

检测报告

编号: SHAEC23007706402

日期: 2023年06月12日

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客户名称: 江苏长晶科技股份有限公司

客户地址: 中国(江苏)自由贸易试验区南京片区研创园腾飞大厦C座13楼

样品名称: 半导体元件

型号: SOT-23

客户参考信息: 见附件

以上样品及信息由客户提供。

SGS工作编号: SHP23-003733

样品接收时间: 2023年06月07日

检测周期: 2023年06月07日~2023年06月12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 POPs 法规(EU) 2019/1021 及其修订指令 - 持久有机性污染物(POPs)	符合

通标标准技术服务(上海)有限公司
授权签名

倪俊

Tom Ni 倪俊
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	A1	SHA23-0077064-0001.C001	黑色本体带银色金属

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 POPs 法规(EU) 2019/1021 及其修订指令 - 持久有机性污染物(POPs)

检测方法: 参考 SGS 内部方法, 采用 GC-MS、GC-ECD 和 HPLC-DAD-MS 进行分析。

检测项目	CAS No.	限值	单位	MDL	A1
六氯丁二烯	87-68-3	禁用	mg/kg	5	ND
五氯苯	608-93-5	禁用	mg/kg	5	ND
六氯苯	118-74-1	10	mg/kg	5	ND
多氯联苯(PCB)	1336-36-3 及其他	禁用	mg/kg	5	ND
六溴环十二烷(HBCDD) 及其非对映异构体(α -HBCDD, β -HBCDD, γ -HBCDD)	134237-50-6 /134237-51-7 /134237-52-8 /25637-99-4 /3194-55-6	100	mg/kg	10	ND
多氯萘(PCN)	70776-03-3 及其他	禁用	mg/kg	5	ND
五氯苯酚(PCP)及其盐和酯	87-86-5 及其他	5	mg/kg	0.5	ND
六溴联苯	36355-01-8	禁用	mg/kg	5	ND
四溴联苯醚	40088-47-9 及其他	10	mg/kg	5	ND
五溴联苯醚	32534-81-9 及其他	10	mg/kg	5	ND
六溴联苯醚	36483-60-0 及其他	10	mg/kg	5	ND
七溴联苯醚	68928-80-3 及其他	10	mg/kg	5	ND
十溴联苯醚	1163-19-5	10	mg/kg	5	ND
C10-13 氯代烃(短链氯化石蜡)(SCCPs)	85535-84-8 及其它	1	%	0.005	ND
全氟辛烷磺酸(PFOS)及其派生物	-	10	mg/kg	-	ND
全氟辛烷磺酸(PFOS) ^	1763-23-1	-	mg/kg	1	ND



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检测项目	CAS No.	限值	单位	MDL	A1
N-乙基全氟辛烷磺酰胺(EtFOSA)	4151-50-2	-	mg/kg	1	ND
N-甲基全氟辛烷磺酰胺(MeFOSA)	31506-32-8	-	mg/kg	1	ND
2-(N-乙基全氟辛基磺酰胺)乙醇(EtFOSE)	1691-99-2	-	mg/kg	1	ND
2-(N-甲基全氟辛基磺酰胺)乙醇(MeFOSE)	24448-09-7	-	mg/kg	1	ND
全氟辛基磺酰胺(PFOSA)	754-91-6	-	mg/kg	1	ND
全氟辛酸(PFOA)及其盐+	335-67-1	0.025	mg/kg	0.025	ND
全氟辛酸(PFOA)相关物质	-	1	mg/kg	-	ND
1H,1H,2H,2H-全氟癸烷磺酸(8:2 FTS)	39108-34-4	-	mg/kg	0.2	ND
全氟辛酸甲酯(Me-PFOA)	376-27-2	-	mg/kg	0.2	ND
全氟辛酸乙酯(Et-PFOA)	3108-24-5	-	mg/kg	0.2	ND
1H,1H,2H,2H-全氟-1-癸醇(8:2 FTOH)	678-39-7	-	mg/kg	0.2	ND
1H,1H,2H,2H-全氟癸基丙烯酸酯(8:2 FTA)	27905-45-9	-	mg/kg	0.2	ND
1H,1H,2H,2H-甲基丙烯酸全氟癸酯(8:2 FTMA)	1996-88-9	-	mg/kg	0.2	ND
全氟辛基碘烷(PFOI)	507-63-1	-	mg/kg	0.2	ND
结论					符合

