

检测报告

编号: CANEC26014714708

日期: 2026年06月22日

第1页, 共27页

客户名称: 建滔积层板控股有限公司
客户地址: 香港新界沙田安耀街三號匯達大廈二十三樓

样品名称: FR-4
型号: KB-6165F
客户参考信息: KB-6165LE

以上样品及信息由客户提供。

SGS 工作编号: GZP26-013758
样品接收时间: 2026年06月03日
检测周期: 2026年06月03日 ~ 2026年06月18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 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863-铅、汞、镉、六价铬、多溴联苯 (PBB)、多溴二苯醚 (PBDE)、邻苯二甲酸二(2-乙基己基)酯 (DEHP)、邻苯二甲酸丁苄酯 (BBP)、邻苯二甲酸二丁酯 (DBP)和邻苯二甲酸二异丁酯 (DIBP)	符合
AfPS GS 2019:01 PAK-多环芳香烃 (PAHs)	见检测结果
四溴双酚 A (TBBP-A)	见检测结果
中链氯化石蜡(C14-C17) (MCCPs)	见检测结果
石棉	见检测结果
苯并三唑类紫外吸收剂	见检测结果
双酚-A	见检测结果

通标标准技术服务有限公司广州分公司
授权签名

叶士龙

Arsene Ye 叶士龙
批准签署人

Scan to see the report



25AE0399



SGS-CS Standards Technical Services Co., Ltd.
Guangzhou Branch Technical Services Co., Ltd. Chemical Laboratory.

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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgs.com.cn
t (86-20) 82155555 sgs.china@sgs.com

检测报告

编号: CANEC26014714708

日期: 2026年06月22日

第2页, 共27页

检测要求	结论
氯化石蜡	见检测结果
富马酸二甲酯 (DMFu)	见检测结果
甲醛	见检测结果
六溴环十二烷(HBCDD)	见检测结果
有机锡化合物	见检测结果
邻苯二甲酸酯	见检测结果
聚氯乙烯 (PVC)	见检测结果
美国环保署有毒物质控制法 (TSCA) 第 6 (h) 节规定的持久性、生物累积性和毒性 (PBT) 化学物质	符合
卤素	见检测结果
红磷	见检测结果
硫	见检测结果
元素分析	见检测结果
多氯联苯(PCBs)	见检测结果

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	CAN26-0147147-0001.C002	双面覆铜板

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

欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863-铅、汞、镉、六价铬、多溴联苯 (PBB)、多溴二苯醚 (PBDE)、邻苯二甲酸二(2-乙基己基)酯 (DEHP)、邻苯二甲酸丁苄酯 (BBP)、邻苯二甲酸二丁酯 (DBP)和邻苯二甲酸二异丁酯 (DIBP)

检测方法: 参考 IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 和 IEC 62321-8:2017, 采用 ICP-OES/AAS, UV-Vis 和 GC-MS 进行分析。

检测项目	限值	单位	MDL	A2
铅 (Pb)	1000	mg/kg	2	8



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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

检测项目	限值	单位	MDL	A2
汞 (Hg)	1000	mg/kg	2	ND
镉 (Cd)	100	mg/kg	2	ND
六价铬 (Cr(VI))	1000	mg/kg	8	ND
多溴联苯之和 (PBB)	1000	mg/kg	-	ND
一溴联苯 (MonoBB)	-	mg/kg	5	ND
二溴联苯 (DiBB)	-	mg/kg	5	ND
三溴联苯 (TriBB)	-	mg/kg	5	ND
四溴联苯 (TetraBB)	-	mg/kg	5	ND
五溴联苯 (PentaBB)	-	mg/kg	5	ND
六溴联苯 (HexaBB)	-	mg/kg	5	ND
七溴联苯 (HeptaBB)	-	mg/kg	5	ND
八溴联苯 (OctaBB)	-	mg/kg	5	ND
九溴联苯 (NonaBB)	-	mg/kg	5	ND
十溴联苯 (DecaBB)	-	mg/kg	5	ND
多溴二苯醚之和 (PBDE)	1000	mg/kg	-	ND
一溴二苯醚 (MonoBDE)	-	mg/kg	5	ND
二溴二苯醚 (DiBDE)	-	mg/kg	5	ND
三溴二苯醚 (TriBDE)	-	mg/kg	5	ND
四溴二苯醚 (TetraBDE)	-	mg/kg	5	ND
五溴二苯醚 (PentaBDE)	-	mg/kg	5	ND
六溴二苯醚 (HexaBDE)	-	mg/kg	5	ND
七溴二苯醚 (HeptaBDE)	-	mg/kg	5	ND
八溴二苯醚 (OctaBDE)	-	mg/kg	5	ND
九溴二苯醚 (NonaBDE)	-	mg/kg	5	ND
十溴二苯醚 (DecaBDE)	-	mg/kg	5	ND
邻苯二甲酸二(2-乙基己基)酯 (DEHP)	1000	mg/kg	50	ND
邻苯二甲酸丁苯酯 (BBP)	1000	mg/kg	50	ND
邻苯二甲酸二丁酯 (DBP)	1000	mg/kg	50	ND
邻苯二甲酸二异丁酯 (DIBP)	1000	mg/kg	50	ND

备注:

- (1) 最大允许极限值引用自 RoHS 指令(EU) 2015/863。
- (2) IEC 62321 系列等同于 EN 62321 系列。
- (3) 2021年7月22号开始, DEHP, BBP, DBP 和 DIBP 的限制适用于医疗器械, 包括体外医疗器械, 监控仪表, 包括工业监测和控制仪器。

