

检测报告

编号: CANEC25032313418

日期: 2026年01月06日

第1页, 共14页

客户名称: 昆胜高分子材料(福建)有限公司
客户地址: 泉州市惠安县辋川镇石化轻工小区

样品名称: TPU

以上样品及信息由客户提供。

SGS 工作编号: XMP25-005891
样品接收时间: 2025年12月24日
检测周期: 2025年12月24日~2026年01月06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 附录 I-C ₁₀ -C ₁₃ 氯代烃(短链氯化石蜡)(SCCPs)	符合
欧盟 POPs 法规(EU) 2019/1021 附录 I 及其修正法规 (EU) 2024/2570-六溴环十二烷(HBCDD) 及其非对映异构体(α -HBCDD, β -HBCDD, γ -HBCDD)	符合
欧盟 POPs 法规 (EU) 2019/1021 附录 I 及其修正法规 (EU) 2025/718 - 全氟辛酸(PFOA)及其盐, 全氟辛酸(PFOA)相关化合物, 全氟辛烷磺酸(PFOS)及其盐和全氟辛烷磺酸(PFOS)相关化合物	符合
欧盟 POPs 法规(EU) 2019/1021 附录 I 及其修正法规 (EU) 2021/277- 五氯苯酚(PCP)及其盐和酯	符合
欧盟 POPs 法规 (EU) 2019/1021 及其修正法规(EU) 2023/1608-全氟己烷磺酸(PFHxS)及其盐和相关化合物	符合
欧盟 POPs 法规(EU) 2019/1021 附录 I-卤代化合物	符合
欧盟 POPs 法规(EU) 2019/1021 附录 I 及其修正法规 (EU) 2025/843- UV-328	符合
欧盟 POPs 法规(EU) 2019/1021 附录 I 及其修正法规 (EU) 2025/1930- 得克隆(DP)	符合

通标标准技术服务有限公司广州分公司
授权签名

谢冬育

Dongyu Xie 谢冬育
批准签署人

Scan to see the report



30A025B2



SGS-CS Standards Technical Services Co., Ltd.
Guangzhou Branch / 通标标准技术服务有限公司广州分公司

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

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	A9	CAN25-0323134-0001.C009	无色透明颗粒

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 POPs 法规(EU) 2019/1021 附录 I-C₁₀-C₁₃ 氯代烃(短链氯化石蜡)(SCCPs)

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

检测项目	CAS No.	限值	单位	MDL	A9
C ₁₀ -C ₁₃ 氯代烃(短链氯化石蜡)(SCCPs)	85535-84-8 及其它	1500	mg/kg	50	ND
结论					符合

欧盟 POPs 法规(EU) 2019/1021 附录 I 及其修正法规 (EU) 2024/2570-六溴环十二烷(HBCDD) 及其非对映异构体(α-HBCDD, β-HBCDD, γ-HBCDD)

检测方法: SGS 内部方法, 采用 GC-MS 进行分析。

检测项目	CAS No.	限值	单位	MDL	A9
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	75	mg/kg	20	ND
结论					符合

备注:

- (1) 委员会应在 2026 年 1 月 1 日前审查和评估规定的豁免。

欧盟 POPs 法规 (EU) 2019/1021 附录 I 及其修正法规 (EU) 2025/718 - 全氟辛酸(PFOA)及其盐, 全氟辛酸(PFOA)相关化合物, 全氟辛烷磺酸(PFOS)及其盐和全氟辛烷磺酸(PFOS)相关化合物

检测方法: 优化的 EN 17681-1:2025, 采用 LC-MS 或 LC-MS/MS 和 GC-MS 或 GC-MS/MS 进行分析。

检测项目	CAS No.	限值	单位	MDL	A9
PFOS, 及其盐					
全氟辛烷磺酸 (PFOS), 及其盐 [^]	1763-23-1	0.025	mg/kg	0.010	ND



