SAFETY DATA SHEET

FDM Filament Standard PLA Silk - Titan Flame

SECTION 1 : IDENTIFICATION

1.1 Product identifier

Product name FDM Filament Standard PLA Silk-Titan Flame

Recommended use and restrictions on use

Recommended use For use in Phrozen 3D-printers

Restrictions on use Do not use in the situation that easily generate aerosol, steam.

1.2 Name, address and phone of manufacturer , importers or supplier

Manufacturer Phrozen Tech Co., Ltd.287 Niupu Rd, Xiangshan Dist,
Hsinchu City 30091, TAIWAN

Phone +886-3621-0505

Emergency phone / Fax +886-3621-0505 / +886-3539-6591

SECTION 2 : HAZARD IDENTIFICATION

2.1 Hazard classification None

2.2 Signal statement None

2.3 Pictograms None

2.4 Signal word None

2.5 Hazard statements None

2.6 Precautionary statements None

2.7 Other hazard None

SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

Not relevant (mixture)

3.2. Mixtures

Components	CAS number	Weight %	Classification acc. to GHS
PLA	9051-89-2	70-90%	-
TPU	27083-55-2	10-20%	-

SECTION 4 : FIRST AID MEASURES

4.1. First-aid advice and recommendations for different routes of exposure

4.1.1 Inhalation

If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.

4.1.2 Skin Contact

Flush skin and hair with running water (and soap if available).
Seek medical attention in event of irritation.

4.1.3 Eyes Contact

Wash out immediately with water. If irritation continues, seek medical attention.
Removal of contact lenses after an eye injury should only be undertaken by skilled
personnel.

4.1.4 Ingestion

Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2. Most important symptoms and hazardous effecects

None

4.3. Protection of First-aid personnel

None

4.4. Note for physician

None

SECTION 5 : FIRE-FIGHTING MEASURES

5.1 Applicable extinguishing media

Foam. Dry chemical powder. BCF (where regulations permit).Carbon dioxide.

5.2 Specific hazards confronted during fire fighting

Combustible solid which burns but propagates flame with difficulty.
Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form

explosive dust-air mixtures and result in a fire or dust explosion (including secondary

explosions).

5.3 Specific fire-fighting procedure

Alert Fire Brigade and tell them location and nature of hazard.
Prevent, by any means available, spillage from entering drains or water courses.
Use water delivered as a fine spray to control fire and cool adjacent area.

5.4 Specific protecttive equipments for fire-fighters

Wear breathing apparatus plus protective gloves.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions

None

6.2. Environmental precautions

None

6.3. Cleaning methods

None

SECTION 7 : SAFETY HANDLING AND STORAGE

7.1. Handling

Limit all unnecessary personal contact.

Wear protective clothing when risk of exposure occurs.

Use in a well-ventilated area.

Avoid contact with incompatible materials.

Store in original containers.

Keep containers securely sealed.

Store in a cool, dry, well-ventilated area.

7.2. Storage

Avoid contamination of water, foodstuffs, feed or seed.

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Engineering controls

Process controls which involve changing the way a job activity or process is done to reduce the risk.
Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

8.2. Control Parameters

None

8.3. Personal protective equipment

8.3.1 Respiratory protection

Wear respiratory protection if ventilation is insufficient.

8.3.2 Hand protection

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer.
Where the chemical is a preparation of several substances,the resistance of the glove
material can not be calculated in advance and has therefore to be checked prior to the
application.
The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and.has to be observed when making a final choice.Suitability and
durability of glove type is dependent on usage.

8.3.3 Eye protection

Safety glasses with side shields. Chemical goggles.

8.3.4 Skin protection

Overalls./P.V.C. apron.