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.	单位	MDL	A2
苯并(a)芘 (BaP)	50-32-8	mg/kg	0.1	ND
苯并(e)芘 (BeP)	192-97-2	mg/kg	0.1	ND
苯并(a)蒽 (BaA)	56-55-3	mg/kg	0.1	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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

检测项目	CAS No.	单位	MDL	A2
苯并(b)荧蒽 (BbF)	205-99-2	mg/kg	0.1	ND
苯并(j)荧蒽 (BjF)	205-82-3	mg/kg	0.1	ND
苯并(k)荧蒽 (BkF)	207-08-9	mg/kg	0.1	ND
蒽 (CHR)	218-01-9	mg/kg	0.1	ND
二苯并(a,h)蒽 (DBA)	53-70-3	mg/kg	0.1	ND
苯并(g,h,i)芘(二萘嵌苯) (BPE)	191-24-2	mg/kg	0.1	ND
茚并(1,2,3-c,d)芘 (IPY)	193-39-5	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)]	-	mg/kg	-	ND
萘 (NAP)	91-20-3	mg/kg	0.1	ND
15项多环芳香烃总和	-	mg/kg	-	ND
材料分类	-	-	-	-

备注:

AfPS(德国产品安全委员会): 认证对多环芳香烃的要求

参数 单位: mg/kg	1类	2类		3类	
	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 定义的玩具, 或 -供 3 岁以下儿童 a,b 使用。	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 ^e 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	
		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
蒽 (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)芘(二萘嵌苯) (BPE)	< 0.2	< 0.2	< 0.5	< 0.5	< 1
茚并(1,2,3-c,d)芘 (IPY)	< 0.2	< 0.2	< 0.5	< 0.5	< 1
菲 (PHE), 芘 (PYR), 蒽 (ANT), 荧蒽 (FLT)	< 1 (总和)	< 5 (总和)	< 10 (总和)	< 20 (总和)	< 50 (总和)
萘 (NAP)	< 1	< 2		< 10	



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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

检测报告

编号: CANEC26014714708

日期: 2026年06月22日

第5页, 共27页

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。

四溴双酚 A (TBBP-A)

检测方法: 参考 US EPA 3550C: 2007, 采用 GC-MS 或 LC-MS 或 LC-MS/MS 进行分析。

检测项目	CAS No.	单位	MDL	A2
四溴双酚 A(TBBP-A)	79-94-7	mg/kg	5	ND

中链氯化石蜡(C14-C17) (MCCPs)

检测方法: 参考 ISO 22818:2021, 采用 GC-NCI-MS 进行分析。

检测项目	CAS No.	单位	MDL	A2
中链氯化石蜡(C14-C17) (MCCPs)	85535-85-9 和其它	mg/kg	50	ND

石棉

检测方法: 参考 NIOSH 9000:2015 / NIOSH 9002:1994, 采用 XRD / PLM 进行分析。

检测项目	CAS No.	单位	MDL	A2
温石棉	12001-29-5 / 132207-32-0	%(m/m)	0.1	阴性
铁镁闪石	12172-73-5	%(m/m)	0.1	阴性
兰闪石	12001-28-4	%(m/m)	0.1	阴性
直闪石	77536-67-5	%(m/m)	0.1	阴性
透闪石	77536-68-6	%(m/m)	0.1	阴性
阳起石	77536-66-4	%(m/m)	0.1	阴性

备注:

(1) 阴性=未检出石棉, 阳性=检出石棉

苯并三唑类紫外吸收剂



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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

检测报告

编号: CANEC26014714708

日期: 2026年06月22日

第6页, 共27页

检测方法: 参考 SGS 内部方法, 采用 GC-MS 进行分析。

检测项目	CAS No.	单位	MDL	A2
2-(2'-羟基-3',5'-二叔丁基苯基)苯并三唑(UV-320)	3846-71-7	mg/kg	5	ND
2-(2'-羟基-3'-异丁基-5'-叔丁基苯基)苯并三唑(UV-350)	36437-37-3	mg/kg	5	ND
2-(2'-羟基-3',5'-二叔戊基苯基)苯并三唑(UV-328)	25973-55-1	mg/kg	5	ND
2-(2'-羟基-3',5'-二叔丁基苯基)-5-氯代苯并三唑(UV-327)	3864-99-1	mg/kg	5	ND

双酚-A

检测方法: 参考 US EPA 3550C:2007, 采用 HPLC-DAD/MS / LC-MS/MS 进行分析。

检测项目	CAS No.	单位	MDL	A2
双酚-A	80-05-7	mg/kg	1.0	ND

氯化石蜡

检测方法: 参考 ISO 22818:2021, 采用 GC-NCI-MS 进行分析。

检测项目	CAS No.	单位	MDL	A2
C ₁₀ -C ₁₃ 氯代烃(短链氯化石蜡)(SCCPs)	85535-84-8	mg/kg	50	ND

富马酸二甲酯 (DMFu)

检测方法: 溶剂萃取, 采用 GC-MS 进行分析。

检测项目	CAS No.	单位	MDL	A2
富马酸二甲酯(DMFu)	624-49-7	mg/kg	0.1	ND

甲醛

检测方法: 参考 ISO 14184-1:2011, 采用 UV-Vis 进行分析。

检测项目	单位	MDL	A2
甲醛	mg/kg	16	ND

六溴环十二烷(HBCDD)

检测方法: 参考 IEC 62321-9:2021, 采用 GC-MS 进行分析。



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch / 广州分公司

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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