检测项目	CAS No.	限值	单位	MDL	A9
PFOS 相关化合物					
N-乙基全氟辛烷磺酰胺 (N-EtFOSA)	4151-50-2	-	mg/kg	0.010	ND
N-甲基全氟辛烷磺酰胺 (N-MeFOSA)	31506-32-8	-	mg/kg	0.010	ND
2-(N-乙基全氟辛基磺酰胺)乙醇 (N-EtFOSE)	1691-99-2	-	mg/kg	0.010	ND
2-(N-甲基全氟辛基磺酰胺)乙醇 (N-MeFOSE)	24448-09-7	-	mg/kg	0.010	ND
全氟辛基磺酰胺 (PFOSA), 及其盐 [^]	754-91-6	-	mg/kg	0.010	ND
N-(全氟-1-辛烷磺酰基)甘氨酸 (FOSAA), 及其盐 [^]	2806-24-8	-	mg/kg	0.010	ND
N-甲基-N-(全氟-1-辛烷磺酰基)甘氨酸 (N-MeFOSAA), 及其盐 [^]	2355-31-9	-	mg/kg	0.010	ND
N-乙基-N-(全氟-1-辛烷磺酰基)甘氨酸 (N-EtFOSAA), 及其盐 [^]	2991-50-6	-	mg/kg	0.010	ND
2-(N-乙基全氟辛烷磺酰胺基)丙烯酸乙酯 (EtFOSAC)	423-82-5	-	mg/kg	0.200	ND
PFOS 相关化合物总和	-	1	mg/kg	-	ND
PFOA, 及其盐					
全氟辛酸 (PFOA), 及其盐 [^]	335-67-1	0.025	mg/kg	0.010	ND
PFOA 相关化合物					
1H,1H,2H,2H-全氟癸烷磺酸 (8:2 FTS), 及其盐 [^]	39108-34-4	1	mg/kg	0.010	ND
全氟辛酸甲酯 (Me-PFOA)	376-27-2	1	mg/kg	0.200	ND
全氟辛酸乙酯 (Et-PFOA)	3108-24-5	1	mg/kg	0.200	ND
1H,1H,2H,2H-全氟癸基丙烯酸酯 (8:2 FTA)	27905-45-9	1	mg/kg	0.100	ND
1H,1H,2H,2H-甲基丙烯酸全氟癸酯 (8:2 FTMA)	1996-88-9	1	mg/kg	0.100	ND
全氟辛基碘烷 (PFOI)	507-63-1	1	mg/kg	0.200	ND
2H, 2H-全氟癸酸 (8:2 FTCA), 及其盐 [^]	27854-31-5	1	mg/kg	0.010	ND
1H,1H,2H,2H-全氟-1-癸醇 (8:2 FTOH)	678-39-7	1	mg/kg	0.100	ND
1-碘-1H,1H,2H,2H-全氟癸烷 (8:2 FTI)	2043-53-0	1	mg/kg	0.100	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	1	mg/kg	0.100	ND
双[2-(全氟辛基)]乙基磷酸酯(8:2diPAP), 及其盐 [^]	678-41-1	1	mg/kg	0.010	ND
2H, 2H, 3H, 3H-全氟十一烷酸 (8:3 FTCA), 及其盐 [^]	34598-33-9	1	mg/kg	0.010	ND
全氟辛基乙烯 (PFDE)	21652-58-4	1	mg/kg	0.100	ND
3-全氟庚基丙酸 (7:3 FTCA)	812-70-4	1	mg/kg	0.010	ND
1H,1H,2H,2H-全氟癸基三氯硅烷 (8:2 FTSiCl ₃)/ 1H,1H,2H,2H-全氟癸基三甲氧基硅烷 (8:2 FTSi(OCH ₃) ₃)	78560-44-8 /83048-65-1	1	mg/kg	0.100	ND
2H-全氟-2-癸烯酸 (8:2 FTUCA)	70887-84-2	1	mg/kg	0.010	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.	限值	单位	MDL	A9	
6:8 全氟次膦酸 (6:8 PFPI)	610800-34-5	1	mg/kg	0.010	ND	
8:8 全氟次膦酸 (8:8 PFPI), 及其盐^	40143-79-1	1	mg/kg	0.010	ND	
1H,1H,2H,2H-全氟十二烷基乙酸酯(8:2 FTOAc)	37858-04-1	1	mg/kg	0.100	ND	
单[2-(全氟辛基)乙基]磷酸盐 (8:2 monoPAP), 及其盐^	57678-03-2	1	mg/kg	0.100	ND	
1H,1H,2H,2H-全氟-1-十二烷醇 (10:2 FTOH)	865-86-1	1	mg/kg	0.100	ND	
1,1,2,2-四氢全氟-1-十四醇 (12:2 FTOH)	39239-77-5	1	mg/kg	0.100	ND	
1H,1H,2H,2H-全氟十二烷基磺酸 (10:2 FTS), 及其盐^	120226-60-0	1	mg/kg	0.100	ND	
双[2-(全氟癸基)乙基]磷酸盐 (10:2 diPAP), 及其盐^	1895-26-7	1	mg/kg	0.100	ND	
2H-全氟-2-十二烯酸 (10:2 FTUCA)	70887-94-4	1	mg/kg	0.010	ND	
2-全氟癸基乙酸 (10:2 FTCA)	53826-13-4	1	mg/kg	0.010	ND	
单[2-(全氟癸基)乙基]磷酸酯 (10:2 monoPAP), 及其盐^	57678-05-4	1	mg/kg	0.100	ND	
1H,1H,2H,2H-全氟十二烷基丙烯酸酯 (10:2 FTA)	17741-60-5	1	mg/kg	0.100	ND	
1H,1H,2H,2H-全氟十二烷基甲基丙烯酸酯 (10:2 FTMA)	2144-54-9	1	mg/kg	0.100	ND	
全氟癸基乙基碘 (10:2 FTI)	2043-54-1	1	mg/kg	0.100	ND	
1H,1H,2H,2H-全氟十四烷基碘 (12:2 FTI)	30046-31-2	1	mg/kg	0.100	ND	
1-碘全氟癸烷 (PFDI)	423-62-1	1	mg/kg	0.100	ND	
全氟碘代十二烷 (PFDODI)	307-60-8	1	mg/kg	0.100	ND	
PFOA 相关化合物总和	-	1	mg/kg	-	ND	
结论						符合

