

检测报告 编号: SHAEC23002618502 日期: 2023年03月17日 第1页,共10页

客户名称: 上海友邦电气(集团)股份有限公司

客户地址: 上海市松江区佘山镇吉业路 528 号

样品名称: 接线端子 型号: UFJ1-2.5/2

客户参考信息: 见附页

以上样品及信息由客户提供。

SGS 工作编号: SP23-006671

样品接收时间: 2023年03月13日

检测周期: 2023年03月13日~2023年03月17日

检测要求: 根据客户要求检测。

检测方法: 见后续页。 检测结果: 见后续页。

检测要求	结论
欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863-铅、汞、镉和六	符合
价铬	17) 日
欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863- 铅、汞、镉、六	
价铬、多溴联苯(PBBs)、多溴二苯醚(PBDEs)、邻苯二甲酸二丁酯 (DBP)、邻苯	符合
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	17) 日
酯(DIBP)	

通标标准技术服务(上海)有限公司 授权签名



Annie Liu 刘盈妹 批准签署人





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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Cond

3<sup>rd</sup>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



编号: SHAEC23002618502

日期: 2023年03月17日

第2页,共10页

### 检测结果:

检测部件外观描述:

样品序号	样品编号	SGS 样品 ID	样品描述
SN1	A1	SHA23-0026185-0001.C001	棕色固体
SN2	A2	SHA23-0026185-0001.C002	银色金属
SN3	А3	SHA23-0026185-0001.C003	银色金属
SN4	A4	SHA23-0026185-0001.C004	银色金属

#### 备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL= 方法检测限
- (3) ND = 未检出( < MDL)
- (4) "-" = 未规定

### 欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863-铅、汞、镉和六价铬

检测方法: 参考 IEC 62321-4:2013+AMD1:2017,IEC 62321-5:2013 和 IEC 62321-7-1:2015,采用 ICP-OES, AAS 和 UV-Vis 进行分析。

检测项目	限值	单位	MDL	A2	A3	A4
镉 (Cd)	100	mg/kg	2	14	ND	ND
铅 (Pb)	1000	mg/kg	2	30970▲	ND	ND
汞 (Hg)	1000	mg/kg	2	ND	ND	ND
六价铬(Cr(VI))▼	-	μg/cm²	0.10	ND	ND	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。
- (3) ▼ = a. 当六价铬的浓度高于0.13 μg/cm²时,样品为阳性,即含有六价铬;
  - b. 当六价铬的浓度为ND (低于0.10 μg/cm²) 时,样品为阴性,即未检测到六价铬;
  - c. 当六价铬的浓度介于0.10 μg/cm²与0.13 μg/cm²之间时,无法直接判定是否检测到六价铬,因不同个体的样品表面差异可 能会影响测定结果。

由于未获知样品的存储条件和生产日期,样品的六价铬检测结果仅能代表测试时样品含六价铬的状态。

(4) ▲根据客户提供的声明,编号A2中的铅(Pb)被欧盟RoHS指令2011/65/EU豁免,相应豁免条文(请以英文原文为准) |ANNEX III 6(c)|:铜合金中的铅含量不得超过4%。

欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863- 铅、汞、镉、六价铬、多溴联苯(PBBs)、多 溴二苯醚(PBDEs)、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-乙基已基)酯 (DEHP)和邻苯二甲酸二异丁酯(DIBP)



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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Cond

3<sup>rd</sup>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



编号: SHAEC23002618502

日期: 2023年03月17日

第3页,共10页

检测方法:

参考 IEC 62321-4:2013+AMD1:2017, 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。

检测项目	限值	单位	MDL	A1
镉 (Cd)	100	mg/kg	2	ND
铅 (Pb)	1000	mg/kg	2	ND
汞 (Hg)	1000	mg/kg	2	ND
六价铬(Cr(VI))	1000	mg/kg	8	ND
多溴联苯之和(PBBs)	1000	mg/kg	-	ND
一溴联苯(MonoBB)	-	mg/kg	5	ND
二溴联苯(DiBB)	-	mg/kg	5	ND
三溴联苯(TriBB)	-	mg/kg	5	ND
四溴联苯(TetraBB)	-	mg/kg	5	ND
五溴联苯(PentaBB)	-	mg/kg	5	ND
六溴联苯(HexaBB)	-	mg/kg	5	ND
七溴联苯(HeptaBB)	-	mg/kg	5	ND
八溴联苯(OctaBB)	-	mg/kg	5	ND
九溴联苯(NonaBB)	-	mg/kg	5	ND
十溴联苯(DecaBB)	-	mg/kg	5	ND
多溴二苯醚之和(PBDEs)	1000	mg/kg	-	ND
一溴二苯醚(MonoBDE)	-	mg/kg	5	ND
二溴二苯醚(DiBDE)	-	mg/kg	5	ND
三溴二苯醚(TriBDE)	-	mg/kg	5	ND
四溴二苯醚(TetraBDE)	-	mg/kg	5	ND
五溴二苯醚(PentaBDE)	-	mg/kg	5	ND
六溴二苯醚(HexaBDE)	-	mg/kg	5	ND
七溴二苯醚(HeptaBDE)	-	mg/kg	5	ND
八溴二苯醚(OctaBDE)	-	mg/kg	5	ND
九溴二苯醚(NonaBDE)	-	mg/kg	5	ND
十溴二苯醚(DecaBDE)	-	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。
- (2) IEC 62321 系列等同于 EN 62321 系列。
- (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。

