

检测报告 编号: TAOEC2308789608 日期: 2023年12月12日 第1页,共6页

客户名称: 安徽积芯微电子科技有限公司

客户地址: 中国(安徽)自由贸易试验区蚌埠片区禹会区姜桥路2999号

样品名称: 芯片封装测试产品

客户参考信息: PDFN5*6、PDFN3.3*3.3、TOLLA-8L、TO-220、TO-247、TO-252、TO-263、T

以上样品及信息由客户提供。

SGS工作编号: SHP23-020799 - QD

样品接收日期: 2023年12月05日

检测周期: 2023年12月05日 - 2023年12月12日

检测要求: 根据客户要求检测

检测方法: 请参见下一页 请参见下一页 检测结果:

检测结果概要:

检测要求 结论

欧盟决议(EC) No 1907/2006 REACH附录XVII及其修正指令(EU) 符合 2021/1297第68条-C9-C14 PFCAs及其盐和 C9-C14 PFCA相关物质

通标标准技术服务(青岛)有限公司 授权签名

Zhang Bo, Justin张波 批准签署人





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com/en/Terms-and-Conditions. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

www.sgsgroup.com.cn

sgs.china@sgs.com

t (86-532) 68999888

t (86-532) 68999888



检测报告 编号: TAOEC2308789608 日期: 2023年12月12日 第2页,共6页

检测结果:

检测样品描述:

样品编号 SGS样品ID 描述

> SN1 TAO23-087896.003 带银色金属引脚的黑色本体

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

欧盟法规(EC) No 1907/2006 REACH附录XVII及其修正指令(EU) 2021/1297第68条-C9-C14 PFCAs及其盐和 C9-C14 PFCA相关物质

优化的CEN/TS 15968:2010, 采用LC-MS或LC-MS/MS和GC-MS进行分析。。 检测方法:

检测项目	CAS No.	限值	Unit (s)	MDL	003
C9-C14 PFCA, 及其盐					
全氟壬酸 (PFNA), 及其盐^	375-95-1	1	μg/kg	10	ND
全氟癸酸 (PFDA), 及其盐^	335-76-2	1	μg/kg	10	ND
全氟十一烷酸 (PFUnDA), 及其盐 ^	2058-94-8	-	μg/kg	10	ND
全氟十二烷酸 (PFDoDA),及其盐^	307-55-1	1	μg/kg	10	ND
全氟十三烷酸 (PFTrDA), 及其盐^	72629-94-8	1	μg/kg	10	ND
全氟十四烷酸 (PFTDA)	376-06-7	-	μg/kg	10	ND
全氟-3, 7-二甲基辛酸 (PF-3, 7-DMOA)	172155-07-6	1	μg/kg	10	ND
C9-C14 PFCA及其盐总和	-	25	μg/kg	ı	ND
C9-C14 PFCA相关物质					
全氟癸烷磺酸 (PFDS), 及其盐^	335-77-3	ı	μg/kg	10	ND
1H, 1H, 2H, 2H-全氟-1-十二烷醇 (10:2 FTOH)	865-86-1	-	μg/kg	100	ND
1H, 1H, 2H, 2H-全氟十二烷基丙烯酸酯 (10:2 FTA)	17741-60-5	-	μg/kg	100	ND
2- (全氟癸基)甲基丙烯酸乙酯 (10:2 FTMA)	2144-54-9	-	μg/kg	100	ND
1, 1, 2, 2-四氢全氟-1-十四醇 (12:2 FTOH)	39239-77-5	-	μg/kg	100	ND
1H, 1H, 2H, 2H-全氟十二烷磺酸 (10:2 FTS)	120226-60-0	-	μg/kg	10	ND
全氟癸基乙基碘 (10:2 FTI)	2043-54-1	-	μg/kg	100	ND
1H, 1H, 2H, 2H-全氟四环碘化物 (12:2 FTI)	30046-31-2	-	μg/kg	100	ND