备注:

- (1) 依据欧盟POPs法规 (EU) 2019/1021 附录I 及其修正法规 (EU) 2025/718, 在物质, 混合物或物品中, 全氟辛烷磺酸 (PFOS)及其盐的浓度等于或低于0.025 mg/kg(0,000025 %), PFOS相关化合物总和的浓度等于或低于1 mg/kg(0,0001%), 适用日期: 2025年12月3日起。
- (2) ^=物质是指下表中列出的盐/衍生物。

物质名称	CAS No.
PFOS, 及其盐&衍生物	
全氟辛烷磺酸(PFOS)	1763-23-1
全氟辛基磺酸钾(PFOS-K)	2795-39-3
全氟辛基磺酸锂(PFOS-Li)	29457-72-5
全氟辛基磺酸钠(PFOS-Na)	4021-47-0
全氟辛基磺酸铵(PFOS-NH ₄)	29081-56-9
全氟辛基磺酸二乙醇铵(PFOS-NH ₂ (C ₂ H ₄ OH) ₂)	70225-14-8
全氟辛基磺酸四乙基铵(PFOS-N(C ₂ H ₅) ₄)	56773-42-3



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

全氟辛基磺酸二癸二甲基铵(PFOS-N(C ₁₀ H ₂₁) ₂ (CH ₃) ₂)	251099-16-8
全氟辛基磺酸四丁基铵(PFOS-N(C ₄ H ₉) ₄)	111873-33-7
全氟辛基磺酰氟(PFOS-F)	307-35-7
双[十七氟辛烷磺酸]镁(PFOS-Mg)	91036-71-4
全氟辛烷磺酸吡啶	71463-74-6
全氟辛烷磺酸盐	45298-90-6
全氟辛烷磺酸三乙基铵(PFOS-NH(C ₂ H ₅) ₃)	54439-46-2
全氟辛烷磺酸四甲基铵(PFOS-N(CH ₃) ₄)	56773-44-5
N,N,N-三丙基戊烷-1-七氟辛烷-1-磺酸铵(PFOS-N(C ₃ H ₇) ₃ (C ₅ H ₁₁))	56773-56-9
N,N-二丁基-N-甲基丁烷-1-胺十七氟辛烷-1-磺酸酯(PFOS-N(C ₄ H ₉) ₃ (CH ₃))	124472-68-0
双[4-(1,1-二甲基乙基)苯基]-碘鎓与全氟-1-辛烷磺酸的盐(1:1)	213740-80-8
全氟-1-辛烷磺酸二苯基(2,4,6-三甲基苯基)铈	258341-99-0
全氟-1-辛烷磺酸1-十六烷基吡啶鎓	334529-63-4
N,N,N-三乙基癸-1-胺十七氟辛烷-1-磺酸盐	773895-92-4
全氟辛烷磺酸四丁基磷 (PFOS-P (C ₄ H ₉) ₄)	2185049-59-4
全氟辛基磺酸二乙胺 (PFOS-C ₄ H ₁₁ N)	2205029-08-7
全氟辛基磺酸庚基二甲基-[2-(2-甲基丙-2-烯酰氧基)乙基]胺 (PFOS-C ₁₅ H ₃₀ NO ₂)	1203998-97-3
全氟辛基磺酸酐(PFOSAN)	423-92-7
全氟辛基磺酰氯(PFOS-Cl)	423-60-9
FOSAA, 及其盐	
N-(全氟-1-辛烷磺酰基)甘氨酸(FOSAA)	2806-24-8
全氟辛烷磺酰氨基乙酸盐 (FOSAA(anion))	909405-47-6
全氟辛烷磺酰氨基乙酸钾 (FOSAA-K)	75260-69-4
全氟辛烷磺酰氨基乙酸钠 (FOSAA-Na)	115716-87-5
N-MeFOSAA, 及其盐	
N-甲基-N-(全氟-1-辛烷磺酰基)甘氨酸 (N-MeFOSAA)	2355-31-9
N-(十七氟辛基磺酰基)-N-甲基甘氨酸盐 (N-Me-FOSAA(anion))	909405-48-7
N-(十七氟辛基磺酰基)-N-甲基甘氨酸钾 (N-Me-FOSAA-K)	70281-93-5
N-EtFOSAA, 及其盐	
N-乙基-N-(全氟-1-辛烷磺酰基)甘氨酸(N-EtFOSAA)	2991-50-6
N-乙基-N-[(十七烷氟辛基)磺酰基]-甘氨酸钾盐 (N-Et-FOSAA-K)	2991-51-7
N-乙基-N-((十七氟辛基)磺酰基)甘氨酸盐 (N-Et-FOSAA(anion))	909405-49-8
N-乙基-N-((十七氟辛基)磺酰基)甘氨酸铵 (N-Et-FOSAA-NH ₄)	2991-52-8
N-乙基-N-((十七氟辛基)磺酰基)甘氨酸钠 (N-Et-FOSAA-Na)	3871-50-9
PFOSA, 及其盐	
全氟辛基磺酰胺(PFOSA)	754-91-6



