

SAFETY DATA SHEETS (SDS)

化学品安全技术说明书 (SDS)

According to Regulation (EC) No 1907/2006, Annex,
Amended by COMMISSION REGULATION (EU) 2020/878.

According to REGULATION (EC) No 1272/2008

No.: SDS20250928A10

Date: Sept. 28. 2025

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Report Number : SDS20250928A10

报告编号

Date of Conduct : Sept. 28. 2025
制作日期 2025 年 09 月 28 日

Date of Report : Sept. 28. 2025
报告日期 2025 年 09 月 28 日

Shenzhen Tuozhu Technology Co., Ltd.

深圳拓竹科技有限公司

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1 - Identification of the substance /preparation and of the company/undertaking

第一章 化学品及企业标识

Product identifier

产品标识

Product name : Bambu PLA Tough+

产品名称 : 3D 打印线材

Model : A10-xx(xx stands for any suffix)

型号 : A10-xx (xx 代表任意后缀)

Unique Formula : N/A

Identifier(UFI)

唯一配方标识符

Export to : /

出口国

CAS No. : Refer to section 3

见第三章

EC No. : Refer to section 3

见第三章

Relevant identified uses of the substance or mixture and uses advised against

有关的确定的物质或混合物的用途和建议不适合的用途

Relevant identified uses : 3D printing filament

有关已确定用途 : 3D 打印线材

Uses advised against

使用建议 : /

Details of the supplier of the safety data sheet

安全技术说明书提供者的详情

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Manufacturer : Shenzhen Tuozhu Technology Co., Ltd.
制造商 : 深圳拓竹科技有限公司
Address : 903, West Zone, Hengchang Science and Technology Building, No. 2228 Linhai Avenue, Nanshan Street, Qianhai Shengang Cooperation Zone, Shenzhen
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Telephone/电话 : 0755-86575393
E-mail address : /
电子邮件地址 : /
Emergency phone : /
紧急通信电话 : /

2 - Hazards Identification

第二章危险性概述

Hazard Classification

危险性类别

In accordance with regulation (EC) No. 1272/2008(CLP), Classification of the substance or mixture
根据(EC) No. 1272/2008(CLP)标准, 物质或混合物分类的分类

Not classified.

没有分类

For the full text of the health note (H-) mentioned in this section, see section 16.

本部分提及的健康说明 (H-)全文请见第16部分。

Label elements

标签要素

Hazard pictograms : No symbol.

象形图 : 无危险图标

Warning words : No signal word

警示词 : 无警示词

Danger statement : None

危险申明 : 无

Preventive measures : None

预防措施 : 无

Response : None

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事故响应	无
Storage	: None
安全储存	无
Disposal	: None
废弃处置	无
health hazard	: None
健康危害	无
Environment hazard	: None
环境危害	无
Physical and chemical hazards	: None
物理和化学危害	无
Other hazards	: The mixture does not contain PBT/vPvB substance 该混合物不含 PBT/vPvB 物质。
其他危害	The mixture does not contain endocrine disruptors 该混合物不含内分泌干扰物。

3 - Composition / Information on Ingredients

第三章 成分/组成信息

Substance or Preparation: Preparation

物质 混合物

Component/Substance 成分/物质	% by wt	CAS Number CAS 号	EINECS Number EC 号	CLP Classification CLP 分类	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE) 特 定浓度极限值, M 因子急性 毒性估计 (ATE)
Polylactic acid 聚乳酸	80-90	26023-30-3	N/A	None 无	None 无
Additive 添加剂	10-20	N/A	N/A	None 无	None 无

Note: CAS Number is Chemical Abstract Service Registry Number.

注: CAS 编号表示化学文摘服务登记编号。

EINECS Number is EUROPEAN Inventory of Existing Commercial Chemical Substance.

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EC 编号表示欧洲现有商业化学品目录编号。

N/A = not applicable. N/A表示不适用。

4 - First Aid Measures

第四章 急救措施

Description of first aid measures

急救措施的说明

If inhaled : If breathed in, remove to fresh air immediately. Keep the respiratory tract smooth. Use oxygen if available. Get medical aid.

