SAFETY DATA SHEET

Phrozen Standard Filament - PLA Tough, Black

SECTION 1 : IDENTIFICATION

1.1 Product identifier

Product name **Phrozen Standard Filament - PLA Tough, Black**

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

May cause skin allergy.
Harmful if ingested.

2.6 Precautionary statements

Avoid inhaling dust or fumes.
If contact with eyes, rinse with water and seek medical advice.
In case of skin contact, wash with soap and water. If molten PLA contacts the skin, rinse
with cold water immediately and seek medical attention.
In case of accidental ingestion, rinse mouth with water. Do not induce vomiting without
medical advice.

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
Polylactic acid resin	26100-51-6	92-96%	-
Calcium	471-34-1	2-4%	-

SECTION 4 : FIRST AID MEASURES

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

4.1.1 Inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Consult doctor if symptoms persist..

4.1.2 Skin Contact

Instantly wash with plenty of soap and water thoroughly.

4.1.3 Eyes Contact

Flush eyes with flowing water, then consult doctor.

4.1.4 Ingestion

Rinse mouth with water. Do not induce vomiting unless directed by medical
personnel.

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

Water spray, BC-powder, Carbon dioxide (CO_2)

5.2 Specific hazards confronted during fire fighting

May release harmful gases like carbon monoxide and nitrogen oxides during combustion.

5.3 Specific fire-fighting procedure

None

5.4 Specific protecttive equipments for fire-fighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures
to the fire surroundings.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions

None

6.2. Environmental precautions

None

6.3. Cleaning methods

Vacuum or sweep up and place in a standard disposalcontainer. Avoid the use of
air jets

SECTION 7 : SAFETY HANDLING AND STORAGE

7.1. Handling

Keep containers tightly sealed.

7.2. Storage

Store in cool,dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.
Stay away from oxidizing agent.

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Engineering controls

Local exhaust recommended to reduce exposure to fiber dust.

8.2. Control Parameters

None

8.3. Personal protective equipment

8.3.1 Respiratory protection

For operations where inhalation exposure can occur, a NIOSH approved dust mask/respirator is recommended.

8.3.2 Hand protection

None

8.3.3 Eye protection

For operation where eye contact can occur, eye protection such as goggles or safety glasses is recommended.

8.3.4 Skin protection

None

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	Black Solid	**Odor**	Typical acrylate
Odor threshold	N/A	**Melting point**	155-185°C
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	1.24 g /cm³ at 20 °C	**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
Avoid high temperatures, open flames, moisture, and unsuitable environments.

10.4. Must avoid substances
oxidizing agents.

10.5. Hazardous decomposted product
Carbon dioxide and carbon monoxide.

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
Oral LD50 4290mg/kg(rat)
Dermal LD50 5990uL/kg(rabibit)
Primary irritant effect: Irritant for skin and mucous membranes.

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

Dispose of in a manner consistent with federal, state, and local regulations. Hand over
to disposers of hazardous waste. Must be specially treated under adherence to official
regulations.

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	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	2025.11.25

formulation **Date**	
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