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

全氟辛基磺酰胺锂盐(1:1)(PFOSA-Li)	76752-79-9
全氟辛基磺酰胺钠盐 (1:1) (PFOSA-Na)	76752-78-8
全氟辛基磺酰胺钾盐 (1:1) (PFOSA-K)	76752-70-0
全氟辛基磺酰胺铵盐 (1:1) (PFOSA-NH ₄)	76752-72-2
全氟辛基磺酰胺三乙胺 (PFOSA-C ₆ H ₁₅ N)	76752-82-4
PFOA, 及其盐&衍生物	
全氟辛酸(PFOA)	335-67-1
全氟辛酸钠(PFOA-Na)	335-95-5
全氟辛酸钾(PFOA-K)	2395-00-8
全氟辛酸银(PFOA-Ag)	335-93-3
全氟辛酰氟(PFOA-F)	335-66-0
全氟辛酸铵(APFO)	3825-26-1
全氟辛酸锂(PFOA-Li)	17125-58-5
全氟辛酸钴(PFOA-Co)	35965-01-6
全氟辛酸铯(PFOA-Cs)	17125-60-9
全氟辛酸铬(3+) (PFOA-Cr(3+))	68141-02-6
全氟辛酸-哌嗪(2:1) (PFOA-NH(C ₄ H ₁₀ N))	423-52-9
全氟辛酸盐	45285-51-6
全氟辛酸酐	33496-48-9
全氟辛酸四乙基胺	98241-25-9
全氟辛酸四甲基胺	32609-65-7
全氟辛酸四丙基胺	277749-00-5
全氟辛酸钾水合物 (PFOA-K(H ₂ O) ₂)	98065-31-7
全氟辛酸乙胺 (PFOA-C ₂ H ₇ N)	1376936-03-6
全氟辛酸吡啶 (PFOA-C ₅ H ₅ N)	95658-47-2
全氟辛酸苯基哌嗪 (PFOA-C ₁₀ H ₁₄ N ₂)	1514-68-7
全氟辛酸辛基三甲基铵 (PFOA-C ₁₁ H ₂₆ N)	927835-01-6
全氟辛酰氯 (PFOA-Cl)	335-64-8
全氟辛酰溴(PFOA-Br)	222037-87-8
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
1H,1H,2H,2H-全氟癸磺酸盐 (8:2 FTS(anion))	481071-78-7
1H,1H,2H,2H-全氟癸磺酰氯 (8:2 FTS-Cl)	27619-90-5
8:2 FTCA, 及其盐	
2H,2H-全氟癸酸(8:2 FTCA)	27854-31-5



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

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-(全氟辛基)]乙基磷酸酯(8:2diPAP)	678-41-1
双[2-(全氟辛基)]乙基磷酸酯钠(8:2diPAP-Na)	114519-85-6
双(2-羟乙基)铵双(全氟辛基)乙基磷酸氢	57677-97-1
双[2-(全氟辛基)]乙基磷酸酯铵盐(8:2 diPAP-NH ₄)	93776-20-6
8:2氟调聚物磷酸二酯离子	1411713-91-1
8:3 FTCA, 及其盐	
2H,2H,3H,3H-全氟十一烷酸(8:3 FTCA)	34598-33-9
2H,2H,3H,3H-全氟十一烷酸钾(8:3 FTCA-K)	83310-58-1
2H,2H,3H,3H-全氟十一酸锂(8:3 FTCA-Li)	67304-23-8
8:8 PFPI,及其盐	
8:8全氟次膦酸 (8:8 PFPI)	40143-79-1
8:8 全氟次膦酸钠盐 (8:8 PFPI-Na)	500776-69-2
8:8 全氟次膦酸铟(3+)盐 (8:8 PFPI-Er)	500776-70-5
8:8 全氟次膦酸镱(3+)盐 (8:8 PFPI-Yb)	500776-71-6
8:2 monoPAP, 及其盐	
单[2-(全氟辛基)乙基]磷酸盐 (8:2 monoPAP)	57678-03-2
8:2氟调聚物磷酸二铵盐	93857-44-4
8:2氟调聚物磷酸钠盐	438237-75-3
双[2-(全氟辛基)乙基]磷酸铵盐	1764-95-0
单[2-(全氟辛基)乙基]磷酸铵盐	92401-44-0
单[2-(全氟辛基)乙基]磷酸单钠盐	144965-22-0
单[2-(全氟辛基)乙基]磷酸单钾盐	150033-28-6
单[2-(全氟辛基)乙基]磷酸氢铵盐	2353-52-8
10:2 FTS, 及其盐	
1H,1H,2H,2H-全氟十二烷磺酸(10:2 FTS)	120226-60-0
1H,1H,2H,2H-全氟十二烷磺酸钠 (10:2 FTS-Na)	108026-35-3
1H,1H,2H,2H-全氟十二烷磺酰氯(10:2 FTS-Cl)	27619-91-6
10:2 diPAP, 及其盐	
双[2-(全氟癸基)乙基]磷酸盐(10:2 diPAP)	1895-26-7
2,2'-亚氨基二乙醇双[2-(全氟癸基)乙基]磷酸盐 (10:2 diPAP-C ₄ H ₁₁ O ₂)	57677-98-2
10:2 monoPAP, 及其盐	
单[2-(全氟癸基)乙基]磷酸酯 (10:2 monoPAP)	57678-05-4
单[2-(全氟癸基)乙基]磷酸双铵盐	93857-45-5
二十一氟十二烷基磷酸二氢酯环己铵盐	2514858-66-1