吸入

如果吸入，迅速脱离现场至空气新鲜处。保持呼吸道通畅。如有必要，给予输氧。就医。

In case of skin contact

: Rinse with clear water.

皮肤接触

用清水冲洗。

In case of eye contact

: If contact with eyes, Rinse with plenty of water or normal saline.

眼睛接触

如果接触到眼睛，用大量清水或生理盐水冲洗。

If swallowed

: Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical aid at once.

食入

切勿给失去知觉者喂食任何东西。用水漱口。立刻就医。

Most important symptoms and effects, both acute and delayed

: No data available

主要症状和影响，急性和迟发

无可用数据。

效应

Indication of any immediate medical attention and special treatment needed

: Transfer patients to a safe place. Consult a doctor. Present this chemical safety data sheet to the doctor on site.

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将患者转移到安全的场所。咨询医生。出示此化学品安全技术说明书给到
现场的医生看。

5 - Fire-Fighting Measures

第五章 消防措施

Extinguishing media

灭火介质

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

灭火方法及灭火剂

用水雾，耐醇泡沫，干粉或二氧化碳灭火。

Special hazards arising from the substance or mixture

No data available.

源于此物质或混合物的特别的危害

无可用数据

Combustion Products

No data available.

燃烧产物

无可用数据

Advice for firefighters

As soon as possible, remove the goods from fire to open place. For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, Standing on the windward, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. 尽快将货物从火中移开。对于小火，使用干粉，二氧化碳，水喷雾或耐酒精泡沫。对于大型火灾，站在迎风，使用水喷雾，雾，或耐酒精泡沫。用水喷雾冷却暴露在火中的容器。

给消防员的建议

尽快将货物从火中移开。对于小火，使用干粉，二氧化碳，水喷雾或耐酒精泡沫。对于大型火灾，站在迎风，使用水喷雾，雾，或耐酒精泡沫。用水喷雾冷却暴露在火中的容器。

Further information

: Wear suitable protective clothing, gloves, eye/face protection and self-contained breathing apparatus in pressure-demand,MSHA/NIOSH (approved or equivalent), and full protective gear.

进一步信息

在压力要求下穿戴合适的防护服、手套、眼/面保护和自备呼吸器，MSHA/NIOSH (认可或等效) 和全防护装置。

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6 - Accidental Release Measures

第六章 泄露应急处理

Personal precautions, protective equipment and emergency procedures	: Avoid inhaling aerosol or gas. Ensure adequate ventilation. Evacuate people to a safe area.
作业人员防护措施、防护装备和应急处置程序	避免吸入气雾或气体，保证充分的通风，将人员疏散到安全区域。
Environmental precautions	: No special environmental prevention requirements.
环境保护措施	无特别的环境预防要求。
Methods and materials for containment and cleaning up	: Contain spillage, soak up residue with an absorbent such as dry quicksand and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.
泄漏化学品的收容、清除方法及所使用的处置材料	围堵溢出，用吸附材料如干砂等吸附，用防电真空清洁器或湿刷子将溢出物收集起来，并放置到容器中去，根据当地规定处理。
Reference to other sections	: For disposal see section 13.
参考其他部分	丢弃处理请参阅第 13 章。

7 - Handling and Storage

第七章 操作处置与储存

Precautions for safe handing	: No special operation opinions are required.
安全操作的注意事项	无需特殊的操作意见。

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Conditions for safe storage, including any incompatibilities	: Store in a closed container when possible to prevent accidental dust generation and to prevent possible product contamination. Protect containers from physical damage. Keep dry and isolated from acids, caustics, halogenated compounds and oxidizers. Do not store near combustible materials. Guard against dust accumulation and dust becoming airborne. Keep container tightly closed in a cool, well-ventilated place. Keep the sample as a easy identification. Equip with relevant type and quantities of the extinguishment instruments.
安全储存的条件,包括任何不兼容性	尽可能存放在密闭的容器中, 以防止意外的灰尘产生并防止可能的产品污染。保护容器免受物理损坏。保持干燥, 与酸, 苛性碱, 卤化物和氧化剂分离。不要存放在易燃材料附近。防止灰尘积聚和粉尘的空气传播。储存于阴凉, 干燥, 通风的库房。保持样品容易识别。配备相应品种和数量的消防器材。
Specific end use(s) 特定用途	: No data available. 无可用数据

