

测试报告 No. CKGEC2100610108 日期: 2021年08月25日 第1页,共9页

四川遂宁市利普芯微电子有限公司 四川省遂宁市船山区(经开区)飞龙路66号

以下测试之样品是由申请者所提供及确认:半导体器件

SGS工作编号: 22013646 - CQ

型号: DFN

样品接收日期: 2021年08月17日

测试周期: 2021年08月17日 - 2021年08月24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

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部昌梅

Mary Zou邹昌梅 批准签署人





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测试结果:

### 测试样品描述:

样品编号 SGS样品ID 描述

SN1 CKG21-006101.004 被称作"半导体器件"

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>004</u>
镉 (Cd)	100	mg/kg	2	ND
铅 (Pb)	1,000	mg/kg	2	12
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



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<u>测试项目</u>	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>004</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。
- (2) IEC 62321系列等同于 EN 62321系列

https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101::::FSP\_ORG\_ID,FSP\_LANG\_ID:12586

(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。

#### 卤素

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>004</u>
氟 (F)	mg/kg	50	ND
氯 (CI)	mg/kg	50	ND
溴 (Br)	mg/kg	50	ND
碘 (I)	mg/kg	50	ND

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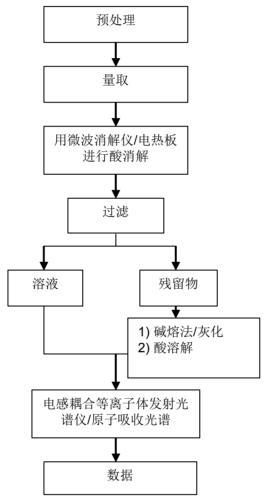
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附件

# 元素(IEC62321) 测试流程图

1)样品按照下述流程被完全消解





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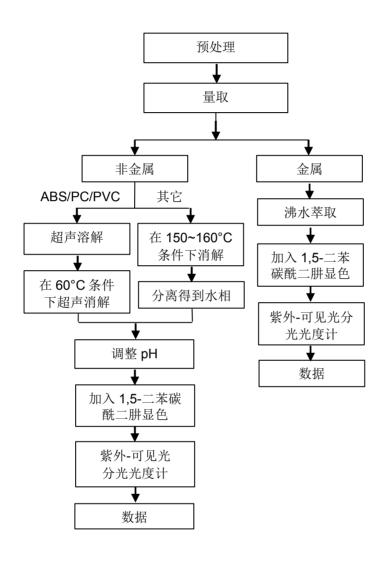


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## 六价铬测试流程图





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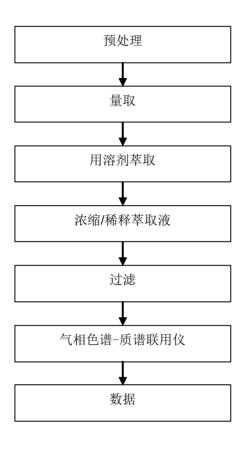


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## PBBs/PBDEs 测试流程图





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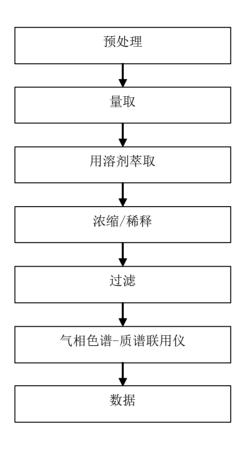


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## Phthalates 测试流程图





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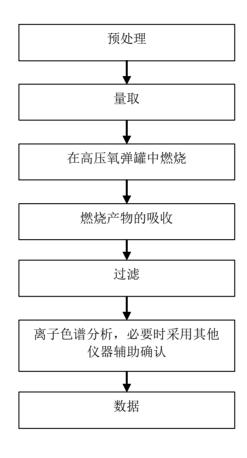


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## 卤素 (氧弹法)测试流程图





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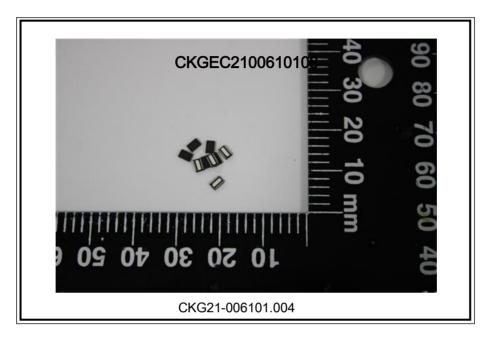
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