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com/en/Terms-and-Conditions. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101 中国・山东・青岛市崂山区株洲路143号通标中心 邮编: 266101

t (86-532) 68999888 t (86-532) 68999888

www.sgsgroup.com.cn sgs.china@sgs.com



检测报告

编号: TAOEC2308789608 日期: 2023年12月12日 第3页,共6页

检测项目	CAS No.	限值	Unit (s)	MDL	003
全氟壬烷磺酸 (PFNS), 及其盐^	68259-12-1	-	μg/kg	10	ND
全氟十一烷磺酸 (PFUnDS),及其盐^	749786-16-1 / 441296-91-9 (anion)	-	μg/kg	10	ND
全氟十二烷磺酸 (PFDoDS), 及其盐^	79780-39-5	-	μg/kg	10	ND
全氟十三烷磺酸 (PFTrDS), 及其盐^	791563-89-8	1	μg/kg	10	ND
双[2- (全氟癸基)乙基]磷酸盐 (10:2 diPAP)	1895-26-7	-	μg/kg	100	ND
1-碘全氟癸烷 (PFDI)	423-62-1	-	μg/kg	100	ND
全氟碘代十二烷 (PFDoDI)	307-60-8	-	μg/kg	100	ND
1H, 1H, 2H, 2H-全氟癸烷磺酸 (8:2 FTS), 及其盐 [^]	39108-34-4	-	μg/kg	10	ND
1H, 1H, 2H, 2H-全氟癸基丙烯酸酯 (8:2 FTA)	27905-45-9	-	μg/kg	100	ND
1H, 1H, 2H, 2H-甲基丙烯酸全氟癸酯 (8:2 FTMA)	1996-88-9	1	μg/kg	100	ND
2H, 2H-全氟癸酸 (H₂PFDA/8:2 FTCA)	27854-31-5	•	μg/kg	10	ND
1H, 1H, 2H, 2H-全氟-1-癸醇 (8:2 FTOH)	678-39-7	-	μg/kg	100	ND
1-碘-1H, 1H, 2H, 2H-全氟癸烷 (8:2 FTI)	2043-53-0	-	μg/kg	100	ND
1H, 1H, 2H, 2H-全氟癸基三乙氧基硅烷 (8:2 FTSi (OC ₂ H ₅) ₃)	101947-16-4	-	μg/kg	100	ND
双 (2- (全氟乙基))磷酸 (8:2diPAP), 及其 盐^	678-41-1	-	μg/kg	10	ND
2H, 2H, 3H, 3H-全氟癸酸 (H ₄ PFUnDA/ 8:3 FTCA), 及其盐^	34598-33-9	-	μg/kg	10	ND
全氟辛基乙烯 (PFDE)	21652-58-4	-	μg/kg	100	ND
C9-C14 PFCA相关物质总和	-	260	μg/kg	-	ND
结论				合格	

备注:

- (1) 1μg/kg=1ppb_o
- (2) 至2024年8月25日,含氟烷氧基的氟塑料和含氟弹性体中C9-C14 PFCAs的浓度限值为2000 ppb。自2024 年8月25日起,含氟烷氧基的氟塑料和含氟弹性体中C9-C14 PFCAs的浓度限值为100 ppb。
- (3) 对于通过电离辐射或热降解产生的PTFE微粉,以及包含PTFE微粉的工业和专业用途的混合物和制品中, C9-C14 PFCAs的浓度限值为1000 ppb, 委员会应不迟于 2024 年 8 月 25 日审查此减损。
- (4) ^=物质是指附表中列出的盐/衍生物。

物质名称	CAS No.
PFNA, 及其盐	
全氟壬酸 (PFNA)	375-95-1



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com/en/Terms-and-Conditions. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101 中国・山东・青岛市崂山区株洲路143号通标中心 邮编: 266101

