

## 化学品安全技术说明书(**MSDS**) Bambu PLA Marble 3D 打印线材

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Apr. 07, 2023





## 化学品安全技术说明书(MSDS) Bambu PLA Marble

## Bambu PLA Marble 3D 打印线材

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According to Regulation (EC) No 1907/2006. Annex II 根据法规(EC) No 1907/2006 附件 II Amended by COMMISSION REGULA TION (EU) 2020/878, 根据欧盟委员会法规(EU) 2020/878 编写 According to REGUL ATION (EC) No 1272/2008 根据 REGUL ATION (EC) No 1272/2008 分类

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

Unique Formula : N/A

Identifier(UFI)

唯一配方标识符

Product name : Bambu PLA Marble

产品名称 3D打印线材

Model : A07-xx(xx代表任意后缀)

型号 A07-xx(xx stands for any suffix)

Country of Origin : China 原产国 中国

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 wire rod

有关已确定用途 3D打印线材

Uses advised against

使用建议

1





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Details of the supplier of the safety data sheet

安全技术说明书提供者的详情

Manufacturer : Shenzhen Tuozhu Technology Co., Ltd

制造商深圳拓竹科技有限公司

Address : Room 201, Building A, No. 1 First Qianwan Road, Qianhai Shengang Cooperation

地址 Zone, Shenzhen

深圳市前海深港合作区前湾一路 1号 A栋 201室

Post Code

邮政编码

Telephone/电话 : 13603003545

Total Total

E-mail address 电子邮件地址

Emergency phone

紧急通信电话

lvhong.yu@bambulab.com

### 2 - Hazards Identification 第二章 危险性概述

#### **Hazards Classification**

#### 危险性类别

In accordance with regulation (EC) No. 1272/2008(CLP), The substance or mixture is not classified as hazardous.

根据(EC) No. 1272/2008(CLP)标准,该物质或混合物不属于危险物质。

Physical hazard : Not classified as a physical hazard class.

物理危害 未被划分为物理危害等级

Health hazard : Not classified as a health hazard class.

健康危害 未被划分为健康危害等级

Environment hazard : Not classified as a environment hazard class.

环境危害

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。





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Label elements

标签要素

Hazard pictograms : Not applicable.

**象形图** 不适用。

Warning words : Not applicable.

**警示词** 不适用。

**Danger statement** : Not applicable.

**危险申明** 不适用。

Preventive measure : Not applicable.

**预防措施** 不适用。

**Response** : Not applicable.

**事故响应** 不适用。

Storage : Not applicable.

安全储存不适用。Disposal: None废弃处置无

health hazard : Thermal decomposition may melt and cause burns.

**健康危害** 热分解时可能融化造成烫伤。

Environment hazard : None 环境危害 无 None chemical hazards : None 无

物理和化学危害

Other hazards : The mixture does not contain PBT/vPvB substance

其他危害 该混合物不含PBT/vPvB物质。

The mixture does not contain endocrine disruptor

该混合物不含内分泌干扰物。







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#### 3 - Composition / Information on Ingredients 第三章 成分/组成信息

Substance or Preparation: Preparation

混合物 ■ 物质□

Seri al Num ber 序号	Component/Su bstance 成分/物质	% by wt	CAS Number CAS 号	EINECS Number EC 号	CLP Classification	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)
1	Polylactic acid 聚乳酸	90-99	26023-30-3	N/A	/	/
2	Additive 添加剂	1-10	N/A	N/A	/	/

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.

EC 编号表示欧洲现有商业化学品目录编号。 N/A denote not applicable. N/A表示不适用。





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### 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

吸入

: If you feel respiratory irritation, remove to fresh air immediately. Keep the respiratory tract smooth. Use oxygen if available. Get medical aid.

