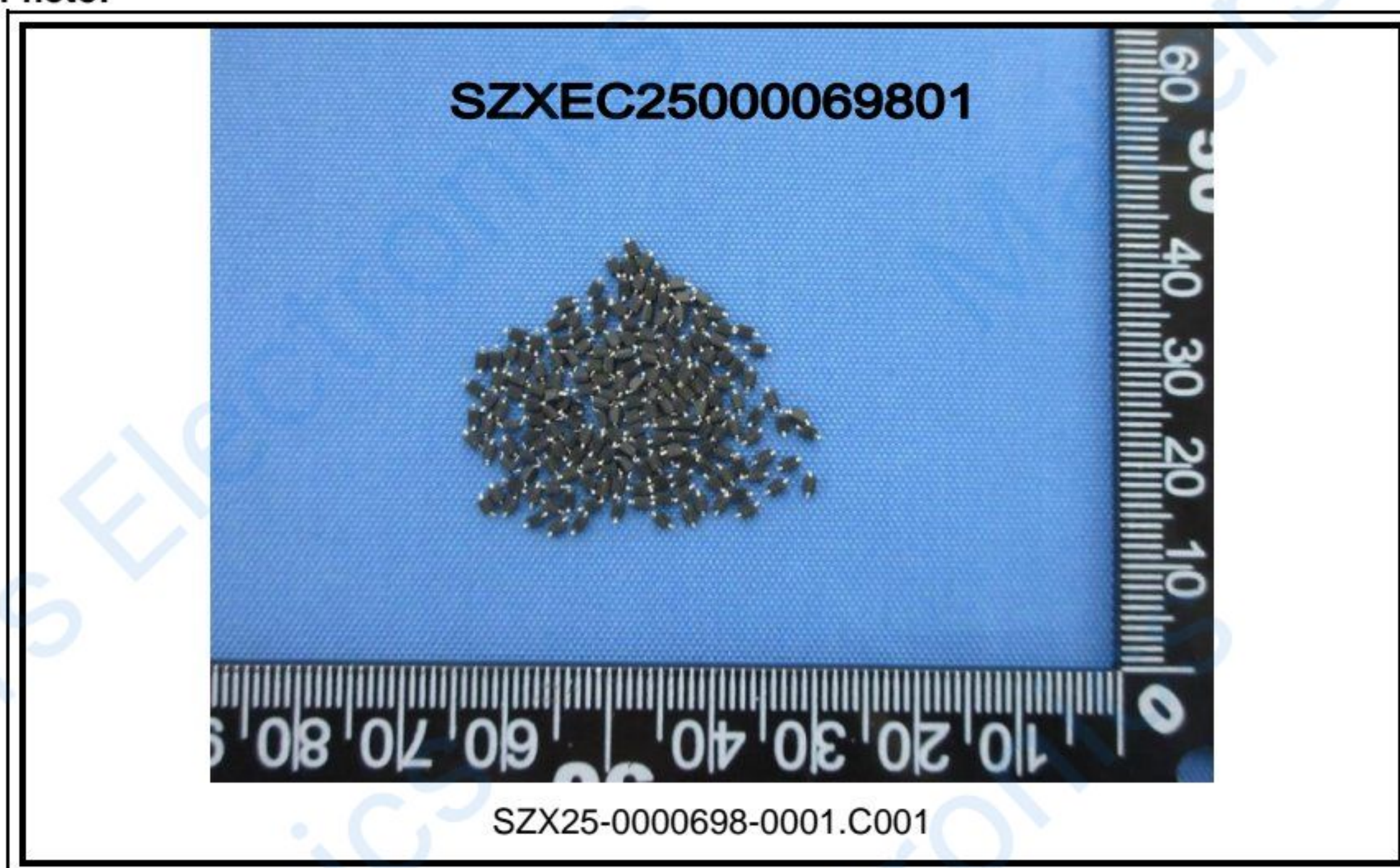
## Test Report

No.: SZXEC25000069801

Date: Jan 14, 2025

Page 7 of 7

Sample Photo:



SGS authenticate the photo on original report only

\*\*\* End of Report \*\*\*



SGS-CHINA Standards Technical Service Co., Ltd.  
Shenzhen Branch

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 <https://www.sgs.com/en/Terms-and-Conditions>. 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](mailto: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.sgsgroup.com.cn](http://www.sgsgroup.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](mailto:sgs.china@sgs.com)

Member of the SGS Group (SGS SA)