(3) 结论仅针对报告上的物质清单。



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

欧盟 POPs 法规(EU) 2019/1021 附录 I 及其修正法规 (EU) 2021/277- 五氯苯酚(PCP)及其盐和酯

检测方法: 参考 EN 17134-2:2023, 采用 GC-MS 进行分析。

检测项目	CAS No.	限值	单位	MDL	A9
五氯苯酚(PCP)及其盐和酯	87-86-5 和其它	5	mg/kg	0.5	ND
结论					符合

欧盟 POPs 法规 (EU) 2019/1021 及其修正法规(EU) 2023/1608-全氟己烷磺酸(PFHxS)及其盐和相关化合物

检测方法: 优化的 EN 17681-1:2025, 采用 LC-MS 或 LC-MS/MS 和 GC-MS 或 GC-MS/MS 进行分析。

检测项目	CAS No.	限值	单位	MDL	A9
PFHxS, 及其盐					
全氟己基磺酸 (PFHxS), 及其盐 [^]	355-46-4	0.025	mg/kg	0.010	ND
PFHxS 相关化合物					
N-甲基全氟-1-己磺酰胺 (N-Me-PFHxSA)	68259-15-4	1	mg/kg	0.010	ND
全氟己烷磺酰胺 (PFHxSA)	41997-13-1	1	mg/kg	0.010	ND
N-[3-(二甲基氨基)丙基]十三氟己烷磺酰胺 (N-AP-FHxSA)	50598-28-2	1	mg/kg	0.010	ND
2-[甲基[(十三氟己基)磺酰基]氨基]乙基丙烯酸酯 (N-MeFHSEA)	67584-57-0	1	mg/kg	0.200	ND
2-[甲基[(十三氟己基)磺酰基]氨基]乙基甲基丙烯酸酯	67584-61-6	1	mg/kg	0.200	ND
2-[乙基[(十三氟己基)磺酰基]氨基]乙基甲基丙烯酸酯	67906-70-1	1	mg/kg	0.200	ND
十三氟-N-(2-羟基乙基)-N-甲基己烷磺酰胺 (MeFHxSE)	68555-75-9	1	mg/kg	0.010	ND
N-乙基-N-[(十三氟己基)磺酰基]甘氨酸 (EtFHxSAA), 及其盐 [^]	68957-32-4	1	mg/kg	0.010	ND
PFHxS 相关化合物总和	-	1	mg/kg	-	ND
结论					符合

备注:

(1) 2023年8月8日, 欧盟委员会于欧盟官方公报发布(EU)2023/1608法规, 修订了2023年5月30日发布的法规 (EU)2019/1021附件I中关于全氟己烷磺酸(PFHxS)、其盐和PFHxS相关化合物清单。

物质	范围	中间用途或其他规范的特殊豁免
PFHxS 及其盐	物质或混合物, 物品	≤ 0.025 mg/kg
PFHxS相关物质	物质或混合物, 物品	≤ 1 mg/kg (单项或PFHxS相关物质总和)
PFHxS 及其盐和 PFHxS相关化合物	浓缩消防泡沫混合物	≤ 0.1 mg/kg (3年内进行审查以降低限值)



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

(2) 本报告中检测的全氟己烷磺酸(PFHxS)及其盐类和PFHxS相关化合物参考欧洲化学品管理局的“持久性有机污染物官方清单”, 请通过以下网络链接查找更多信息:
<https://echa.europa.eu/list-of-substances-proposed-as-pops>