8.4. Hygiene measures

Do not eat, drink and smoke in work areas.
Wash thoroughly after handling.
Contaminated clothing should be cleaned before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Apperance and color	Silk-Titan Flame Solid	**Odor**	Typical acrylate
Odor threshold	N/A	**Melting point**	N/A
pH value	7	**Boiling point**	N/A
Flammable	Non-flammable	**Flash point Testing method**	>110°C Closed cup
Decomposition Temp	N/A		
Natural Temp	N/A	**Explosive limit**	N/A
Vapor pressure	N/A	**Vapor density**	N/A
Density	1.2g /cm³	**Solubility**	Insoluble in water
Octanol/water distribution coefficient (log Kow)	N/A	**Evaporaion rate**	N/A

SECTION 10: STABILITY AND REACTIVITY

10.1. Stability

Stable under normal condition.

10.2. Possible hazardous reation under specific conditions

None

10.3. Must avoid condition

None

10.4. Must avoid substances

None

10.5. Hazardous decomposted product

None

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Test data are not available for the complete mixture.

11.1. Exposure paths

None

11.2. Symptoms

None

11.3. Acute toxicity

None

11.4. Chronic toxicity

None

11.5. Reproductive and/or Developmental Effects

None

SECTION 12: ECOLOGICAL INFORMATION

The product has not been tested.

12.1. Ecological toxicity

None

12.2. Per sistence and degradability

None

12.3. Bio-accumulative potential

None

12.4. Mobility in soil

None

12.5. Other adverse effects

None

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste disposal methods

Waste shall be separated into the categories that can be handled separately by the local
or national waste management facilities.

13.2. Sewage disposal method

Do not empty into drains. Avoid release to the environment.

13.3. Contaminated Packaging disposal method

Handle contaminated packages in the same way as the substance itself.

SECTION 14: TRANSPORT INFORMATION

Land transport **USDOT**	Not classified as dangerous goods under transport regulations.
Sea transport **IMDG**	Not classified as dangerous goods under transport regulations.
Air transport **IATA/ICAO**	Not classified as dangerous goods under transport regulations.
Further information	N/A
Other requirements	N/A

SECTION 15: REGULATORY INFORMATION

15.1. List of substances subject to authorisation (REACH, Annex XIV) / SVHC- candidate list

None of the ingredients are listed

15.2. Directive on the restriction of the use of certain hazardous substances in electrical

and electronic equipment (RoHS)

None of the ingredients are listed

15.3. Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed

15.4. Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

15.5. National inventories

Country	Inventory	Status
AU	AU AICS	not all ingredients are listed
CA	DSL	not all ingredients are listed
CA	NDSL	not all ingredients are listed
CN	IECSC	not all ingredients are listed
EU	ECSI	not all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
NZ	NZIoC	not all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	not all ingredients are listed
US	TSCA	not all ingredients are listed

Legend

AIIC	Australian Inventory of Industrial Chemicals
DSL	Domestic Substances List (DSL)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China

EU	EC Substance Inventory (EINECS, ELINCS, NLP)
EU	REACH registered substances
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
ISHA-ENCS	Inventory of Existing and New Chemical Substances (ISHA-ENCS)
NZIoC	New Zealand Inventory of Chemicals
CICR	Chemical Inventory and Control Regulation
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

SECTION 16: OTHER INFORMATION

Reference	US OSHA HCS 29 CFR 1910.1200 / ECHA / OECD
Table formulation unit	Name ：Phrozen Tech. Co. Ltd Address ／Phone：287 Niupu Rd, Xiangshan Dist, Hsinchu City 30091, TAIWAN(R.O.C)/+ 886-3-6210505
Table formulator	Job title：Occupational Safety & Health manager Name ：Chun-Yao，Kuo
Table formulation Date	2026.07.21
Remarks	In the above described information, the symbol “N/A” means no relevant information currently.

To the best of our knowledge the information contained herein is accurate. However, Phrozen Tech. Co. Ltd. makes no warranty, expressed or implied, regarding the accuracy of these results to be obtained from the use thereof. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Phrozen Tech. Co. Ltd. assumes no responsibility for injury from the use of the product described herein.

END OF SAFETY DATASHEET