检测报告

编号: CANEC26014714708

日期: 2026年06月22日

第7页, 共27页

检测项目	CAS No.	单位	MDL	A2
六溴环十二烷 (HBCDD)	134237-50-6 /134237-51-7 /134237-52-8 /25637-99-4 /3194-55-6	mg/kg	20	ND

有机锡化合物

检测方法: 参考 ISO 17353:2004, 采用 GC-MS 进行分析。

检测项目	单位	MDL	A2
二丁基锡(DBT)	mg/kg	0.02	ND
三丁基锡(TBT)	mg/kg	0.02	ND
二辛基锡(DOT)	mg/kg	0.02	ND
三苯基锡(TPhT)	mg/kg	0.02	ND
三环己基锡(TCyHT)	mg/kg	0.02	ND
三甲基锡(TMT)	mg/kg	0.02	ND
三辛基锡(TOT)	mg/kg	0.02	ND
三丙基锡(TPT)	mg/kg	0.02	ND

邻苯二甲酸酯

检测方法: 参考 IEC 62321-8:2017, 采用 GC-MS 进行分析。

检测项目	CAS No.	单位	MDL	A2
邻苯二甲酸二丁酯 (DBP)	84-74-2	mg/kg	50	ND
邻苯二甲酸二(2-乙基己基)酯(DEHP)	117-81-7	mg/kg	50	ND
邻苯二甲酸丁苄酯(BBP)	85-68-7	mg/kg	50	ND
邻苯二甲酸二异壬酯(DINP)	28553-12-0 /68515-48-0	mg/kg	50	ND
邻苯二甲酸二辛酯(DNOP)	117-84-0	mg/kg	50	ND
邻苯二甲酸二异癸酯(DIDP)	26761-40-0 /68515-49-1	mg/kg	50	ND
邻苯二甲酸二异丁酯(DIBP)	84-69-5	mg/kg	50	ND
邻苯二甲酸二(2-甲氧基乙基)酯(DMEP)	117-82-8	mg/kg	50	ND
邻苯二甲酸二正己酯(DnHP)	84-75-3	mg/kg	50	ND
邻苯二甲酸二戊酯 (DPENP/ DnPP)	131-18-0	mg/kg	50	ND
邻苯二甲酸二苯酯(DPhP)	84-62-8	mg/kg	50	ND
邻苯二甲酸双十一酯(DUDP)	3648-20-2	mg/kg	50	ND
邻苯二甲酸二甲酯(DMP)	131-11-3	mg/kg	50	ND
邻苯二甲酸二乙酯(DEP)	84-66-2	mg/kg	50	ND
邻苯二甲酸二丙酯(DPrP)	131-16-8	mg/kg	50	ND
邻苯二甲酸二环己酯(DCHP)	84-61-7	mg/kg	50	ND
邻苯二甲酸二苯甲酯(DBzP)	523-31-9	mg/kg	50	ND
邻苯二甲酸二壬酯(DNP)	84-76-4	mg/kg	50	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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

检测报告

编号: CANEC26014714708

日期: 2026年06月22日

第8页, 共27页

检测项目	CAS No.	单位	MDL	A2
邻苯二甲酸二异辛酯(DIOP)	27554-26-3	mg/kg	50	ND
邻苯二甲酸二异戊酯(DiPP)	605-50-5	mg/kg	50	ND
邻苯二甲酸正戊基异戊基酯(nPiPP)	776297-69-9	mg/kg	50	ND
邻苯二甲酸二 C6-C8 支链烷基酯(DIHP)	71888-89-6	mg/kg	50	ND
邻苯二甲酸二(C7,C9,C11)烷基酯(DHNUP)	68515-42-4	mg/kg	50	ND
邻苯二甲酸二(支链与直链)戊基酯(DPP)	84777-06-0	mg/kg	50	ND
邻苯二甲酸二(支链与直链)己基酯(DHxP)	68515-50-4	mg/kg	50	ND

聚氯乙烯 (PVC)

检测方法: 参考 SGS 内部方法, 采用 FTIR/HATR 进行分析。

检测项目	A2
聚氯乙烯(PVC)	阴性

备注:

(1) 阴性=未检测到, 阳性= 已检测到。

美国环保署有毒物质控制法 (TSCA) 第 6 (h) 节规定的持久性、生物累积性和毒性 (PBT) 化学物质

检测方法: 参考 US EPA 3550C:2007, 采用 GC-MS 进行分析。

检测项目	CAS No.	限值	单位	MDL	A2
十溴二苯醚 (Deca-BDE)	1163-19-5	1000	mg/kg	5	ND
异丙基化磷酸三苯酯 (PIP 3:1)	68937-41-7	1000	mg/kg	5	ND
2,4,6-三叔丁基苯酚 (2,4,6-TTBP)	732-26-3	3000	mg/kg	5	ND
六氯丁二烯 (HCBD)	87-68-3	禁用	mg/kg	5	ND
五氯苯硫酚 (PCTP)	133-49-3	10000	mg/kg	5	ND
结论					符合

备注:

(1) 法规信息请参见下链接

<https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/persistent-bioaccumulative-and-toxic-pbt-chemicals-under>.

