

检测报告

编号: SHAEC23008339606

日期: 2023年07月04日

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客户名称: 江苏捷捷微电子股份有限公司
客户地址: 江苏省启东市经济开发区钱塘江路 3000 号

样品名称: TO-220A
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: SHP23-005036
样品接收时间: 2023年06月15日
检测周期: 2023年06月15日 ~ 2023年07月04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。

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

scan to see the report



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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	SHA23-0083396-0001.C001	黑色固体

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

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、七溴联苯醚和十溴联苯醚豁免于POPs法规。



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附件:

402、603、2510、62mm、ABS、DBS、DFN0603-2L、DFN0603-2L、DFN1006-2L、DFN1006-2L、DFN1006-3L、DFN1006-3L、DFN10x15-5L、DFN10x15-5L-XX、DFN10x15-5L-XX、DFN1610-2L、DFN1610-2L、DFN1610-6L、DFN1610-6L、DFN2010-5L、DFN2010-5L、DFN2010-8L、DFN2010-8L、DFN2020-2L、DFN2020-2L、DFN2020-3L、DFN2020-3L、DFN2020-6L、DFN2020-6L、DFN2020-6L-XX、DFN2020-6L-XX、DFN2020-8L、DFN2510-10L、DFN2510-10L、DFN2626-10L、DFN2626-10L、DFN2x2-3L、DFN2x2-3L、DFN2x2-6L、DFN2x2-6L、DFN2x2-6L-D、DFN2x2-6L-XX、DFN3.0x3.0-8L、DFN3.0x3.0-8L-SD (Type, B) DFN3.3x3.3-8L-XX、DFN3.0x3.0-8L-XX、DFN3.3x3.3-8L、DFN3.3x3.3-8L、DFN3.3x3.3-8L (Type, B)、DFN3.3x3.3-8L-XX、DFN3020-10L、DFN3020-10L、DFN3030-8L、DFN3030-8L、DFN3030-8L-XX、DFN3030-8L-XX、DFN3030-12L、DFN3333-2L、DFN3333-2L、DFN3333-8L、DFN3333-8L、DFN3810-9L、DFN3810-9L、DFN3x3-8L-XX、DFN3x3-8L-XX、DFN4120-10L、DFN5060-8L、DFN5060-8L、DFN5060-8L-XX、DFN5060-8L-XX、DFN5515-18L、DFN5x6-8L、DFN5x6-8L(Dual)、DFN5x6-8L-XX、DFN5x6-8L-XX、DFN8080-2L、DFN8080-2L、DFN8080-4L、DFN8080-4L、DFN8x8-2L、DFN8x8-2L、DFN8x8-4L、DFN8x8-4L-XX、DIP-4、DO-15、DO-218AB、DO-27、DO-41、DriveJM-34、DriveJM-62、DriveJM-DC、DriveJM-E1、DriveJM-E2、DriveJM-EC、DriveJM-ED、DriveJM-H1、DriveJM-H2、EasyPack1B、EconoDual、FBP-02C-A、GBJ、GBL、GBU、ITO-247、ITO-247-XX、KBL、KBP、LSOP-4、LSOP-4、MBF、MBS、PDFN3.3x3.3-8L、PDFN3.3x3.3-8L、PDFN3.3x3.3-8L-XX、PDFN3x3-8L、PDFN3x3-8L、PDFN3x3-8L-XX、PDFN3x3-8L-XX、PDFN5x6-8L、PDFN5x6-8L、PDFN5x6-8L-XX、PDFN5x6-8L-XX、PowerJE10x12、PowerJE10x12、PowerJE5x6、PowerJE5x6、PowerJE7x8、PowerJE7x8、PowerJE8x8、PowerJE8x8、PPTC、PPTC、R6、SGBJ、SGD0201、SGD0402、SMA、SMAF、SMB、SMBF、SMC、SMC-3、SMD-3225、SMD-4032、SMT、SMT-4、SMTF、SMTJ、SMTO-218Tab、SOD-123、SOD-123、SOD-123FL、SOD-123FL、SOD-123FLT、SOD-123FLT、SOD-323、SOD-323、SOD-323F、SOD-323FL、SOD-323FL、SOD-523、SOD-523、SOD-723、SOD-723、SOD-923、SOD-923、SOP-10、SOP-10、SOP-16、SOP-16、SOP-4、SOP-4、SOP-5、SOP-5、SOP-7、SOP-7、SOP-8、SOP-8、SOT-143、SOT-143-XX、SOT-143-XX、SOT-223、SOT-223、SOT-223-XX、SOT-223-XX、SOT-227、SOT-227、SOT-227-XX、SOT-227-XX、SOT-23、SOT-23、SOT-23-XX、SOT-23-XX、SOT-323、SOT-323-XX、SOT-323-XX、SOT-353、SOT-353-XX、SOT-353-XX、SOT-363、SOT-363-XX、SOT-363-XX、SOT-523、SOT-523-XX、SOT-523-XX、SOT-563、SOT-563-XX、SOT-563-XX、SOT-723、SOT-723-XX、SOT-723-XX、SOT-82、SOT-82、SOT-89、SOT-89R-XX、SOT-89R-XX、SOT-89-XX、SOT-89-XX、SSOP-16、SSOP-4、SSOP-4、STOLL7x8-5L、TO-126、TO-202、TO-202-XX、TO-220A、TO-220A-2D-XX、TO-220AB、TO-220A-XX、TO-220B、TO-220B-XX、TO-220C、TO-220C-XX、TO-220F、TO-220FA、TO-220FA-XX、TO-220FP、TO-220FP-XX、TO-220HF、TO-220H-XX、TO-220-XX、TO-247、TO-247-XX、TO-247iPS-2L、TO-247iPS-3L、TO-247J、TO-247J-XX、TO-247plus、TO-247S、TO-247S-XX、TO-247-XX、TO-251、TO-



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251L-XX、TO-251S、TO-251-XX、TO-252、TO-252-XX、TO-262、TO-262-XX、TO-263、TO-263-XX、TO-277B、TO-3P、TO-3P-3L、TO-3PF-3L、TO-92、TO-92CR、TO-92KR、TO-92KRF、TO-92UR、TO-92-XX、TOLL9.9x10.38-8L、TSSOP-8、TSSOP-8、WSOP-6



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