

No. XMNEC1800423802

日期: 2018年04月27日 第1页,共7页

厦门华信安电子科技有限公司 厦门火炬高新区(翔安)产业区翔岳路**25**号东北栋

以下测试之样品是由申请者所提供及确认:双芯片串联型安规认证陶瓷电容器

SGS工作编号: 18940578 - XM

型号: HBY

客户参考信息: 陶瓷,环氧树脂

样品接收日期: 2018年04月20日

测试周期: 2018年04月20日 - 2018年04月27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: 基于所送样品的指定部位进行的测试,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厦门分公司 授权签名

卢烟勤

Sunny Lu卢湘勤 批准签署人

备注:本报告是编号为XMNEC1800423801报告的中文版本



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) 83071443, and many approximations are remained from the company.

No. 31 Xianghong Road, Xiang An Torch Industrial Zone, Xiamen, Fujian Province, China 361101 t (86-592) 5766995 f (86-592) 5766999 www.sgsgroup.com.cn 中国·福建·厦门市火炬(翔安)产业区翔虹路31号 邮编: 361101 t (86-592) 5766995 f (86-592) 5766999 e sgs.china@sgs.com



测试报告 日期: 2018年04月27日 第2页,共7页 No. XMNEC1800423802

测试结果:

测试样品描述:

样品编号 SGS样品ID 描述

SN1 蓝色陶瓷部分 XMN18-004238.001

备注:

(1) 1 mg/kg = 0.0001%

(2) MDL = 方法检测限

(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	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>001</u>
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) 83071443, or email: CN.Doccheck@sgs.com"

No. 31 Xianghong Road, Xiang' An Torch Industrial Zone, Xiamen, Fujian Province, China 361101 t (86-592) 5766995 f (86-592) 5766999 www.sgsgroup.com.cn 中国・福建・厦门市火炬(翔安)产业区翔虹路31号 邮编: 361101 t (86-592) 5766995 f (86-592) 5766999 e sgs.china@sgs.com



\H.L. N. I. → . I.			
测试报告	N. N. W. I. T. O. 4.0.0.0.4.0.0.0.0.0.0.0.0.0.0.0.0.0.0.		燃り石 サフゴ
///// TA AR ==	No. XMNEC1800423802	日期: 2018年04月27日	第3页.共7页
1/3/1 /L/A/ LIX	INU. AIVINEO 1000423002		50 W.JCIW

测试项目	限值	<u>单位</u>	<u>MDL</u>	<u>001</u>
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)	1000	mg/kg	50	ND
邻苯二甲酸丁苄酯(BBP)	1000	mg/kg	50	ND
邻苯二甲酸二(2-乙基己基)酯(DEHP)	1000	mg/kg	50	ND
邻苯二甲酸二异丁酯(DIBP)	1000	mg/kg	50	ND

备注:

(1)最大允许极限值引用自RoHS指令(EU) 2015/863 。IEC 62321系列等同于 EN 62321系列 http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101::::FSP ORG ID.FSP LANG ID:12586 37,25

索应

测试方法: 参考EN 14582:2016,用 IC分析。

测试项目	<u>单位</u>	<u>MDL</u>	<u>001</u>
氟 (F)	mg/kg	50	ND
氯 (CI)	mg/kg	50	227
溴 (Br)	mg/kg	50	ND
碘 (I)	mg/kg	50	ND

中国・福建・厦门市火炬(翔安)产业区翔虹路31号

备注:

(1)这项测试由SGS广州化学实验室操作。

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) 83071443, or email: CN.Doccheck@sgs.com"

No. 31 Xianghong Road, Xiang An Torch Industrial Zone, Xiamen, Fujian Province, China 361101 t (86-592) 5766995 f (86-592) 5766999 www.sgsgroup.com.cn