(3) ^=物质是指下表列出的盐/衍生物

物质名称	CAS No.
PFHxS, 及其盐&衍生物	
全氟己基磺酸(PFHxS)	355-46-4
全氟己基磺酸钠(PFHxS-Na)	82382-12-5
全氟己基磺酸钾(PFHxS-K)	3871-99-6
全氟己基磺酸锂(1:1)(PFHxS-Li)	55120-77-9
全氟己基磺酸铵(PFHxS-NH ₄)	68259-08-5
全氟己基磺酸三苯基(苯基甲基)-磷鎓盐(PFHxS-BTPP)	1000597-52-3
N,N,N-三丁基丁烷-1-胺全氟己基磺酸盐(PFHxS-N(C ₄ H ₉) ₄)	108427-54-9
N, N,N-三乙基乙胺全氟己基磺酸盐(PFHxS-N(C ₂ H ₅) ₄)	108427-55-0
全氟己基磺酸与四氢吡咯络合物(PFHxS-NC ₄ H ₉)	1187817-57-7
全氟-1-己基磺酸-N-[4-[[4-(二乙氨基)苯基][4-(乙氨基)-1-萘基]亚甲基]-2,5-环己二烯-1-亚基]-N-乙基-乙铵盐(PFHxS-(NC ₁₀ H ₁₄) ₃ C ₅ H ₄)	1310480-24-0
全氟-1-己基磺酸-N-[4-[[4-(二甲基氨基)苯基][4-(乙氨基)-1-萘基]亚甲基]-2,5-环己二烯-1-亚基]-N-甲基-甲基铵盐(PFHxS-(NC ₈ H ₁₀) ₂ C ₁₃ H ₁₂)	1310480-27-3
全氟-1-己基磺酸-N-[4-[[4-(二甲基氨基)苯基][4-(苯基氨基)-1-萘基]亚甲基]-2,5-环己二烯-1-亚基]-N-甲基-甲基铵盐(PFHxS-(NC ₈ H ₁₀) ₂ C ₁₇ H ₁₂)	1310480-28-4
全氟己基磺酸与β-环糊精络合物(PFHxS-C ₄₂ H ₇₀ O ₃₅)	1329995-45-0
全氟己基磺酸与γ-环糊精络合物(PFHxS-C ₄₈ H ₈₀ O ₄₀)	1329995-69-8
全氟己基磺酸三苯基硫鎓盐(TPS-PFHxS)	144116-10-9
全氟己基磺酸喹啉, 1-(羧甲基)-4-[2-[4-[4-(2,2-二苯基噻吩基)苯基]-1,2,3a,4,8b-六氢环戊并[b]吡啶-7-基]乙基]盐(PFHxS-C ₄₄ H ₃₇ N ₂ O ₂)	1462414-59-0
全氟己基磺酸二苯基碘鎓盐(PFHxS-I(C ₆ H ₅) ₂)	153443-35-7
N,N,N-三甲基-全氟己基磺酸甲基铵盐(PFHxS-TMA)	189274-31-5
全氟己基磺酸与2-甲基-2-丙胺络合物(1:1)(PFHxS-NH ₂ (CH ₃) ₃)	202189-84-2
全氟己基磺酸双[4-(1,1-二甲基乙基)苯基]碘鎓盐(PFHxS-I(C ₆ H ₄) ₂ (C ₄ H ₉) ₂)	213740-81-9
全氟己基磺酸镓(9Cl)(PFHxS-Ga)	341035-71-0
全氟己基磺酸双(4-甲基苯基)苯基硫鎓盐(1:1)(PFHxS-S(C ₇ H ₇) ₂ C ₆ H ₅)	341548-85-4
全氟己基磺酸钪(PFHxS-Sc)	350836-93-0
全氟己基磺酸钕(PFHxS-Nd)	41184-65-0
全氟己基磺酸钇(PFHxS-Y)	41242-12-0
全氟己基磺酸(硫代二-4,1-亚苯基)双[二苯基]硫鎓盐(PFHxS-	421555-73-9



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

S ₃ (C ₆ H ₅) ₄ (C ₆ H ₄) ₂	
全氟己基磺酸双[4-(1,1-二甲基丙基)苯基]碘鎓盐(PFHxS-I(C ₆ H ₄) ₂ (C ₅ H ₁₁) ₂)	421555-74-0
全氟己基磺酰氟(PFHxS-F)	423-50-7
全氟己基磺酸三[4-(1,1-二甲基乙基)苯基]硫鎓盐(PFHxS-S(C ₆ H ₄) ₃ (C ₄ H ₉) ₃)	425670-70-8
全氟己基磺酸锌(PFHxS-Zn)	70136-72-0
全氟己基磺酸与2,2'-亚氨基乙二醇络合物(PFHxS-NH(C ₂ H ₅ O) ₂)	70225-16-0
全氟己基磺酸与三乙胺络合物(1:1)(PFHxS-N(C ₂ H ₅) ₃)	72033-41-1
全氟己基磺酸双[(1,1-二甲基乙基)苯基]碘鎓盐(PFHxS-I(C ₆ H ₄) ₂ (C ₄ H ₉) ₂)	866621-50-3
全氟己基磺酸(4-甲基苯基)二苯硫鎓盐(PFHxS-S(C ₆ H ₅) ₂ C ₇ H ₇)	910606-39-2
全氟己基磺酸[4-[(2-甲基-1-氧代-2-丙烯酰)氧基]苯基]二苯基硫鎓盐(PFHxS-S(C ₆ H ₅) ₂ C ₁₀ H ₉ O ₂)	911027-68-4
全氟己基磺酸铯(1:1)(PFHxS-Cs)	92011-17-1
二苯并[k,n][1,4,7,13]四氧杂硫环戊二烯,19-[4-(1,1-二甲基乙基)苯基]-6,7,9,10,12,13-六氢-,全氟己基磺酸盐(PFHxS-SC ₂₈ H ₃₁ O ₄)	928049-42-7
全氟己基磺酰氯(PFHxS-Cl)	55591-23-6
PFHxS-磺酸酯聚合物	911027-69-5
全氟己基磺酸盐	108427-53-8
全氟己基磺酸四丁基磷(PFHxS-P(C ₄ H ₉) ₄)	2310194-12-6
EtFHxSAA, 及其盐	
N-乙基-N-[(十三氟己基)磺酰基]甘氨酸(EtFHxSAA)	68957-32-4
N-乙基-N-[(十三氟己基)磺酰基]甘氨酸钾(EtFHxSAA-K)	67584-53-6
N-乙基-N-[(十三氟己基)磺酰基]甘氨酸钠(EtFHxSAA-Na)	68555-70-4