除非另有说明,参照 ILAC-G8:09/2019,使用简单接受(w=0)的二元判定规则进行符合性判定。 除非另有说明,此报告结果仅对检测的样品负责。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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Cond

3<sup>rd</sup>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



编号: SHAEC23002618502

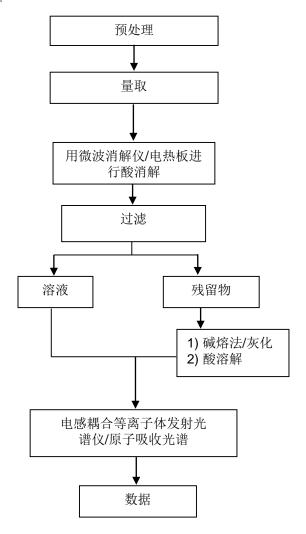
日期: 2023年03月17日

第4页,共10页

附件

### 元素 (IEC62321) 检测流程图

样品按照下述流程被完全消解





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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a>, dor electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Conditio

3<sup>rd</sup>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



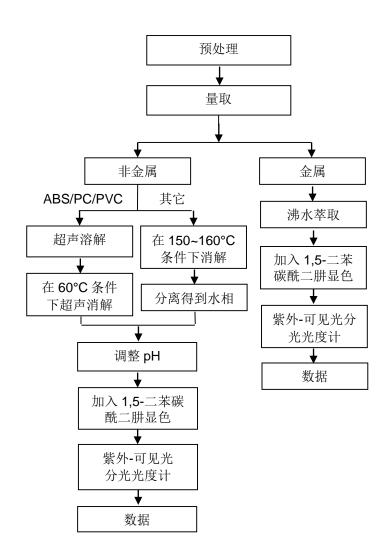
# 检测报告 附件

编号: SHAEC23002618502

日期: 2023年03月17日

第5页,共10页

### 六价铬检测流程图





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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-p-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-p-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document 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 form 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,

3<sup>rd</sup>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



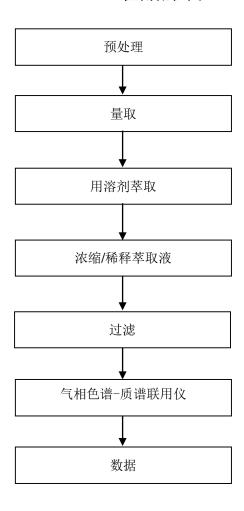
检测报告 附件

编号: SHAEC23002618502

日期: 2023年03月17日

第6页,共10页

### PBBs/PBDEs 检测流程图





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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Cond

3<sup>rd</sup>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

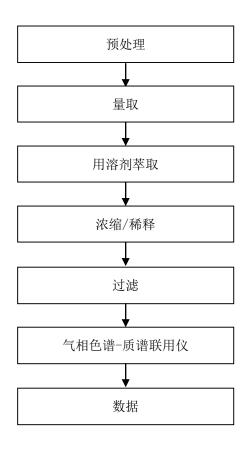


检测报告 附件

编号: SHAEC23002618502

日期: 2023年03月17日 第7页,共10页

## Phthalates 检测流程图





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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Cond

3<sup>rd</sup>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



编号: SHAEC23002618502

日期: 2023年03月17日

第8页,共10页

附件:

UFJ1-2. 5/3, UFJ1-2. 5/4, UFJ1-2. 5/5, UFJ1-2. 5/6, UFJ1-2. 5/7, UFJ1-2. 5/8, UFJ1-2. 5/9, UFJ1-2. 5/10, UFJ1-2. 5/9, UFJ1-2. 5/9, UFJ1-2. 5/9, UFJ1-2. 5/10, UFJ1-2. 5/9, UFJ1-2. 5/10,  $2.\ 5/11, \ UFJ1-2.\ 5/12, \ UFJ1-6/2, \ UFJ1-6/3, \ UFJ1-6/4, \ UFJ1-6/5, \ UFJ1-6/6, \ UFJ1-6/7, \ UFJ1-6/8, \ UFJ1-6/9, \$ 6/10, UFJ1-6/11, UFJ1-6/12, UFJ1-10/2, UFJ1-10/3, UFJ1-10/4, UFJ1-10/5, UFJ1-10/6, UFJ1-10/7, UFJ1-10/8, UFJ1-10/9, UFJ1-10/10, UFJ1-10/11, UFJ1-10/12



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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-p-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-p-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document 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 form 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,

3<sup>rd</sup>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



编号: SHAEC23002618502

**日期:** 2023年03月17日 第9页,共10页

样品照片:







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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Cond

3<sup>rd</sup>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



编号: SHAEC23002618502

日期: 2023年03月17日

第10页,共10页





此照片仅限于随 SGS 正本报告使用 \*\*\*报告结束\*\*\*



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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Cond

3<sup>rd</sup>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