(2) 针对十溴二苯醚 (Deca-BDE) 和异丙基化磷酸三苯酯 (PIP 3:1) 的规定于 2025 年 1 月 21 日生效。

实施实验室活动的地点: 广东省广州市黄埔区开创大道 1501 号 3 栋 101 房

卤素

检测方法: 参考 EN 14582:2016, 采用 IC 进行分析。



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch, Technical Services Laboratory

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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgs.com.cn
t (86-20) 82155555 sgs.china@sgs.com

检测报告

编号: CANEC26014714708

日期: 2026年06月22日

第9页, 共27页

检测项目	单位	MDL	A2
氟 (F)	mg/kg	20	1250
氯 (Cl)	mg/kg	50	145
溴 (Br)	mg/kg	50	19452
碘 (I)	mg/kg	50	ND

红磷

检测方法: SGS 内部方法, 采用 PY-GC/MS/ ICP-OES / GC-MS 进行分析。

检测项目	CAS No.	单位	MDL	A2
红磷	7723-14-0	mg/kg	500	ND

硫

检测方法: 参考 EN 14582:2016, 采用 IC 进行分析。

检测项目	单位	MDL	A2
硫 (S)	mg/kg	50	ND

元素分析

检测方法: 参考 US EPA 3052:1996, 采用 ICP-OES/AAS 进行分析。

检测项目	单位	MDL	A2
砷(As)	mg/kg	10	ND
铍(Be)	mg/kg	5	ND
镍(Ni)	mg/kg	5	ND
锑(Sb)	mg/kg	10	ND

多氯联苯(PCBs)

检测方法: SGS 内部方法, 采用 GC-ECD/GC-MS 进行分析。

检测项目	CAS No.	单位	MDL	A2
4-一氯联苯(PCB3)	2051-62-9	mg/kg	0.5	ND
2,4'-二氯联苯(PCB8)	34883-43-7	mg/kg	0.5	ND
2,2',5-三氯联苯(PCB18)	37680-65-2	mg/kg	0.5	ND
2,4,4'-三氯联苯(PCB28)	7012-37-5	mg/kg	0.5	ND
2,4,5-三氯联苯(PCB29)	15862-07-4	mg/kg	0.5	ND
2,4',5-三氯联苯(PCB31)	16606-02-3	mg/kg	0.5	ND
2,2',3,5'-四氯联苯(PCB44)	41464-39-5	mg/kg	0.5	ND
2,2',4,6-四氯联苯(PCB50)	62796-65-0	mg/kg	0.5	ND
2,2',5,5'-四氯联苯(PCB52)	35693-99-3	mg/kg	0.5	ND
2,2',4,5,5'-五氯联苯(PCB101)	37680-73-2	mg/kg	0.5	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 herein 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

检测报告

编号: CANEC26014714708

日期: 2026年06月22日

第 10 页, 共 27 页

检测项目	CAS No.	单位	MDL	A2
2,3',4,4',5'-五氯联苯(PCB118)	31508-00-6	mg/kg	0.5	ND
2,2',3,4,4',5'-六氯联苯(PCB138)	35065-28-2	mg/kg	0.5	ND
2,2',3,4',5',6'-六氯联苯(PCB149)	38380-04-0	mg/kg	0.5	ND
2,2',4,4',5,5'-六氯联苯(PCB153)	35065-27-1	mg/kg	0.5	ND
2,2',3,4,4',5,5'-七氯联苯(PCB180)	35065-29-3	mg/kg	0.5	ND
2,2',3,3',4,4',5,5'-八氯联苯(PCB194)	35694-08-7	mg/kg	0.5	ND
2,2',3,3',4,4',5,5',6'-九氯联苯(PCB206)	40186-72-9	mg/kg	0.5	ND
2,2',3,3',4,4',5,5',6,6'-十氯联苯(PCB209)	2051-24-3	mg/kg	0.5	ND

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。



SGS-CSTC Standards Technical Services Co., Ltd.
 Guangzhou Branch Technical Services Laboratory

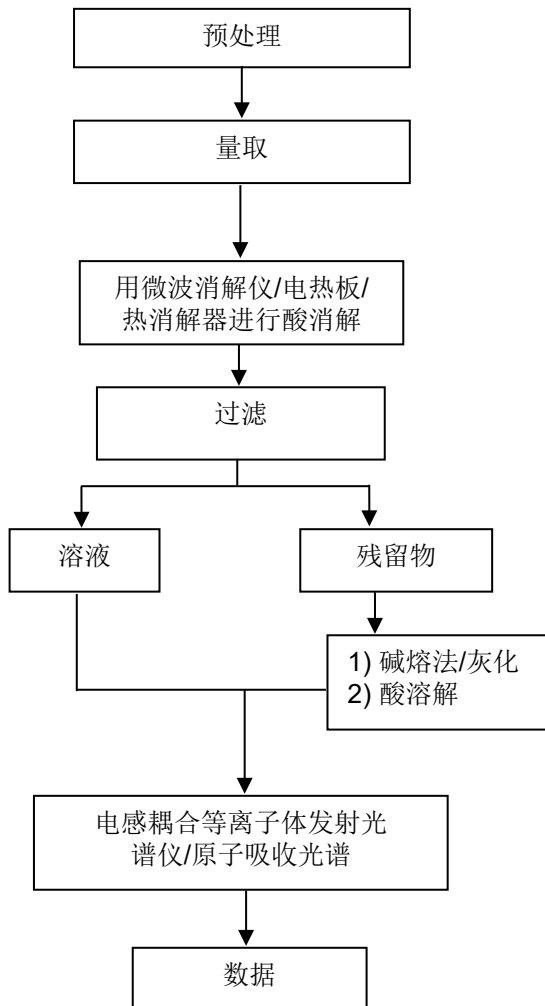
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
 中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