8 - Exposure Controls / Personal Protection

第八章 接触控制/个体防护

Allowable concentration	: No data available.
容许浓度	无可用数据
Monitoring method	: No data available.
检测方法	无可用数据
Components with workplace control parameters	: In accordance with good industrial and safety regulations. Wash hands before rest and at the end of work.
暴露控制	按照良好工业和安全规范操作。休息前和工作结束时洗手。
Personal protective equipment	: It is not necessary to use protective equipment under normal conditions.
个体防护装备	正常条件下没有必要使用防护装备。
Eye Protection	: It is not necessary to use protective equipment under normal conditions.
眼睛防护	正常条件下没有必要使用防护装备。

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Skin protection	:	It is not necessary to use protective equipment under normal conditions.
皮肤保护		正常条件下没有必要使用防护装备。
Body Protection	:	It is not necessary to use protective equipment under normal use conditions.
身体保护		正常条件下没有必要使用防护装备。
Respiratory protection	:	It is not necessary to use protective equipment under normal use conditions.
呼吸系统防护		正常条件下没有必要使用防护装备。
Other protection	:	None
其他防护		无

9 - Physical and Chemical Properties

第九章 理化特性

Physical state:	:	Thread	Odor	:	No data available.
物理形态		线	气味		无可用数据
Color	:	No data available.	pH	:	No data available.
颜色		无可用数据	pH 值		无可用数据
Melting Point	:	No data available.	Density	:	No data available.
熔点		无可用数据	密度		无可用数据
Boiling point or initial boiling point and boiling range	:	No data available.	Flashing Point	:	No data available.
沸点或初始沸点沸腾范围(°C)		无可用数据	闪点		无可用数据
Explosion Upper Limits	:	No data available.	Explosion Lower Limits	:	No data available.
爆炸上限		无可用数据	爆炸下限		无可用数据
Kinematic viscosity (mm²/s)	:	No data available.	Particle characteristics	:	No data available.
运动粘度(mm²/s)		无可用数据	粒子特性		无可用数据

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Ignition temperature	:	No data available.	Decomposition temperature	:	No data available.
着火点		无可用数据	分解温度		无可用数据
Solubility	:	No data available.			
溶解度		无可用数据			

10 - Stability and Reactivity

第十章 稳定性和反应活性

Reactivity	:	No data available.
反应活性		无可用数据
Chemical stability	:	Stable under recommended storage conditions.
化学稳定性		正常情况下稳定
Conditions to avoid	:	Avoid fire, elevated temperatures, direct sunlight.
应避免的条件		避免火灾, 高温, 阳光直射
Incompatible materials	:	No data available.
禁配物		无可用数据
Hazardous decomposition products	:	No data available.
危险的分解产物		无可用数据

11 - Toxicological Information

第十一章 毒理学资料

Information on toxicological effects	Acute Toxicity	:	No data available.
急性毒性			无可用数据
Skin corrosion/irritation		:	No data available.
皮肤腐蚀/刺激性			无可用数据
Serious eye damage/eye irritation		:	No data available.

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严重眼伤害/眼刺激	无可用数据
Respiratory or skin	: No data available.
Sensitization	
呼吸系统或皮肤致敏作用	无可用数据
Germ cell mutagenicity	: No data available.
生殖细胞致变性	无可用数据。
Carcinogenicity	: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
致癌性	IARC: 该产品中不存在大于或等于 0.1% 的组分被 IARC 鉴定为可能的、可能的或证实的人类致癌物。
Reproductive toxicity	: No data available.
生殖毒性	无可用数据。
Specific target organ	: No data available.
toxicity-single exposure	
特定靶器官毒性-单次暴露	无可用数据。
Specific target organ	: No data available.
toxicity-repeated	
特定靶器官毒性-长期暴露	无可用数据。
Aspiration hazard	: No data available.
吸入危害	无可用数据。
Information on other	
hazards Endocrine	
disrupting properties	
关于其他危险的资料内分泌干扰物	该混合物不含内分泌干扰物。
Additional information	: No data available.
其他信息	无可用数据。

