

No. CANEC2116296118

### 日期: 2021年09月10日 第1页,共8页

广东超华科技股份有限公司 广东省梅县雁洋镇松坪村

以下测试之样品是由申请者所提	供及确认:电解铜箔
SGS工作编号:	CP21-046354 - SZ
型号:	HTE
样品接收日期:	2021年08月31日
测试周期:	2021年08月31日 - 2021年09月09日
测试要求:	根据客户要求
	- 基于欧盟POPs法规((EU) 2019/1021 及其修正法规 (EU) 2021/277,对附录I中物 质进行筛分测试。
测试结果:	请参见下一页
总结:	

根据具体的测试范围和分析技术,委托样品中POPs物质浓度<法规限值 合格

通标标准技术服务有限公司广州分公司 授权签名

陈江梨

Allie Chen陈江梨 批准签署人





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备注:

1. 欧盟POPs法规(EU) 2019/1021,附录I中的物质禁用在混合物及物品中使用,除非法规有特殊豁免。

2. 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

3. 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。

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: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1ug/m<sup>2</sup>。

6. 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。

7. 对POPs物质的分析检测是基于现有的技术,根据客户要求进行测试。

8. ^测试结果可能来源于混合测试中一个或多个组分,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。

### 测试样品:

测试样品描述:

样品编号	SGS 样品ID	描述
SN1	CAN21-162961.001	带红铜色表层的红铜色金属



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测试方法:

SGS内部方法--GZTC CHEM-TOP-268-01,采用GC-MS、GC-ECD和HPLC-DAD-MS 或 LC-MS/MS进行分析。

测试结果:

)	序号	物质名称	CAS No.	单位	RL	001 浓度
	-	所有测试清单中的POPs	-	mg/kg	-	ND

注释:

(1) 上表仅显示检出的POPs,低于RL的POPs没有列出,所有测试的POPs请参见附录。

(2) RL = 报告极限值,所有RL是基于均一材质的测试。ND = 未检出(<RL)

(3) ^ 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.: 20081-56-9), PFOS-NH(OH)2 (CAS No.: 70225-14-8), PFOS-N(C2H5)4 (CAS No.: 7025-14-8), PFOS-N(C2H5)4 (CAS NO.: 7055-14-8), PFOS-N(C2H5)4 (CAS NO.: 7055-14-8), PFOS-N(C2H5)4 (CAS NO.: 7055-14-8), PFOS-N(C2H5)4 (CAS NO.: 7055-14-8), PFOS

56773-42-3), PFOS-DDA (CAS No.:251099-16-8) 和POSF (CAS No.: 307-35-7)

(4) + 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);

(5) 多溴联苯醚总和\*是指四溴联苯醚、五溴联苯醚、六溴联苯醚、七溴联苯醚和十溴联苯醚的总和。



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#### 附录

### 所有测试的物品中 POPs:

序号	物质名称	CAS No.	单位	RL	法规要求 / 豁 免	样品ID
1	四溴联苯醚	<b>40088-47-9</b> 和其 它	mg/kg	5	-	001
2	五溴联苯醚	<b>32534-81-9</b> 和其 它	mg/kg	5	-	001
3	六溴联苯醚	<b>36483-60-0</b> 和其 它	mg/kg	5	-	001
4	七溴联苯醚	<b>68928-80-3</b> 和其 它	mg/kg	5	-	001
5	十溴联苯醚	1163-19-5	mg/kg	5	-	001
-	多溴联苯醚总和*	-	mg/kg	-	500	001
6	全氟辛烷磺酸 (PFOS)及其衍生物	-	mg/kg	-	1000	001
6-1	全氟辛烷磺酸 (PFOS)^	1763-23-1	mg/kg	1	-	001
6-2	N-乙基全氟辛烷磺酰 胺(EtFOSA)	4151-50-2	mg/kg	1	-	001
6-3	N-甲基全氟辛烷磺酰 胺(MeFOSA)	31506-32-8	mg/kg	1	-	001
6-4	2-(N-乙基全氟辛基磺酰胺)乙 醇(EtFOSE)	1691-99-2	mg/kg	1	-	001
6-5	<b>2-(N-</b> 甲基全氟辛基磺酰胺)乙 醇(MeFOSE)	24448-09-7	mg/kg	1	-	001
6-6	全氟辛基磺酰胺(PFOSA)	754-91-6	mg/kg	1	-	001
7	4,4'-滴滴涕	50-29-3	mg/kg	0.05	禁用	001
8	氯丹	57-74-9	mg/kg	0.01	禁用	001
9	六氯环己烷	58-89-9 319-84-6 319-85-7 608-73-1	mg/kg	0.05	禁用	001
10	狄氏剂	60-57-1	mg/kg	0.05	禁用	001
11	异狄氏剂	72-20-8	mg/kg	0.05	禁用	001