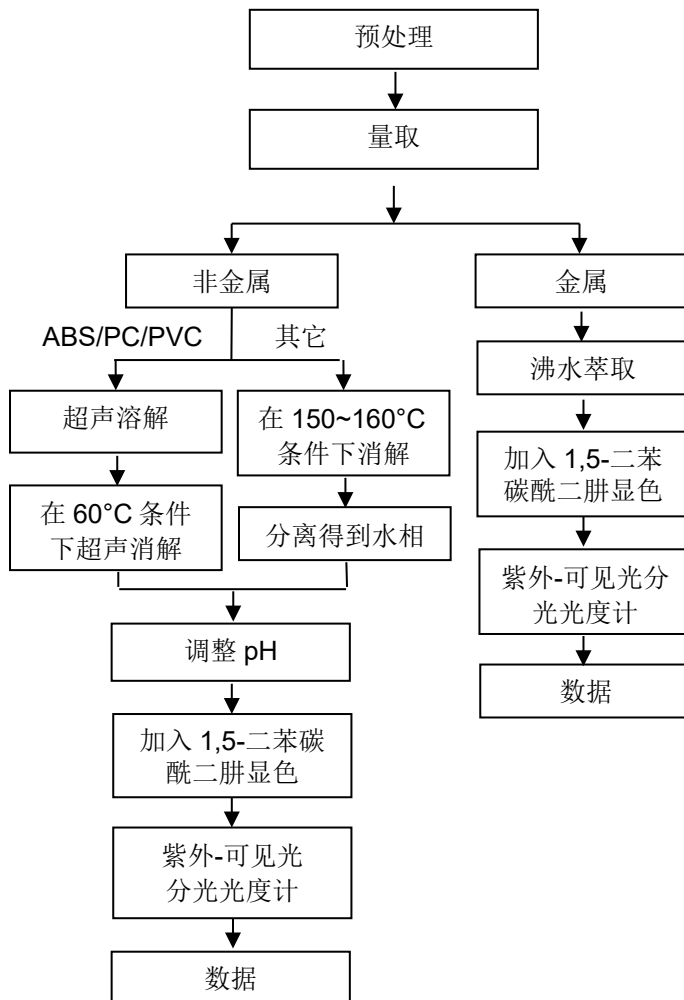
t (86-20) 82155555 www.sgsgroup.com.cn
 t (86-20) 82155555 sgs.china@sgs.com