t (86-532) 68999888 t (86-532) 68999888

www.sgsgroup.com.cn sgs.china@sgs.com



检测报告 编号: TAOEC2308789608 日期: 2023年12月12日 第4页,共6页

全氟壬酸钠 (PFNA-Na)	21049-39-8
全氟壬酸铵 (PFNA-NH ₄)	4149-60-4
全氟壬酸钾 (PFNA-K)	21049-38-7
全氟壬酸钾 (PFNA-Li)	60871-92-3
全氟壬酸银 (PFNA-Ag)	7358-16-9
PFDA, 及其盐	7000 10 0
全氟癸酸 (PFDA)	335-76-2
全氟癸酸钠 (PFDA-Na)	3830-45-3
全氟癸酸铵 (PFDA-NH ₄)	3108-42-7
九氟癸酸钾 (PFDA-K)	51604-85-4
全氟癸酸银 (PFDA-Ag)	5784-82-7
全氟癸酸锂 (PFDA-Li)	84743-32-8
PFUnDA, 及其盐	04740 02 0
全氟十一烷酸 (PFUnDA)	2058-94-8
全氟十一烷酸钠 (PFUnDA-Na)	60871-96-7
全氟十一烷酸铵 (PFUnDA-NH ₄)	4234-23-5
全氟十一烷酸钾 (PFUnDA-K)	30377-53-8
全氟十一烷酸钙 (PFUnDA-Ca)	97163-17-2
PFDoDA,及其盐	
全氟十二烷酸 (PFDoDA)	307-55-1
全氟十二烷铵 (PFDoDA-NH ₄)	3793-74-6
全氟十二烷酸钠 (PFDoDA-Na)	60872-01-7
PFTrDA, 及其盐	·
全氟十三烷酸 (PFTrDA)	72629-94-8
全氟十三烷酸铵 (PFTrDA-NH ₄)	4288-72-6
全氟十四烷酸 (PFTDA)	376-06-7
全氟-3,7-二甲基辛酸 (PF-3,7-DMOA)	172155-07-6
PFDS,及其盐	
全氟癸烷磺酸 (PFDS)	335-77-3
全氟癸烷磺酸钠 (PFDS-Na)	2806-15-7
全氟癸烷磺酸钾 (PFDS-K)	2806-16-8
全氟癸基磺酸铵 (PFDS-NH ₄)	67906-42-7
PFNS, 及其盐	
全氟壬烷磺酸 (PFNS)	68259-12-1
全氟壬烷磺酸钠 (PFNS-Na)	98789-57-2
全氟壬烷磺酸铵 (PFNS-NH4)	17202-41-4
全氟磺酸钾 (PFNS-K)	29359-39-5
PFDoDS,及其盐	
全氟十二烷磺酸 (PFDoDS)	79780-39-5
全氟十二烷磺酸钠 (PFDoDS-Na)	1260224-54-1



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com/en/Terms-and-Conditions. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CN.Doccheck@sgs.com

SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101 中国・山东・青岛市崂山区株洲路143号通标中心 邮编: 266101

t (86-532) 68999888 t (86-532) 68999888

www.sgsgroup.com.cn sgs.china@sgs.com



检测报告 编号: TAOEC2308789608 日期: 2023年12月12日 第5页,共6页

PFTrDS, 及其盐	
全氟十三烷磺酸 (PFTrDS)	791563-89-8
全氟十三烷磺酸钠 (PFTrDS-Na)	174675-49-1
8:2 FTS, 及其盐	
1H,1H,2H,2H-全氟癸烷磺酸 (8:2 FTS)	39108-34-4
1H,1H,2H,2H-全氟癸磺酸钾 (8:2 FTS-K)	438237-73-1
1H,1H,2H,2H-全氟癸磺酸铵 (8:2 FTS-NH ₄)	149724-40-3
1H,1H,2H,2H-全氟癸磺酸钠 (8:2 FTS-Na)	27619-96-1
H₂PFDA/8:2 FTCA,及其盐	
2H,2H-全氟癸酸 (H2PFDA/8:2 FTCA)	27854-31-5
四丁基磷 2H,2H-全氟癸酸酯 (8:2 FTCA-P (C ₄ H ₉) ₄)	882489-14-7
8:2diPAP,及其盐	
双 (2- (全氟乙基))磷酸 (8:2diPAP)	678-41-1
双 (2- (全氟乙基))磷酸钠 (8:2diPAP-Na)	114519-85-6
H₄PFUnDA/ 8:3 FTCA,及其盐	
2H,2H,3H,3H-全氟癸酸 (H ₄ PFUnDA/ 8:3 FTCA)	34598-33-9
2H,2H,3H,3H-全氟十一烷酸钾 (H4PFUnDA-K)	83310-58-1

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。



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com/en/Terms-and-Conditions. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CN.Doccheck@sgs.com

SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101 中国・山东・青岛市崂山区株洲路143号通标中心 邮编: 266101 www.sgsgroup.com.cn

sgs.china@sgs.com

t (86-532) 68999888

t (86-532) 68999888

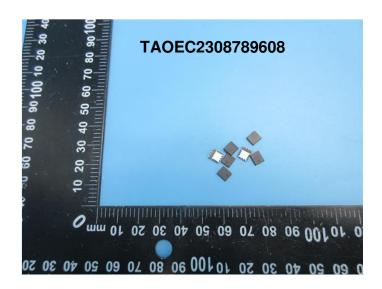


检测报告

编号: TAOEC2308789608

日期: 2023年12月12日 第6页,共6页

样品照片:



TAO23-087896.003

此照片仅限于随SGS正本报告使用

*** 报告结束 ***



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com/en/Terms-and-Conditions. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CN.Doccheck@sgs.com

SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101 中国・山东・青岛市崂山区株洲路143号通标中心 邮编: 266101

t (86-532) 68999888 t (86-532) 68999888