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#### 附录

### 所有测试的物品中 POPs:

序号	₩ 物质名称	CAS No.	单位	RL	法规要求 / 豁 免	样品ID
12	七氯	76-44-8	mg/kg	0.05	禁用	001
13	硫丹	115-29-7 959-98-8 33213-65-9	mg/kg	0.05	禁用	001
14	六氯苯	118-74-1	mg/kg	5	禁用	001
15	十氯铜	143-50-0	mg/kg	0.2	禁用	001
16	艾氏剂	309-00-2	mg/kg	0.05	禁用	001
17	五氯苯	608-93-5	mg/kg	5	禁用	001
18	多氯联苯(PCB)	<b>1336-36-3</b> 和其 他	mg/kg	5	禁用	001
19	灭蚁灵	2385-85-5	mg/kg	0.05	禁用	001
20	毒杀芬	8001-35-2	mg/kg	0.2	禁用	001
21	六溴联苯	36355-01-8	mg/kg	5	禁用	001
22	六溴环十二烷(HBCDD) 及其非 对映异构体(α-HBCDD, β-HBCDD, γ-HBCDD)	25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8	mg/kg	10	100	001
23	六氯丁二烯	87-68-3	mg/kg	5	禁用	001
24	五氯苯酚(PCP)及其盐和酯	87-86-5和其它	mg/kg	0.5	5	001
25	多氯萘(PCN)	<b>70776-03-3</b> 和其 它	mg/kg	5	禁用	001
26	短链氯化石蜡(C10-C13) (SCCPs)	<b>85535-84-8</b> 和其 它	mg/kg	50	1500	001
27	全氟辛酸 (PFOA)及其盐+	335-67-1	mg/kg	0.010	0.025	001
28	全氟辛酸(PFOA)相关物质	-	mg/kg	-	1.0	001
28-1	1H,1H,2H,2H-全氟癸烷磺酸 (8:2 FTS)	39108-34-4	mg/kg	0.2	-	001
28-2	全氟辛酸甲酯 (Me-PFOA)	376-27-2	mg/kg	0.2	-	001



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### 附录

### 所有测试的物品中 POPs:

序号	物质名称	CAS No.	单位	RL	法规要求 / 豁	样品ID
					免	
28-3	全氟辛酸乙酯 (Et-PFOA)	3108-24-5	mg/kg	0.2	-	001
28-4	1H,1H,2H,2H-全氟-1-癸醇(8:2 FTOH)	678-39-7	mg/kg	0.2	-	001
28-5	1H,1H,2H,2H-全氟癸基丙烯酸 酯(8:2 FTA)	27905-45-9	mg/kg	0.2	-	001
28-6	1H,1H,2H,2H-甲基丙烯酸全氟 癸酯(8:2 FTMA)	1996-88-9	mg/kg	0.2	-	001
28-7	全氟辛基碘烷 (PFOI)	507-63-1	mg/kg	0.2	-	001
29	三氯杀螨醇	115-32-2	mg/kg	0.05	禁用	001

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附件

### PFOA / PFOS 测试流程图





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