元素检测流程图

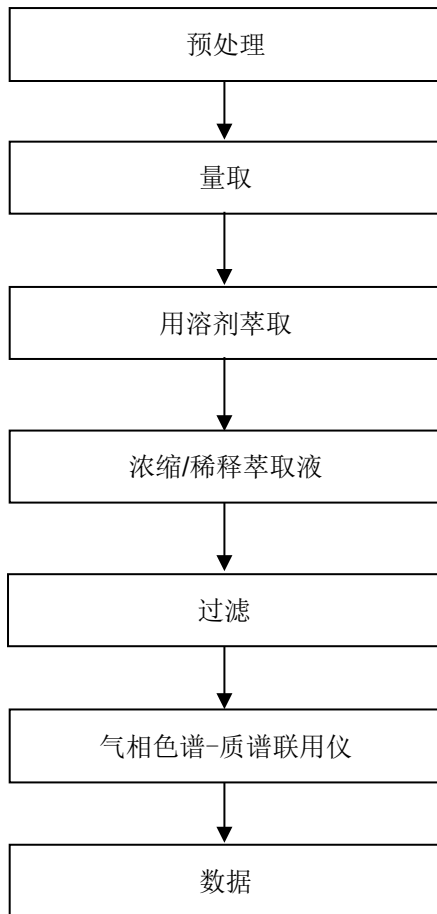
样品中的 Pb/Cd/Hg 按照下述流程被完全消解。



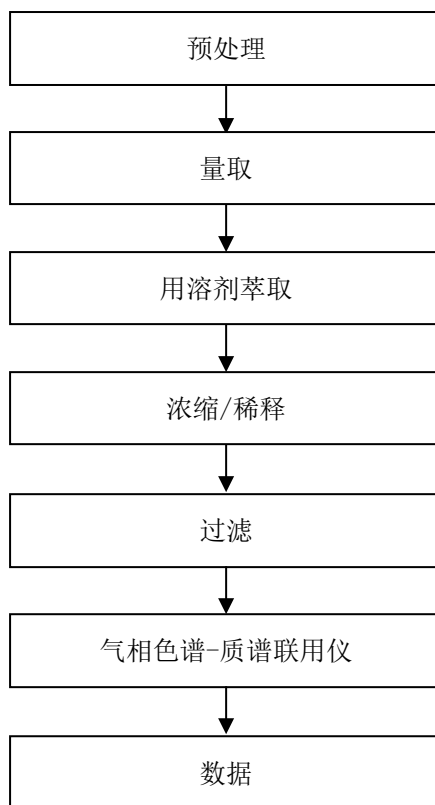
六价铬检测流程图



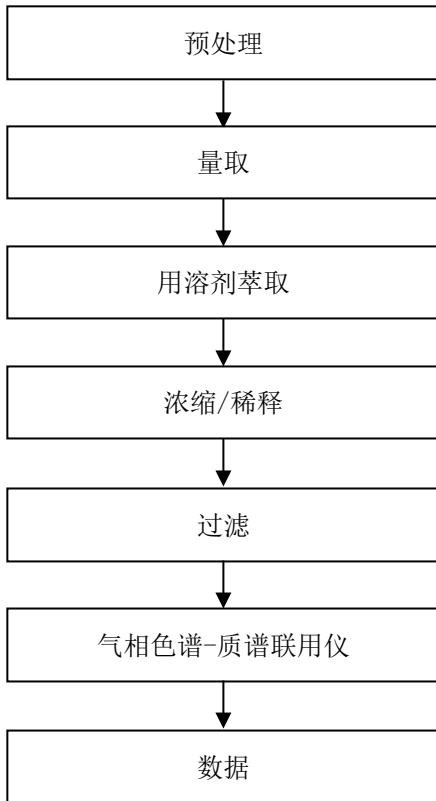
PBB(s)/PBDE(s)检测流程图



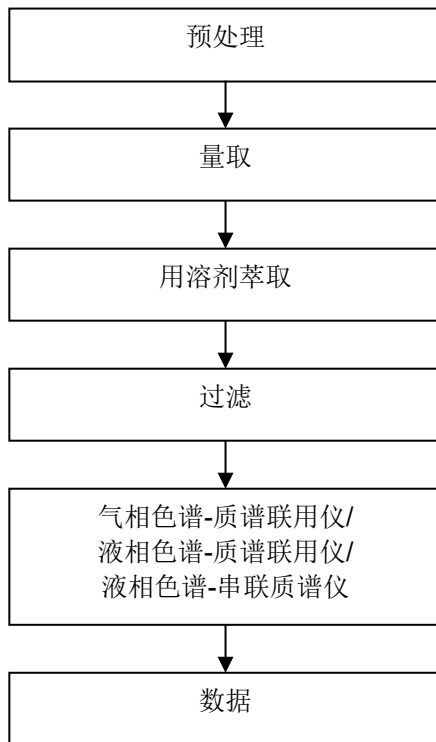
Phthalates 检测流程图



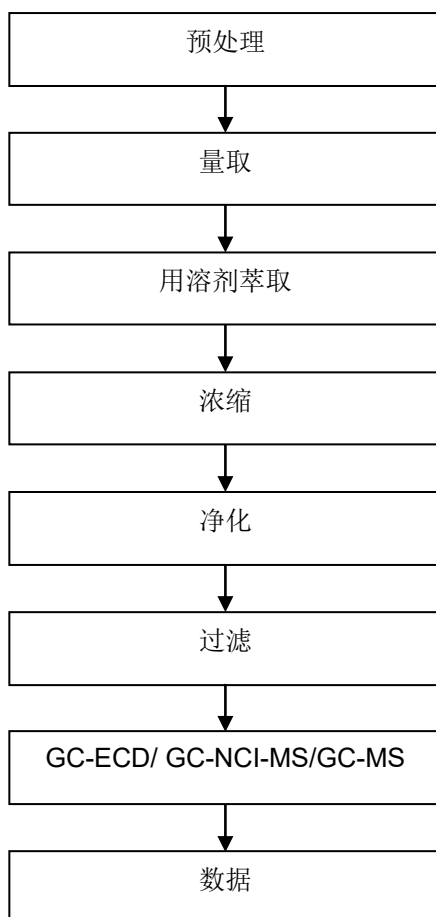
PAHs 检测流程图



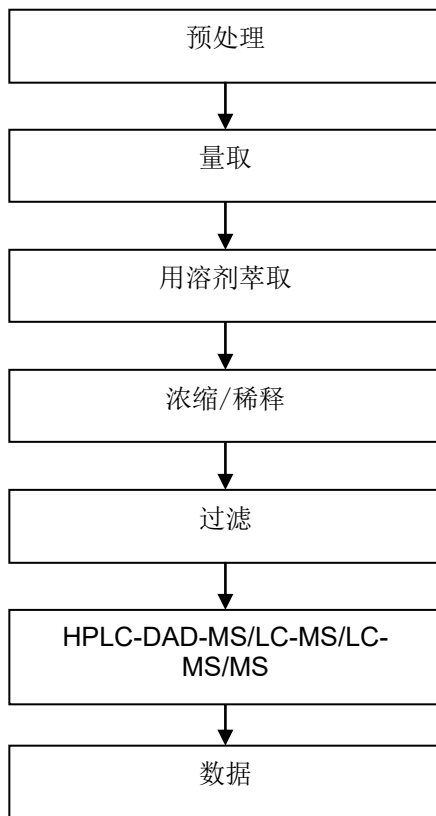
TBBP-A 检测流程图



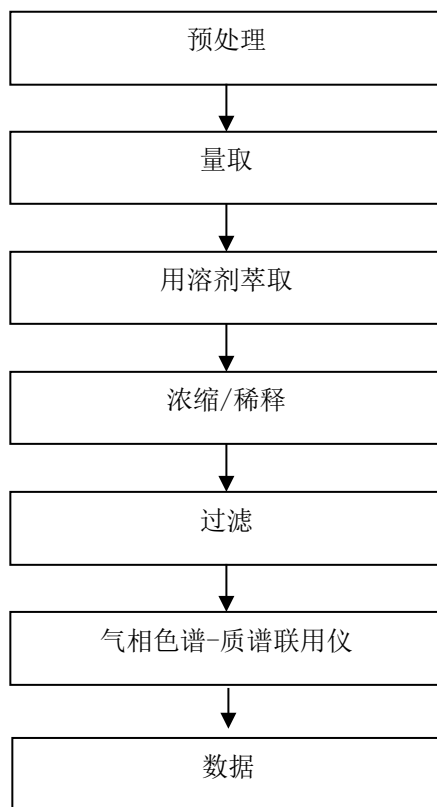
氯化石蜡检测流程图



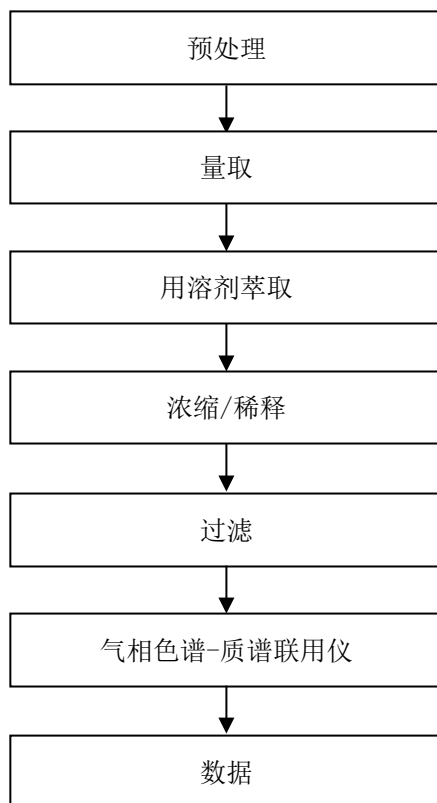
双酚类化合物检测流程图