如果感到呼吸道刺激,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 皮肤接触 Burns caused by molten materials need hospital treatment. In case of contact with skin, please rinse with plenty of water and seek medical attention immediately. Please clean the

contaminated clothes before using them again. 熔化材料造成的烧伤需要医院治疗,万一接触到皮肤,请用大量水冲洗并立即就医。再次使用之前,请清洗受污染的衣物。

In case of eye contact 眼睛接触 量水冲洗开立即就医。再次使用之前,请清洗受污染的衣物。
If you feel eye irritation, flush the eyes with plenty of water or saline water at least 15 minutes. Get medical aid at once. 如果感觉到眼睛刺激,用大量清水或生理盐水冲洗 15 分钟以上。立刻就医。

If swallowed 食入

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical aid at once. 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 主要症状和影响,急性和迟发效应 Indication of any immediate medical attention and special treatment needed

: No available data 无可用数据。

及时的医疗处理和所需的特殊处理的 说明和指示 Transfer patients to a safe place. Consult a doctor. Present this chemical safety data sheet to the doctor on site. 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。





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### 5 - Fire-Fighting Measures 第五章 消防措施

**Extinguishing media** 

灭火介质

Suitable extinguishing media

灭火方法及灭火剂

Special hazards arising from the

substance or mixture

源于此物质或混合物的特别的危害

**Combustion products** 

燃烧产物

Advice for firefighters

给消防员的建议

: Dry powder, carbon dioxide, sand, anti-soluble foam

干粉, 二氧化碳, 砂土, 抗溶性泡沫

No available data.

无可用数据

: No available data.

无可用数据

: 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. Do NOT use

straight streams of water.

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。不要使用直接

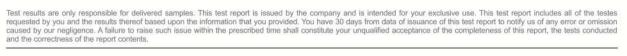
的水流。

: 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.

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。

Further information 进一步信息







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#### 6 - Accidental Release Measures 第六章 泄露应急处理

Personal precautions, protective equipment and emergency procedures

作业人员防护措施、防护装备和应 急处置程序

Environmental precautions 环境保护措施

Methods and materials for containment and cleaning up 泄漏化学品的收容、清除方法及所使用的处置材料

Reference to other sections 参考其他部分 : Avoid inhaling aerosol or gas. Ensure adequate ventilation. Evacuate people to a safe area.

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。

: No special environmental prevention requirements.

无特别的环境预防要求。

捡起并安排处置,不要产生灰尘。 清扫并铲起。 放在合适的密闭 容器中进行处置。

: For disposal see section 13. 丢弃处理请参阅第13章。





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### 7 - Handling and Storage 第七章 操作处置与储存

Precautions for safe handing 安全操作的注意事项 Conditions for safe storage, including any incompatibilities 安全储存的条件,包括任何不兼容性

- : No special operation opinions are required. 无需特殊的操作意见。
- Store in a closed container when possible to prevent accidental aerosols 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.

尽可能存放在密闭的容器中,以防止意外的气雾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。





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### 8 - Exposure Controls / Personal Protection 第八章 接触控制/个体防护

Allowable concentration

容许浓度

Monitoring method

检测方法

Components with workplace control

parameters 暴露控制 No available data.

无可用数据

No available data.

无可用数据

In accordance with good industrial and safety regulations. Wash hands

before rest and at the end of work.

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

个体防护装备

**Eye Protection** 

眼睛防护

: It is not necessary to use protective equipment under normal conditions.

正常条件下没有必要使用防护装备。

Skin protection

皮肤保护

It is not necessary to use protective equipment under normal conditions.

正常条件下没有必要使用防护装备。

**Body Protection** 

身体保护

It is not necessary to use protective equipment under normal use

conditions.

正常条件下没有必要使用防护装备。

Respiratory protection :

呼吸系统防护

It is not necessary to use protective equipment under normal use

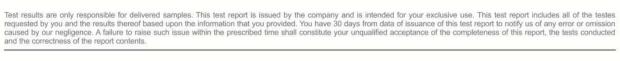
conditions.

正常条件下没有必要使用防护装备。

Other protection

其他防护

None 无







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## 9 - Physical and Chemical Properties 第九章 理化特性

Physical state:<br/>物理形态Thread<br/>结Odor<br/>气味No available data.<br/>无可用数据Colorgrevish whitepHNo available data.

 Color
 greyish white
 pH
 No available data.

