

检测报告 编号: TSNPC25001663702 日期: 2025年05月19日 第1页,共5页

客户名称: 深圳光华伟业股份有限公司

客户地址: 深圳市南山区粤海街道高新区社区高新南九道 55 号微软科通大厦 15A

样品名称: PLA+

以上样品及信息由客户提供。

SGS 工作编号: TJPC2505000212(WHIN2505000449PL01)

收样日期: 2025年05月09日

检测周期: 2025年05月09日~2025年05月16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
EN 71-3:2019+A1:2021 - 特定元素迁移测试(针对第一类:干燥、易碎、粉状或易弯曲的玩具材料)	符合
ASTM F963-23, 章节 4.3.5.2 - 基材中的总铅含量	符合
ASTM F963-23, 章节 4.3.5.2 - 基材中可溶性重金属含量	符合
CPSIA 章节 101(a)(2) - 可接触基材中的铅	符合
CPSIA 第 108 章节修订法案-美国消费品安全委员会 (CPSC) 关于限制玩具和儿童护理品用品中特定邻苯二甲酸酯的最终规则-16 CFR 1307	符合

通标标准技术服务(天津)有限公司 授权签名

Reabeca Zhou 周艳

批准签署人



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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	TSN25-0016637-0001.C001	白色固体

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

EN 71-3:2019+A1:2021 - 特定元素迁移测试(针对第一类:干燥、易碎、粉状或易弯曲的玩具材料)

检测方法: 参考 EN 71-3:2019+A1:2021,采用 ICP-MS, IC-UV, LC-ICP-MS 或 IC-ICP-MS 进行分析。

检测项目	限值	单位	MDL	A1
小于 100mg 的样品质量	-	mg	-	/
可溶性铝 (AI)	2250	mg/kg	50	ND
可溶性锑 (Sb)	45	mg/kg	1	ND
可溶性砷 (As)	3.8	mg/kg	0.5	ND
可溶性钡 (Ba)	1500	mg/kg	50	ND
可溶性硼 (B)	1200	mg/kg	50	ND
可溶性镉 (Cd)	1.3	mg/kg	0.1	ND
可溶性三价铬 (Cr III)	37.5	mg/kg	5.0	ND
可溶性六价铬(Cr VI)	0.02	mg/kg	0.010	ND
可溶性钴 (Co)	10.5	mg/kg	0.5	ND
可溶性铜 (Cu)	622.5	mg/kg	50.0	ND
可溶性铅 (Pb)	2.0	mg/kg	0.5	ND
可溶性锰 (Mn)	1200	mg/kg	50	ND
可溶性汞 (Hg)	7.5	mg/kg	0.5	ND
可溶性镍 (Ni)	75	mg/kg	10	ND
可溶性硒 (Se)	37.5	mg/kg	5.0	ND
可溶性锶 (Sr)	4500	mg/kg	50	ND
可溶性锡 (Sn)	15000	mg/kg	0.15	ND
可溶性锌 (Zn)	3750	mg/kg	50	ND
可溶性有机锡*	0.9	mg/kg	-	ND
结论				符合

备注:

(1) 根据 EN 71-3:2019+A1:2021 第 10.1.2 章节规定,Cr(III)结果由以下公式换算得到:可溶性三价铬 =可溶性总铬 -可溶性六价铬



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(2)*可溶性锡转化为可溶性有机锡后的含量没有超过 EN 71-3:2019+A1:2021 中相应限量,根据 EN 71-3:2019+A1:2021 的要求,不需要额外检测可溶性有机锡的含量。

(3) /= 不适用

ASTM F963-23, 章节 4.3.5.2 - 基材中的总铅含量

检测方法: 参考 CPSC-CH-E1002-08.3 , 采用 AAS/ICP-OES 进行分析。

检测项目	限值	单位	MDL	A1
铅(Pb)	100	mg/kg	20	ND
结论				符合

ASTM F963-23, 章节 4.3.5.2 - 基材中可溶性重金属含量

检测方法: 参考 ASTM F963-23 (章节 8.3)方法检测,采用 ICP-OES 进行分析。

检测项目	限值	单位	MDL	A1
可溶性汞(Hg)	60	mg/kg	5	ND
可溶性铬(Cr)	60	mg/kg	5	ND
可溶性镉(Cd)	75	mg/kg	5	ND
可溶性钡(Ba)	1000	mg/kg	10	ND
可溶性砷(As)	25	mg/kg	2.5	ND
可溶性铅(Pb)	90	mg/kg	5	ND
可溶性锑(Sb)	60	mg/kg	5	ND
可溶性硒(Se)	500	mg/kg	10	ND
结论				符合

备注:

(1) 结果经分析调整。

CPSIA 章节 101(a)(2) - 可接触基材中的铅

检测方法: 参考 CPSC-CH-E1002-08.3, 采用 AAS/ICP-OES 进行分析。

检测项目	限值	单位	MDL	A1
铅 (Pb)	100	mg/kg	20	ND
结论				符合

<u>CPSIA 第 108 章节修订法案-美国消费品安全委员会 (CPSC) 关于限制玩具和儿童护理品用品中特定邻苯二甲</u>酸酯的最终规则-16 CFR 1307

检测方法: 参考 CPSC-CH-C1001-09.4, 采用 GC-MS 进行分析。

检测项目	CAS No.	限值	单位	MDL	A1
邻苯二甲酸丁苄酯 (BBP)	85-68-7	0.1	%	0.0050	ND



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检测项目	CAS No.	限值	单位	MDL	A1
邻苯二甲酸二丁酯 (DBP)	84-74-2	0.1	%	0.0050	ND
邻苯二甲酸二环己酯 (DCHP)	84-61-7	0.1	%	0.0050	ND
邻苯二甲酸二(2-乙基)己酯 (DEHP)	117-81-7	0.1	%	0.0050	ND
邻苯二甲酸二正己酯 (DHEXP/DnHP)	84-75-3	0.1	%	0.0050	ND
邻苯二甲酸二异丁酯 (DIBP)	84-69-5	0.1	%	0.0050	ND
邻苯二甲酸二异壬酯 (DINP)	28553-12-0 /68515-48-0	0.1	%	0.0050	ND
邻苯二甲酸二戊酯 (DnPP)	131-18-0	0.1	%	0.0050	ND
结论					符合

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。



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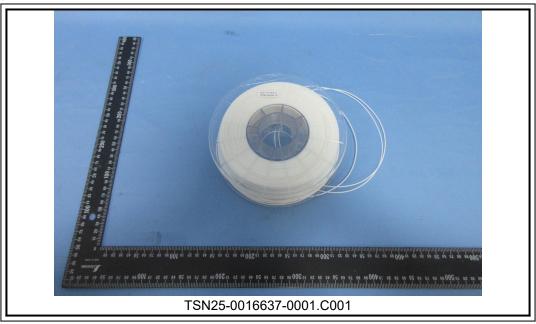


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