

检测报告 编号: CANEC25015059708 日期: 2025年07月02日 第1页,共5页

客户名称: 深圳市永源微电子科技有限公司

客户地址: 深圳市宝安区福海和秀西路 44 号锐明工业园 C2 栋

样品名称: 半导体元器件

型号: TO-252

客户参考信息: TO252-3L、TO252-4L、TO263-3L、TO251S-3L、TO220F-3L、

TO220-3L、TO247-3L、PDFN3*3-8L、PDFN5*6-8L、TO263-6L、

TOLLA-8L、STOLL-5L、TO264-3L

以上样品及信息由客户提供。

SGS 工作编号: SZP25-031683

样品接收时间: 2025年06月24日

检测周期: 2025年06月24日~2025年07月02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 |
|----------------------------------|----|
| AfPS GS 2019:01 PAK-多环芳香烃 (PAHs) | 符合 |

通标标准技术服务有限公司广州分公司 授权签名



Arsene Ye 叶士龙 批准签署人





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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 | A2 | CAN25-0150597-0001.C002 | 带印字的黑色塑胶 |

备注:

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

AfPS GS 2019:01 PAK-多环芳香烃 (PAHs)

检测方法: 参考 AfPS GS 2019:01 PAK, 采用 GC-MS 进行分析。

| 检测项目 | CAS No. | 限值 | 单位 | MDL | A2 |
|--|----------|-----|-------|-----|----|
| 苯并(a)芘 (BaP) | 50-32-8 | 0.5 | mg/kg | 0.1 | ND |
| 苯并(e)芘 (BeP) | 192-97-2 | 0.5 | mg/kg | 0.1 | ND |
| 苯并(a)蒽 (BaA) | 56-55-3 | 0.5 | mg/kg | 0.1 | ND |
| 苯并(b)荧蒽 (BbF) | 205-99-2 | 0.5 | mg/kg | 0.1 | ND |
| 苯并(j)荧蒽 (BjF) | 205-82-3 | 0.5 | mg/kg | 0.1 | ND |
| 苯并 (k)荧蒽 (BkF) | 207-08-9 | 0.5 | mg/kg | 0.1 | ND |
| 崫 (CHR) | 218-01-9 | 0.5 | mg/kg | 0.1 | ND |
| 二苯并(a,h)蒽 (DBA) | 53-70-3 | 0.5 | mg/kg | 0.1 | ND |
| 苯并(g,h,i)菲(二萘嵌苯) (BPE) | 191-24-2 | 0.5 | mg/kg | 0.1 | ND |
| 茚苯(1,2,3-c,d)芘 (IPY) | 193-39-5 | 0.5 | mg/kg | 0.1 | ND |
| 菲 (PHE) | 85-01-8 | - | mg/kg | 0.1 | ND |
| 芘 (PYR | 129-00-0 | - | mg/kg | 0.1 | ND |
| 蒽 (ANT) | 120-12-7 | - | mg/kg | 0.1 | ND |
| 荧蒽 (FLT) | 206-44-0 | - | mg/kg | 0.1 | ND |
| 4 项多环芳香烃总和[菲 (PHE),芘 (PYR), 蒽 (ANT),荧蒽 (FLT)] | - | 10 | mg/kg | - | ND |
| 萘 (NAP) | 91-20-3 | 2 | mg/kg | 0.1 | ND |
| 15 项多环芳香烃总和 | - | 10 | mg/kg | - | ND |
| 材料分类 | - | - | - | - | 2 |
| 结论 | | | | 符合 | |

备注:

根据客户提供的信息,检测样品为德国产品安全法涉及的非儿童使用产品。

AfPS(德国产品安全委员会): 认证对多环芳香烃的要求

| 参数 | 1 光 | 2 巻 | 3 巻 |
|----------|-----|-----|------------|
| 少 | 一 | 4天 | 3 矢 |



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| 单位: mg/kg | 设计意图为放入口中的材料,或与皮肤长期接触(超过30秒)的材料用于-2009/48/EC定义 | 不属于第 1 类,设计意图或可预见 ^d 与皮肤长期接触(超过 30 秒)或短期重复接触 ^c 的材料 | | 不属于第 1 和 2 类,设计意图或可预见与皮肤短期接触(不超过 30 秒)材料 | |
|---|--|---|------------------------|--|------------------------|
| | 1-2009/40/LC 足叉 的玩具,或 -供 3 岁以下儿童 ^{a,b} 使用。 | a .供儿童 使用的产品 | b.其他产品 | a .供儿童 使用的产品 | b.其他产品 |
| 苯并(a)芘 (BaP) | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并(e)芘 (BeP) | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并(a)蒽 (BaA) | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并(b)荧蒽 (BbF) | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并(j)荧蒽 (BjF) | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并 (k)荧蒽 (BkF) | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 薜 (CHR) ,mg/kg | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 二苯并(a,h)蒽 (DBA) | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并(g,h,i)菲(二萘嵌 苯) (BPE) | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 茚苯(1,2,3-c,d)芘 (IPY) | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 菲 (PHE),芘 (PYR),蒽 (ANT),荥 蒽 (FLT) | <1 (总和) | <5 (总和) | < 10 (总和) | < 20 (总和) | < 50 (总和) |
| 萘 (NAP) | < 1 | < 2 | | < 10 | |
| 15 PAH 之和 | <1 | < 5 | < 10 | < 20 | < 50 |

注释:

- a 儿童是指法定年龄未满 14 周岁的人。
- b供儿童使用包括儿童的主动接触或被动接触。
- c "短期重复接触"的定义摘自 REACH 附录 XVII 第 50 条修正案 ((EC) No. 1272/2013)。
- d 根据德国产品安全法(ProdSG)(第一章第 2 条第 28 款)的定义,"可预见的使用"是指将产品投放市场的人无意但可以合理预见的方式使用产品。

备注:

德国产品安全委员会(AfPS)于 2020 年 4 月 10 日发布了关于多环芳香烃(PAHs)的新文件(AfPS GS 2019:01 PAK),该文件将于 2020 年 7 月 1 日起用于 GS-MARK 认证。

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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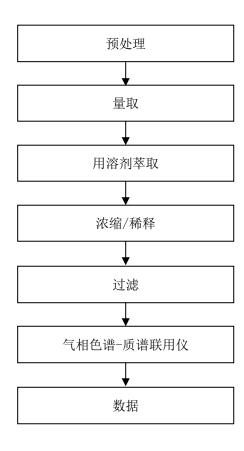
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PAHs 检测流程图





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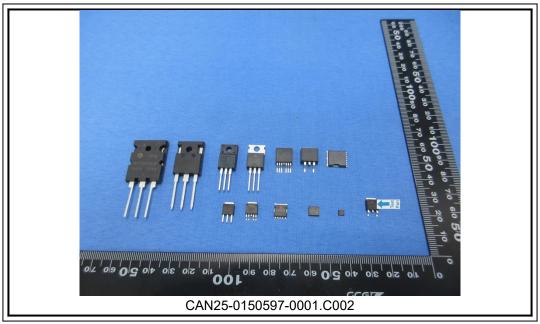
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