 颜色
 灰白色
 pH 值
 无可用数据

Boiling point or initial boiling

point and boiling range : No available data. Flashing Point : No available data. 无可用数据 : No available data. 无可用数据

Explosion
Upper Limits
操作上限

No available data.
无可用数据

Explosion Lower
Limits
操作下限

No available data.
无可用数据

Kinematic
viscosity
(mm2/s):

No available data.
Full ###

Particle
characteristics:

No available data.
Full ###

(mm2/s): : No available data: characteristics: : 无可用数据 **粒子特性** (mm2/s)

Ignition<br/>temperature<br/>着火点No available data.<br/>无可用数据Decomposition<br/>temperature<br/>分解温度No available data.<br/>temperature<br/>分解温度

Solubility<br/>溶解度No available data.<br/>无可用数据





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## 10 - Stability and Reactivity 第十章 稳定性和反应活性

Reactivity 反应活性

**Chemical stability** 

化学稳定性

**Conditions to avoid** 

应避免的条件

Incompatible materials

禁配物

Hazardous decomposition products :

危险的分解产物

: No available data.

无可用数据。

: Stable under recommended storage conditions.

正常情况下稳定

: Avoid fire, elevated temperatures. direct sunlight.

避免火灾,高温,阳光直射。

: No available data.

无可用数据。

No available data.

无可用数据。

### 11 - Toxicological Information 第十一章 毒理学资料

Information on toxicological effects

Acute Toxicity : No available data.

**急性毒性** 无可用数据。

**Skin corrosion/irritation**: No available data.

皮肤腐蚀/刺激性 无可用数据。

Serious eye : No available data.

damage/eye irritation 无可用数据。 严重眼伤害/眼刺激

Respiratory or skin : No available data.

Sensitization 无可用数据。

呼吸系统或皮肤致敏作用

Germ cell mutagenicity : No available data.

**生殖细胞致变性** 无可用数据。





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Carcinogenicity

致癌性

: 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.

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

生殖毒性

: No available data.

No available data.

No available data.

无可用数据

无可用数据

无可用数据

Specific target organ toxicity-single exposure 特定靶器官毒性-单次暴露

特定靶器官毒性-单次暴露 Specific target organ

Specific target org toxicity-repeated

exposure 特定靶器官毒性-长期暴露

Aspiration hazard

吸入危害

: No available data.

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

Other information

其他资料

The mixture does not contain endocrine disruptor 这种混合物不含内分泌干扰物。

: No available data.

无可用数据





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#### 12 - Ecological Information 第十二章 生态学资料

Toxicity 生态毒性

Persistence and degradability 持久性和降解性

Bioaccumulative potential

潜在的生物累积性 Mobility in soil 土壤中的迁移性

Results of PBT and vPvB assessment

PBT 和 vPvB 的结果评价

Endocrine disrupting properties

内分泌干扰物

Other adverse effects

其他不良影响

: No available data. 无可用数据。.

: No available data.

无可用数据。

: No available data.

无可用数据

: No available data.

无可用数据

: PBT/vPvB assessment not available as chemical safety assessment not

required/not conducted

由于化学品安全评估未要求/未开展,因此 PBT/vPvB 评估不可用

: The mixture does not contain endocrine disruptor

这种混合物不含内分泌干扰物。

No available data.

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

废弃处置方法

废弃注意事项

产品性质

: This product is not regarded as hazardous waste, as defined by

Regulation (EC) No.1272/2008.

根据法规(EC)第1272/2008号,该产品不被视为危险废物。

Waste disposal methods

Refer to relevant national and local regulations before disposal.

回收利用或参阅国家和地方有关法规。

Contaminated packaging

: Use and recycle after cleaning.

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.

废弃处置前应参阅国家和地方有关法规。





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#### 14 - Transport Information 第十四章 运输信息

#### **Transport Attentions:**

### 运输注意事项:

In the case of land, air and ocean shipping, avoid exposure to fire, water, prevent damp and insolation. The products restrict the use of own steel tanker shipment when railway transport, submit to relevant departments for approval. The transport vehicles should be equipped with the appropriate variety and quantity of fire control equipment and emergency equipment for leakage. In summer, best transport in morning or evening. Transport tank should have grounding chain, the inner of tank should have baffle hole plate to reduce static electricity. Ban mixed operation with antioxidants, acid, alkali metal and amine. Prevent insolate, rain and heat in transit. Keep away from fire, heat and high temperature when stopover. Exhaust pipes of transport vehicle must be equipped with fire retardant equipment. Ban load and unload with mechanical equipments and tools that easy to produce the spark. According to prescribed routes when road transport. Do not stay in residential area and densely populated area. Ban humping when railway transport. Ban bulk transport use wooden boats, concrete boats.