(4) 结论仅针对报告上的物质清单。

欧盟 POPs 法规(EU) 2019/1021 附录 I-卤代化合物

检测方法: SGS 内部方法, 采用 GC-ECD 或 GC-MS 进行分析。

检测项目	CAS No.	限值	单位	MDL	A9
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
多氯联苯 (PCBs)	1336-36-3 和其它	禁用	mg/kg	0.2	ND
多氯萘(PCNs)	70776-03-3 和其它	禁用	mg/kg	5	ND
六溴联苯	36355-01-8	禁用	mg/kg	5	ND
结论					符合



SGS-CST Standards Technical Services Co., Ltd.
Guangzhou Branch, Technical Services Co., Ltd. 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

检测报告

编号: CANEC25032313418

日期: 2026年01月06日

第11页, 共14页

备注:

- (1) 豁免: RoHS指令(2011/65/EU)定义电子电器产品中四溴二苯醚、五溴二苯醚、六溴二苯醚、七溴二苯醚和十溴二苯醚豁免于 POPs 法规。
- (2) 在不影响指令 96/59/EC 的情况下, 允许使用在本法规生效时已经使用的物品。成员国应尽快但不迟于 2025 年 12 月 31 日确定并停止使用多氯联苯含量超过 0.005%且体积大于 0.05 立方分米的设备(如变压器、电容器或其他含有液体库存的容器)。

欧盟 POPs 法规(EU) 2019/1021 附录 I 及其修正法规 (EU) 2025/843- UV-328

检测方法: SGS 内部方法, 采用 GC-MS 进行分析。

检测项目	CAS No.	限值	单位	MDL	A9
UV-328	25973-55-1	100	mg/kg	1	ND
结论					符合

备注:

- (1) 依据欧盟 POPs 法规(EU) 2019/1021 附录 I 及其修正法规 (EU) 2025/843, 为加强《持久性有机污染物重新预测条例》的应用和执行, 当化学物质存在于物质、混合物和物品中时, 为 UV-328 设定了无意痕量污染物 (UTC)值, 这一 UTC 限制值将在四年内得到加强。

物质	范围	中间用途或其他规范的特殊豁免	生效日期
UV-328	物质、混合物和物品	≤ 100 mg/kg	2025.8.4
		≤ 10 mg/kg	2027.8.4
		≤ 1.0 mg/kg	2029.8.4

欧盟 POPs 法规(EU) 2019/1021 附录 I 及其修正法规 (EU) 2025/1930- 得克隆 (DP)

检测方法: SGS 内部方法, 采用 GC-MS 进行分析。

检测项目	CAS No.	限值	单位	MDL	A9
得克隆 (DP)	13560-89-9 /135821-03-3 /135821-74-8	1000	mg/kg	1	ND
结论					符合

备注:

- (1) 依据欧盟 POPs 法规(EU) 2019/1021 附录 I 及其修正法规 (EU) 2025/1930, 为加强《持久性有机污染物重新预测条例》的应用和执行, 当化学物质存在于物质、混合物和物品中时, 为得克隆设定了无意痕量污染物 (UTC)值。

物质	范围	中间用途或其他规范的特殊豁免	生效日期
得克隆 (DP)	物质、混合物和物品	≤ 1000 mg/kg	到 2028.4.15
		≤ 1 mg/kg	2028.4.15 之后