邮编: 361101 t (86-592) 5766995 f (86-592) 5766999 e sgs.china@sgs.com



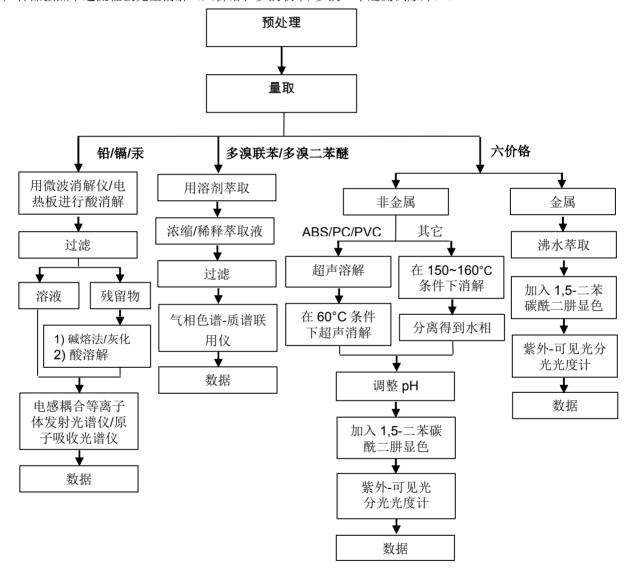
No. XMNEC1800423802

日期: 2018年04月27日 第4页,共7页

附件

Pb/Cd/Hg/Cr6+/PBBs/PBDEs 测试流程图

- 1) 分析人员: 陈聪
- 2) 项目负责人: 聂丹丹
- 3) 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) 83071443, or email: CN.Doccheck@sas.com"

No.31 Xianghong Road, Xiang'An Torch Industrial Zone, Xiamen, Fujian Province, China 361101 t (86-592) 5766995 f (86-592) 5766999 www.sgsgroup.com.cn 中国・福建・厦门市火炬(翔安)产业区翔虹路31号 邮编: 361101 t (86-592) 5766995 f (86-592) 5766999 e sgs.china@sgs.com



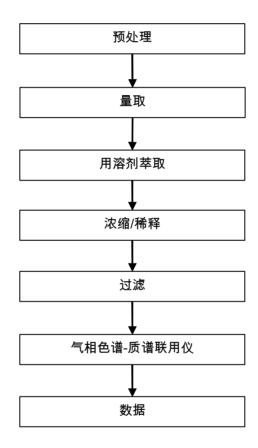
No. XMNEC1800423802

日期: 2018年04月27日 第5页,共7页

附件

Phthalates 测试流程图

1) 分析人员: 陈聪 2) 项目负责人: 聂丹丹



中国・福建・厦门市火炬(翔安)产业区翔虹路31号



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) 83071443, or email: CN.Doccheck@sgs.com"

No. 31 Xianghong Road, Xiang An Torch Industrial Zone, Xiamen, Fujian Province, China 361101 t (86-592) 5766995 f (86-592) 5766999 www.sgsgroup.com.cn

邮编: 361101 t (86-592) 5766995 f (86-592) 5766999 e sgs.china@sgs.com



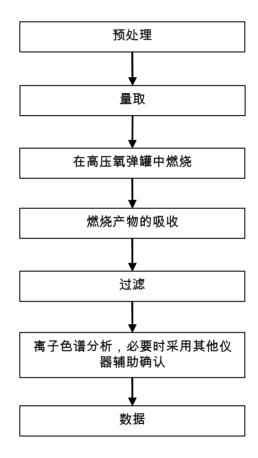
No. XMNEC1800423802

日期: 2018年04月27日 第6页,共7页

附件

Halogen 测试流程图

1) 分析人员: 肖戈 2) 项目负责人: 汪丹





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.

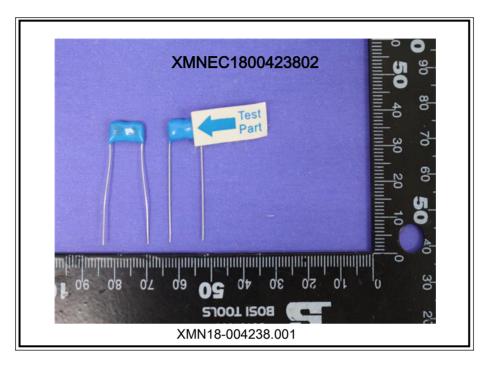
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CN.Doccheck@sgs.com"



No. XMNEC1800423802

日期: 2018年04月27日 第7页,共7页

样品照片:



此照片仅限于随SGS正本报告使用

*** 报告完 ***



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) 83071443, or email: CN.Doccheck@sgs.com"

or email: CN.Doccheck@sgs.com
No. 31 Xianghong Road, Xiang' An Torch Industrial Zone, Xiamen, Fujian Province, China 361101 t (86–592) 5766995 f (86–592) 5766999 www.sgsgroup.com.cn
中国 • 福建 • 厦门市火炬(翔安)产业区翔虹路31号 邮编: 361101 t (86–592) 5766995 f (86–592) 5766999 e sgs.china@sgs.com