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12 - Ecological Information

第十二章 生态学资料

Toxicity	:	No data available.
生态毒性	:	无可用数据
Persistence and degradability	:	No data available.
持久性和降解性	:	无可用数据
Bioaccumulative potential	:	No data available.
潜在的生物累积性	:	无可用数据
Mobility in soil	:	No data available.
土壤中的迁移性	:	无可用数据
Results of PBT and vPvB assessment	:	No data available.
PBT 和 vPvB 的结果评价	:	无可用数据
Endocrine disrupting properties	:	The mixture does not contain endocrine disruptors
内分泌干扰物	:	这种混合物不含内分泌干扰物。
Other adverse effects	:	No data available.
其他有害影响	:	无可用数据

13 - Disposal Considerations

第十三章 废弃处置

Waste disposal methods

废弃处置方法

Product : This product is not classified as hazardous waste under Regulation (EC) No. 1272/2008.

产品性质 根据法规(EC)第 1272/2008 号, 该产品不被视为危险废物。

Waste disposal methods : Consult relevant national and local regulations before disposal.

废弃处置方法 回收利用或参阅国家和地方有关法规。

Contaminated packaging : Use and recycle after cleaning.

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受污染的容器和包装

清洗后使用回收。

Attention abandoned:

: Before disposal, refer to relevant national and local laws and regulations.

废弃注意事项

废弃处置前应参阅国家和地方有关法规。

14 - Transport Information

第十四章运输信息

Transport Attentions:

运输注意事项:

Please select the appropriate transportation method and corresponding transportation and storage conditions according to the nature of the chemical. The product can be transported by air, land or sea. The means of transportation should be equipped with corresponding types and quantities of fire extinguishing materials and leakage emergency treatment equipment. Do not mix with antioxidants, acids, alkali metals and amines. Prevent direct sunlight, rain and high temperature transportation.

Please refer to section 7-HANDLING AND STORAGE also, and requirements of the IATA/ICAO/PG .
请根据化学品的性质选择适当的运输方式和相应的运输和储存条件。该产品可以空运, 陆运或海运方式运输。
运输工具应配备相应品种和数量的灭火材料和泄漏应急处理设备。禁止与抗氧化剂, 酸, 碱金属和胺混合使用。防止阳光直射, 雨淋和高温运输。

具体请参照ADR-RID/PG , IMO/IMDG/PG , IATA/ICAO/PG以及第七部分的要求。

Maritime transport IMDG

国际海运危险货物规则

IMDG Code : Not hazardous goods

危险类别 : 非危害品

UN-Number : /

UN 编号

Packing group : /

包装组别

Proper shipping name : /

运输名称

DOT regulations

运输部条例

Hazard class : Not hazardous goods

危险类别 : 非危害品

UN-Number : /

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UN 编号

Packing group : /

包装组别

Proper shipping name : /

运输名称

Land transport ADR/RID(cross-border)

陆路运输条例

Hazard class : Not hazardous goods

危险类别 : 非危害品

UN-Number : /

UN 编号

Packing group : /

包装组别

Proper shipping name : /

运输名称

Air transport ICAO-TI and IATA-DGR

航空运输 国际民航组织和国际航空运输协会危险货物规则

ICAO-TI-II class : Not hazardous goods

危害等级 : 非危害品

UN/ID Number : /

联合国编号

Packing group : /

运输包装

Proper shipping name : /

合适运输名称

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

防止船舶污染国际公约 73/78 附件 II 和散装危险化学品船舶载运的建设和设备的国际代码

Not available data

无可用数据

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15 - Regulatory Information

第十五章法规信息

Safety, health and environmental regulations/legislation specific for the substance or mixture
针对物质或混合物的安全、健康和环境的特别的法规/法律