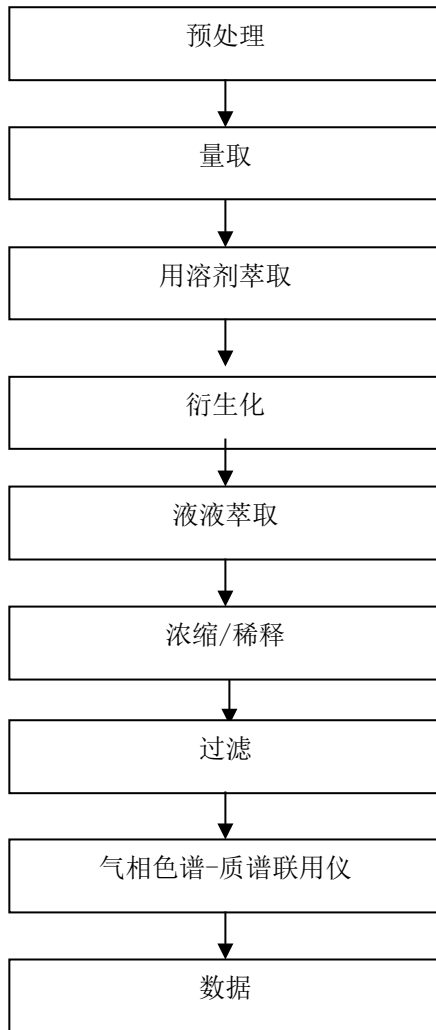
DMF(富马酸二甲酯)检测流程图



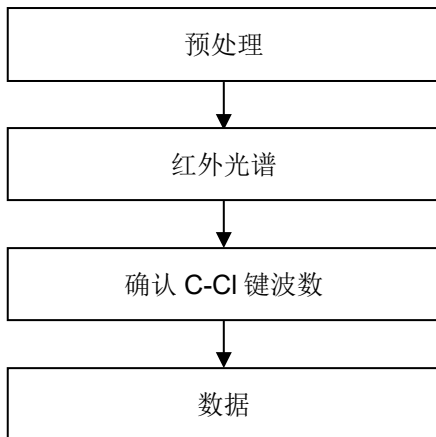
HBCDD 检测流程图



有机锡检测流程图

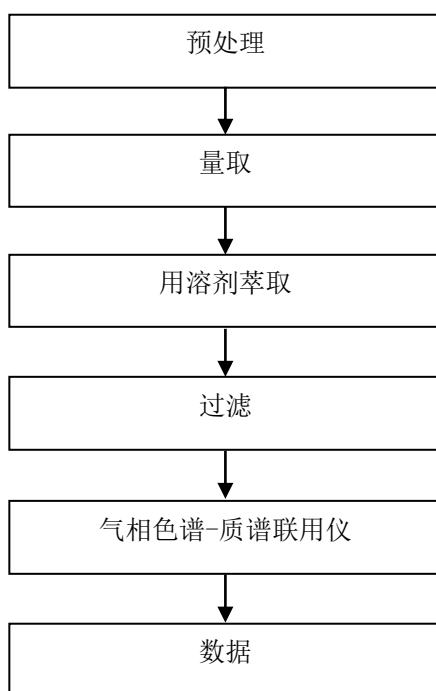


PVC 检测流程图

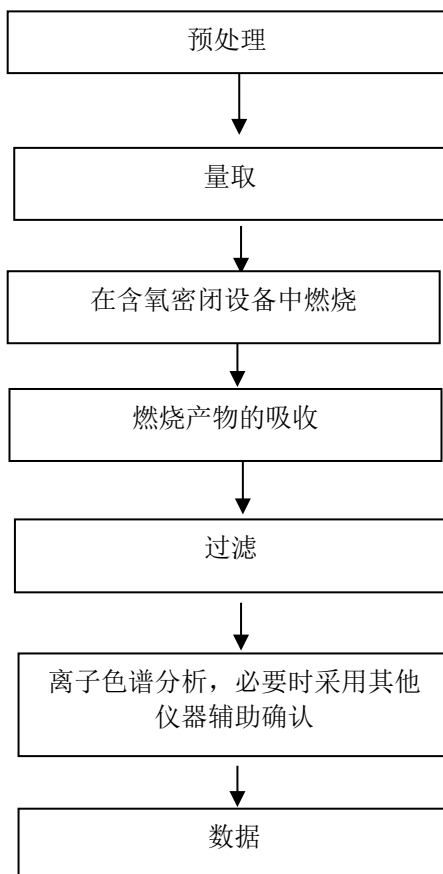


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

持久性、生物累积性和毒性 (PBT) 化学物质检测流程图

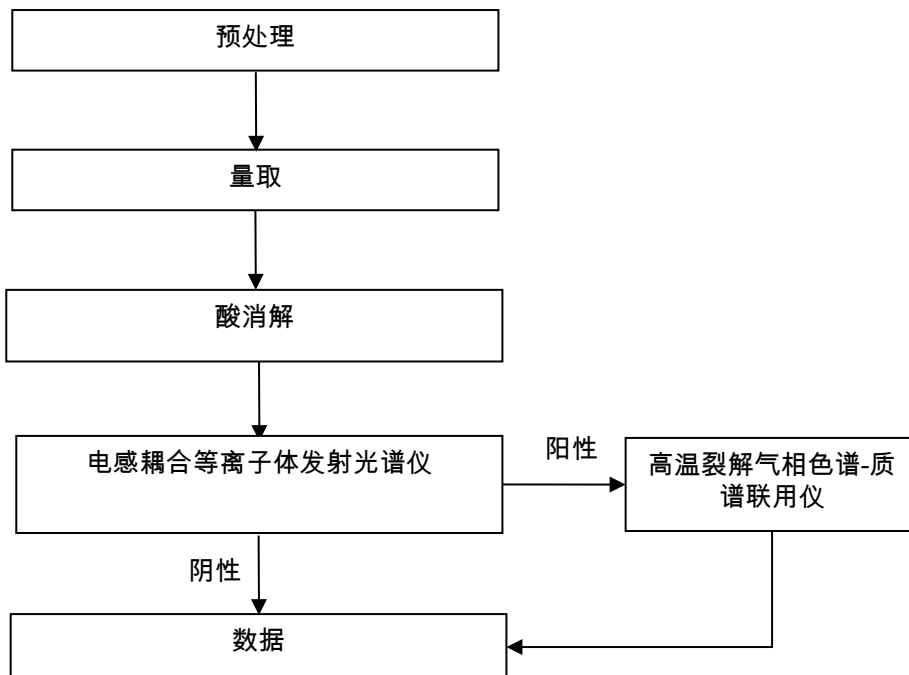


卤素检测流程图



附件

红磷检测流程图



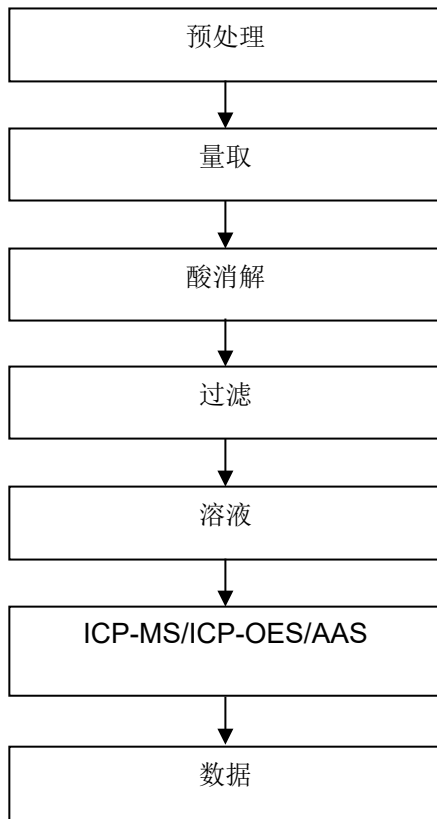
SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Technical Laboratory