备注:

- (1) 欧盟POPs法规(EU) 2019/1021, 附录I 中的物质禁用混合物及物品中使用, 除非法规有特殊豁免。
- (2) 对POPs物质的分析检测是基于现有的技术, 根据客户要求进行检测。
- (3) 检测结果可能来源于混合检测中一个或多个组分, 建议客户进一步定量分析检测含有POPs的组分并且得到POPs物质的准确浓度。
- (4) 豁免: C10-13 氯代烃(短链氯化石蜡)在混合物中的法规限值是1.0% (w/w), 在物品中的法规限值为0.15% (w/w)。
- (5) 豁免: HBCDD 做为无意添加的微量污染物, 在物质, 混合物, 物品或者物品的阻燃剂中不能超出100mg/kg。
- (6) 豁免: 全氟辛烷磺酸(PFOS)及其衍生物在混合物中的法规限值是10mg/kg, 在物品中的法规限值是0.1%(w/w), 在纺织品和涂层材料中的限值是1µg/m²。
- (7) ^ 全氟辛烷磺酸 (PFOS)包含 PFOS-K (CAS No.: 2795-39-3), PFOS-Li (CAS No.: 29457-72-5), PFOS-NH₄ (CAS No.: 29081-56-9), PFOS-NH(OH)₂ (CAS No.: 70225-14-8), PFOS-N(C₂H₅)₄ (CAS No.: 56773-42-3), PFOS-DDA (CAS No.:251099-16-8) 和POSF (CAS No.: 307-35-7)
- (8) + PFOA 及其盐包含PFOA-Na (CAS No.: 335-95-5), PFOA-K (CAS No.: 2395-00-8), PFOA-Ag (CAS No.: 335-93-3), PFOA-F (CAS No.: 335-66-0) 和 APFO (CAS No.: 3825-26-1);
- (9) 豁免: 四溴联苯醚、五溴联苯醚、六溴联苯醚、七溴联苯醚和十溴联苯醚在物质中的法规限值是10mg/kg, 混合物和物品中四溴、五溴、六溴、七溴和十溴二苯醚的总和不得超过500 mg/kg, 该限制应在2021年7月16日之前由委员会审查和评估
- (10) 豁免: RoHS指令(2011/65/EU)定义的电子电器产品中四溴联苯醚、五溴联苯醚、六溴联苯醚、七溴联苯



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醚和十溴联苯醚豁免于POPs法规。

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附件:

DFN、PDFN、SOD-123/323/523/723/923/123FL、SOP8/14/16/18/20/24、
SOT-23 (-XL) /89 (-XL) /143/223/323/343/353/363/523/553/563/723、
TO-92/92L/92S/92MOD/126/220 (-XL) /220A/220F/227/247/251/251S
/252/263/277/3P、TSSOP8、FBP、CSP、QFN、TSOT、WBFBP、WBHFBP、
MSOP8、ESOP8、DIP8/14/16/18、SOP8PP、SOP10、TSSOP14、ETSSOP16、
WBLGA6×6-44L、6GBJ、ABS、DB、DBS、GBJ、GBL、GBP、GBU、JBF、JBSL、
KBL、KBP、KBU、MBF、MBS、SMA、SMAF、SMAG、SMAJ、SMB、SMBF、
SMBG、SMBJ、SMC、SMCG、SMD、R-1、R-6、A-405、DO-15、DO-27、DO-41、
UMSB、SOD-123HE、TO-220F-B、TO-220-2L、TO-220F-2L、TO-247-3L、
TO-247-2L、4GBJ、D3K、TO-92K/126K/220AK/220BK/220CK/220FK/262K
/263K/3PK/247K/252-2LK、SOT-223-3LK、SOT-23-3LK、SOT-89K、MINI-MELF、
MELF、LL-41、LL-34、DO-41(G)、DO-35(G)、DL-41、DL-35



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