**German regulations concerning the classification of hazard for
water(WGK)** : Not listed

德国关于水危害分类的规定 (WGK) 不列入

**Substance of Very High Concern (SVHC) according to Regulation
(EC) No. 1907/2006 (REACH)** : Not listed

REACH 法规(EC) No. 1907/2006 的高度关注物 不列入

**The conditions of restrictions according to Regulation (EC) No.
1907/2006 (REACH) Article 67 and Annex XVII for the
manufacturing, placing on the market and use must be observed** 不列入
法规 (EC) 1907/2006 号 (REACH) 第 67 条和附件 XVII 对制造、投放
市场和使用上必须遵守的限制条件制造、投放市场和使用上必须遵守的限制
条件

**Regulation (EC) No. 1907/2006 (REACH) Annex XVII(requiring
Authorisation for use)** : Not listed

法规 (EC) 1907/2006 号 (REACH) 附件 XVII(需要授权才能使用物质) 不列入

**Regulation (EC) No. 1907/2006 (REACH)-Pre-registered
substance.** : Not listed

法规 (EC) 1907/2006 号 (REACH) 预注册物质 不列入

**Regulation (EC) No. 1005/2009 on substances that deplete the
ozone layer** : Not listed

法规 (EC) 1005/2009 号关于破坏臭氧层物质 不列入

**Regulation (EC) No 649/2012 concerning the export and import of
dangerous chemicals, Annex I** : Not listed

法规 (EC) 649/2012 号关于危险化学品的出口、进口, 附录 I 不列入

ELINECS(European List of Notified Chemical Substances) : Not listed

ELINECS (欧洲化学品通报清单) 不列入

Specific provisions : No data available.
特别规定 无可用数据

SAFETY DATA SHEETS (SDS)

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16 - Other Information

第十六章其他信息

ACGIH	:	American Conference of Governmental Industrial 美国政府工业学家会议
ADR	:	European Agreement concerning the International Carriage of Dangerous Goods by Road 欧洲关于危险国际货物公路运输的协议
CAS	:	Chemical Abstracts Service 化学文摘社
CLP	:	Classification Packaging and Labelling 分类、包装、标签
EC	:	European Commission 欧洲委员会
ECHA	:	European Chemicals Agency 欧洲化学品中心
EINECS	:	The European Inventory of Existing Commercial Chemical Substances 欧洲现有商业化学物质的目录
GHS	:	Globally Harmonised System of Classification and Labelling of Chemicals 全球化学品分类和标签制度
IARC	:	International Agency for Research on Cancer 国际癌症研究机构
IATA	:	International Air Transport Association 国际航空运输协会
IBC Code	:	International code for the construction and equipment of ships carrying dangerous chemical in bulk 散装危险化学品船舶载运的建设和设备的国际代码
ICAO	:	International Civil Aviation Organization 国际民航组织
IMDG	:	International Maritime Dangerous Goods 国际海运危险货物规则
IC50	:	Inhibitory Concentration fifty 半数抑制浓度
LC50	:	Lethal Concentration fifty

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半数致死浓度

LD50 : Lethal Dose fifty per cent.

半数致死剂量

MARPOL : International Convention for the Prevention of Pollution From Ships
防止船舶造成污染国际公约

REACH : Registration Evaluation And Authorisation Of Chemicals
化学品的注册, 评估和授权

RID : Regulations Relating to International Carriage of Dangerous Goods by Rail
国际危险货物铁路运输规则

RTECS : Registry of Toxic Effects of Chemical Substances
化学品毒性危害注册

STEL : Short term exposure limit
短时间暴露限值

TWA : Time-Weighted Average
时间加权平均值

OSHA : Occupational Safety and Health Administration
职业安全与健康管理局

NIOSH : National Institute for Occupational Safety and Health
国家职业安全与健康研究所

TLV-TWA : Threshold Limit Value-Time Weighted Average
容许最高浓度-时间加权平均值

TLV-STEL : Threshold Limit Value-Short Term Exposure Limit
容许最高浓度-短时间暴露限值

PEL : Permissible Exposure Limit
容许暴露限值

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填表时间: 2025年09月28日

Data Audit Units: Shenzhen Tuozhu Technology Co., Ltd.

数据审核单位: 深圳拓竹科技有限公司

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样品照片 Sample Photo



The End of MSDS

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*** MSDS结束***