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。



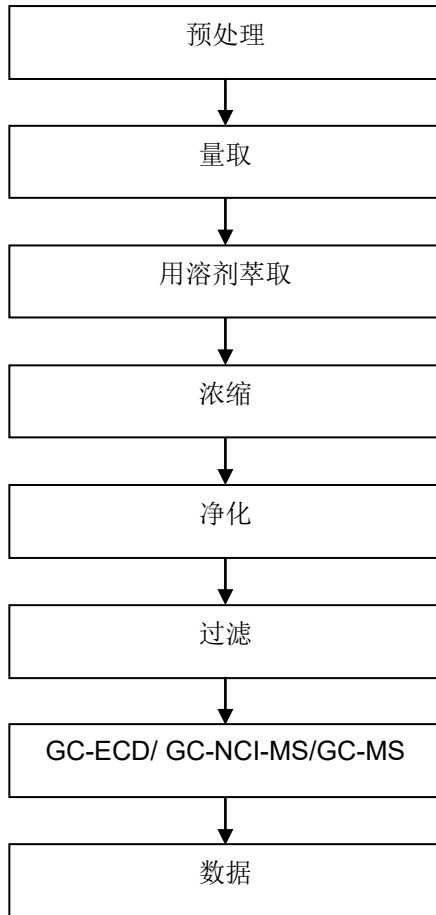
SGS-CSTC Standards Technical Services Co., Ltd.
 Guangzhou Branch Technical Services Laboratory

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 results report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

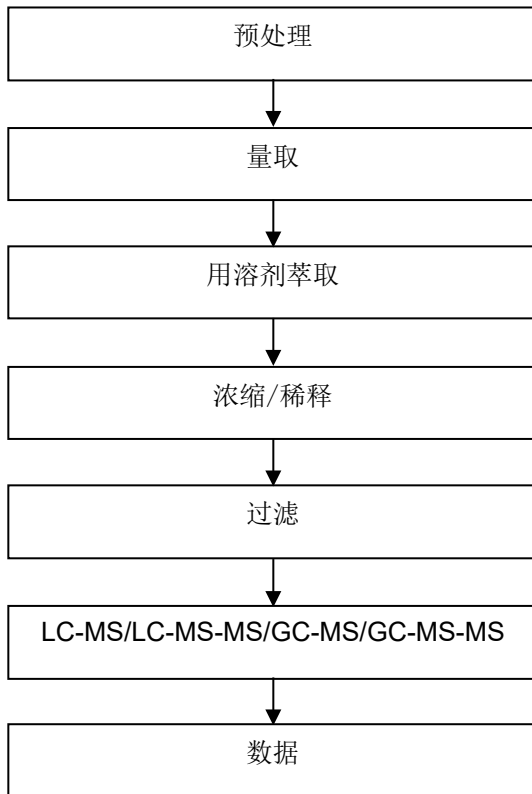
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
 中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

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

氯化石蜡检测流程图



PFASs/ PFOS/PFOA 检测流程图



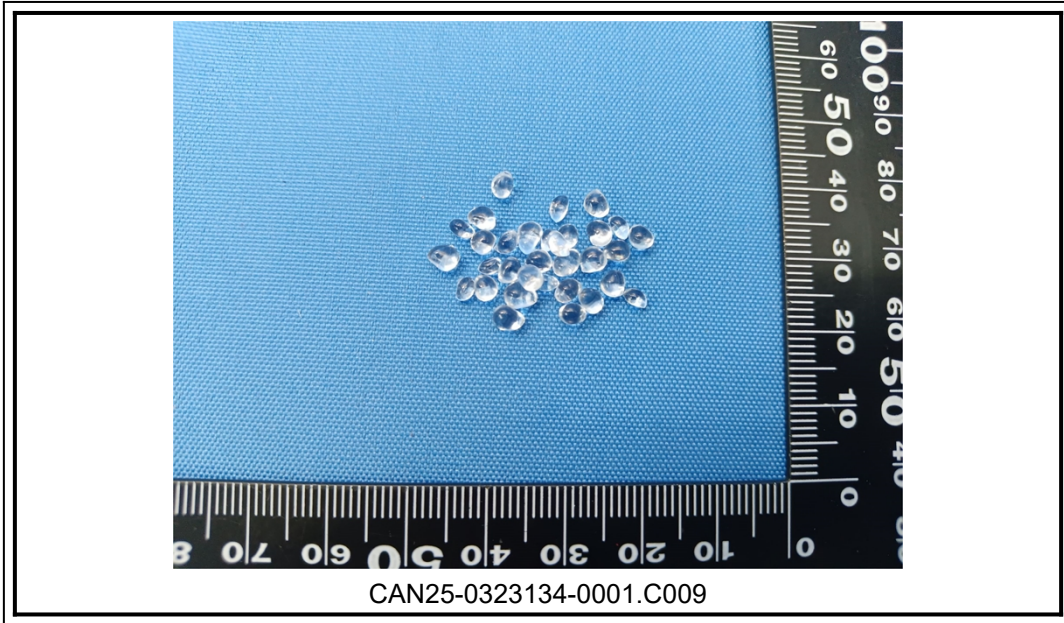
检测报告

编号: CANEC25032313418

日期: 2026年01月06日

第 14 页, 共 14 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 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