

检测报告 编号: SHAEC24004166504 日期: 2024年03月18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: USK-2.5 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: TIC1020240307154805NHB2

样品接收时间: 2024年03月08日

2024年03月08日~2024年03月18日 检测周期:

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、六价铬、多溴联苯 (PBB)、多溴二苯醚 (PBDE)、邻苯二甲酸二(2-乙基己基)酯 (DEHP)、邻苯二甲酸丁苄酯 (BBP)、邻苯二甲酸二丁酯 (DBP)和邻苯二甲酸二异丁酯 (DIBP)	符合
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	符合

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





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检测结果:

检测部件外观描述:

EM 11-11-7-7303 E.				
样品序号	样品编号	SGS 样品 ID	样品描述	
SN1	A5	SHA24-0041665-0001.C005	淡棕色固体	
SN2	A6	SHA24-0041665-0001.C006	银色金属	
SN3	A7	SHA24-0041665-0001.C007	银蓝色金属	
SN4	A8	SHA24-0041665-0001.C008	银蓝色金属	

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、六价铬、多溴联苯 (PBB)、多溴 二苯醚 (PBDE)、邻苯二甲酸二(2-乙基已基)酯 (DEHP)、邻苯二甲酸丁苄酯 (BBP)、邻苯二甲酸二丁酯 (DBP)和邻苯二甲酸二异丁酯 (DIBP)

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/AAS, UV-Vis 和 GC-MS 进行分析。

检测项目	限值	单位	MDL	A5
铅 (Pb)	1000	mg/kg	2	ND
汞 (Hg)	1000	mg/kg	2	ND
镉 (Cd)	100	mg/kg	2	ND
六价铬 (Cr(VI))	1000	mg/kg	8	ND
多溴联苯之和 (PBB)	1000	mg/kg	-	ND
一溴联苯 (MonoBB)	ı	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 (PBDE)	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



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检测项目	限值	单位	MDL	A5
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(2-乙基己基)酯 (DEHP)	1000	mg/kg	50	ND
邻苯二甲酸丁苄酯 (BBP)	1000	mg/kg	50	ND
邻苯二甲酸二丁酯 (DBP)	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。

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	A6	A7	A8
铅 (Pb)	1000	mg/kg	2	30	ND	ND
汞 (Hg)	1000	mg/kg	2	ND	ND	ND
镉 (Cd)	100	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。
- 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检测时样品含六价铬的状态。

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。



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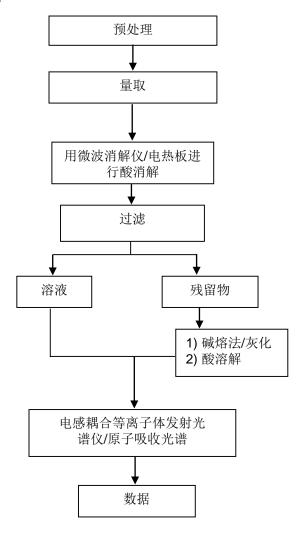
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附件

元素检测流程图

样品按照下述流程被完全消解





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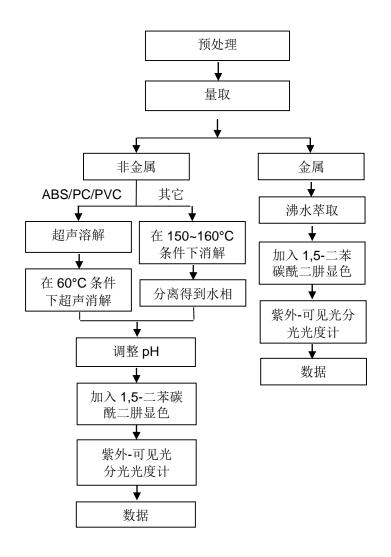
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六价铬检测流程图





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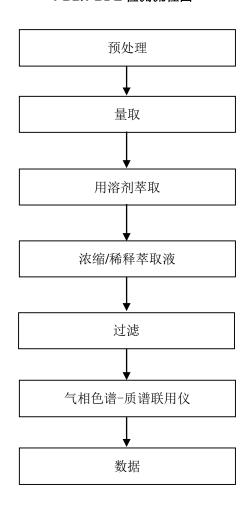
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附件

PBB/PBDE 检测流程图





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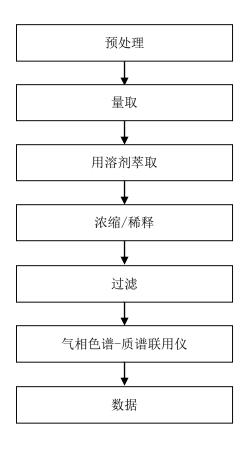


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Phthalates 检测流程图





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附件:

USK-2.5, USK-4, USK-6,USK-2.5N, USK-4N, USK-6N, USK-10, USK-16, USK-35, USK-2.5E, USK-50, USK-70, USK-95, USK-150, USK-240,USK-2.5JD,USK-4JD,USK-6JD,USK-10JD,USK-16JD,USK-35JD,USK-4/2-2, USK-4/2 \times 2, USK-4/2 \times 6S,USK-6T,USK-6SN, USK-2.5RD, USK-4RD, USK-4/2-2RD,USK-10RD, USK-2.5RDX, USK-4RDX, USK-10RDX, USK-4/2-2RDX, USK-10RDN, USK-2.5V/2-2/5.08, USK-4/2-2D,

USK-2.5G, USK-4G, USK-6G, USK-10G, USK-16G, USK-35G, USK-2.5FG, USK-4FG, USK-10FG, USK-16FG, USK-35FG, USK-2.5FG, USK-4FG, USK-10FG, USK-16FG, USK-35FG, USK-2.5FG, USK-4FG, USK-10FG, USK-16FG, USK-35FG, USK-2.5FG, USK-2.5FG, USK-35FG, U 2.5EG,USK-4HG,USK-4/HFG, USK-2.5V/2-2/5.08G, USK-4/2-2RDG,USK-2.5RDG,UKJ-4/2×2FG,USK-6SNG,USK-6SG,



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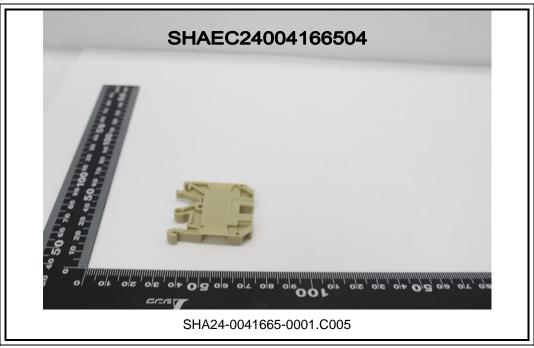
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样品照片:







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