Please refer to section 7-HANDING AND STORAGE also, and requirements of the IATA/ICAO/PG. 在陆运、空运和海运的情况下,应避免暴露于火、水,防止受潮和日晒。本品铁路运输时限使用企业自备罐车装运,装运前需报有关部门批准。运输时运输车辆应配备相应品种和数量的消防器材及泄漏应急处理设备。夏季最好早晚运输。运输时所用的槽(罐)车应有接地链,槽内可设孔隔板以减少震荡产生静电。严禁与氧化剂、酸类、碱金属、胺类、食用化学品等混装混运。运输途中应防曝晒、雨淋,防高温。中途停留时应远离火种、热源、高温区。装运该物品的车辆排气管必须配备阻火装置,禁止使用易产生火花的机械设备和工具装卸。公路运输时要按规定路线行驶,勿在居民区和人口稠密区停留。

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 Not available data

UN 编号 . 无可用数据

Packing group Not available data

包装组别 无可用数据

Proper shipping name Not available data

运输名称 无可用数据

**DOT regulations** 

运输部条例

Hazard class Not hazardous goods

危险类别 : 非危害品





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UN-Number Not available data

UN 编号 . 无可用数据

Packing group . Not available data

Proper shipping name Not available data

运输名称 无可用数据

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 Not available data

UN 编号 . . . 无可用数据

Packing group Not available data

Proper shipping name Not available data

#### 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 Not available data

联合国编号 : 无可用数据

Packing group Not available data

运输包装 无可用数据

Proper shipping name Not available data

合适运输名称 : 无可用数据

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)

德国关于水危害分类的规定(WGK)

Substance of Very High Concern (SVHC) according to

Regulation (EC) No. 1907/2006 (REACH)

REACH法规(EC) No. 1907/2006的高度关注物

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 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

Regulation (EC) No. 1907/2006 (REACH) Annex

XVII( requiring Authorisation for use)

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

Regulation (EC) No. 1907/2006 (REACH)-Pre-registered substance.

法规(EC) 1907/2006号(REACH)预注册物质

Regulation (EC) No. 1005/2009 on substances that deplete

the ozone laver

法规(EC) 1005/2009号关于破坏臭氧层物质

Regulation (EC) No 649/2012 concerning the export and import of dangerous chemicals, Annex I

法规(EC)649/2012号关于危险化学品的出口、进口,附

ELINECS(European List of Notified Chemical Substances)

ELINECS (欧洲化学品通报清单)

Particular provisions

特别规定

Not listed

不列入

No available data.

无可用数据





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Chemical Safety Assessment 化学品安全评估 No available data. 无可用数据

#### 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





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LC50 : Lethal Concentration fifty

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- : Threshold Limit Value-Short Term Exposure Limit

STEL 容许最高浓度-短时间暴露限值 PEL : Permissible Exposure Limit

容许暴露限值

Date: Apr. 06, 2023

填表时间: 2023年04月06日

Data Audit Units: EMTEK(GUANGZHOU) CO.,LTD. 数据审核单位: 广州信测标准技术服务有限公司

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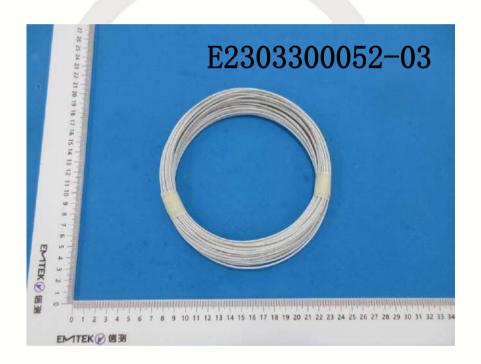


# 化学品安全技术说明书(**MSDS**) Bambu PLA Marble 3D 打印线材

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#### Sample Photo: 样品照片:



\*\*\*The End of MSDS\*\*\*
\*\*\* MSDS 结束\*\*\*





## 化学品安全技术说明书(**MSDS**) Bambu PLA Marble 3D 打印线材

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