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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

元素检测流程图



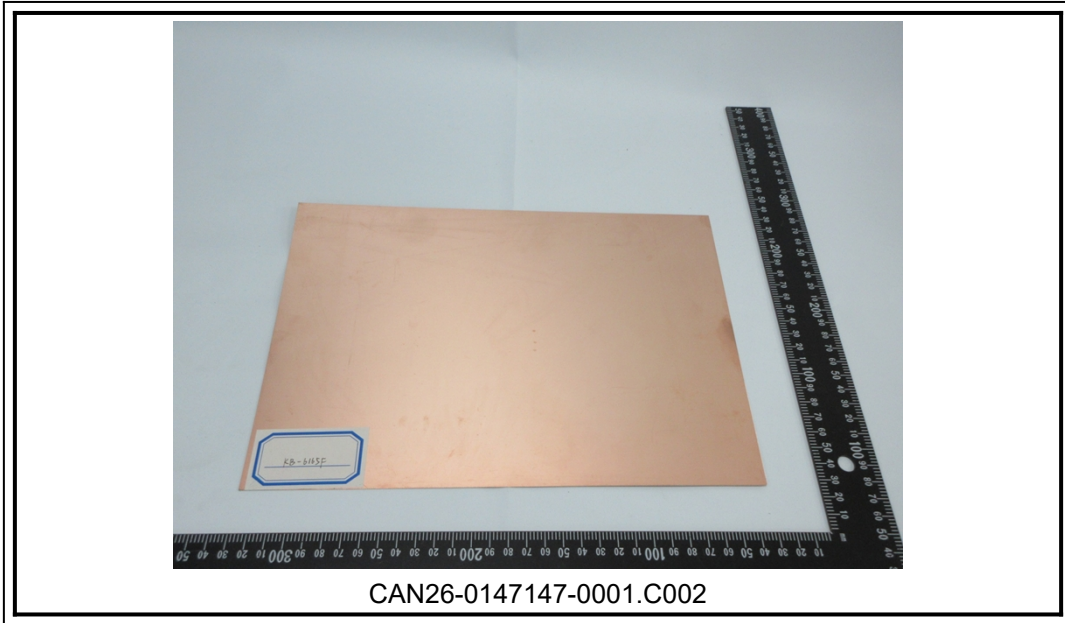
检测报告

编号: CANEC26014714708

日期: 2026年06月22日

第27页, 共27页

样品照片:



此照片仅限于随 SGS 正本报告使用

报告结束



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Technical Services Laboratory

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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com