MELOVY

SAFETY DATA SHEET (According to Regulation (EC) No.1907/2006)

Product Code	Revision Number	Revision Date
PLA-CF	01	2024/02/05

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name:	3D printing filament
Product code:	PLA-CF
Product Use:	A filament to be used in 3D printing applications.
Supplier:	Suzhou Melovy Technology CO.,LTD
Address:	NO.68, Nantiancheng Road, Xiangcheng Dist. Suzhou City, CN.
Responsible/issuing person:	info@melovy3d.com
Emergency telephone numbers:	+86-(0512)-65808834

2. HAZARDS IDENTIFICATION

Health Effects:	Prolonged and /or repeated contacts: Risk of skin sensitization.When handled at high temperatures, can cause serious burns.
Potential Health Effects:	Eye contact: Contact with eyes may cause irritation.
Skin contact:	Substance may cause slight skin irritation.
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Inhalation:	Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Low hazard for usual industrial or commercial handling.
Target organ effects:	There were no target organ effects noted following ingestion or dermal exposure in animal studies.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name:	polylactic resin
CAS Number:	9051-89-2
Weight:	＞75%
OSHA Exposure Limits:	None
ACGIH Exposure Limits:	None

All ingredients in quantities > 1.0% (0.1% for carcinogens) that are potentially hazardous per OSHA definitions.

Other standards: This material can generate Particulates Not Otherwise Classifiable (PNOC).

The Occupational Safety and Health Administration (OSHA) PEL/TWA for PNOC is 15 mg/m^3 for total dust and 5 mg/m^3 for the respirable fraction. The American Conference of Governmental Industrial Hygienists (ACGIH) TLV/TWA for PNOC is 10 mg/m3 for inhalable particulates and 3 mg/m^3 for respirable particulates.

4. FIRST AID MEASURES

Inhalation:	Move person to fresh air; if effects occur, consult a physician.
Skin contact:	Wash skin with plenty of water. Seek first aid or medical attention as needed. If molten material comes in contact with the skin, do not apply ice but cool under ice water or running stream of water. DO NOT attempt to remove the material from skin. Removal could result in severe tissue damage.

	Seek medical attention immediately. Suitable emergency safety shower facility should be immediately available.
Eye contact:	Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.
Ingestion:	If swallowed, seek medical attention. May cause gastrointestinal blockage. Do not give laxatives. Do not induce vomiting unless directed to do so by medical personnel.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media :	Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.Foam.
Hazardous decomposition:	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Carbon monoxide. Carbon dioxide. Combustion products may include trace amounts of: Styrene. Hydrogen cyanide.
Special protective equipment:	As in Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (includes fire-fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used,

	fight fire from a protected location or safe distance.
Fire-fighting procedures:	Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires.
Other information：	Fine dust dispersed in air may ignite. Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use personal protective equipment. See Section 8. Remove all sources of ignition. Avoid dust formation. Avoid contact with skin and eyes. Sweep up to prevent slipping hazard.
Environmental precautions：	Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.
Methods for cleaning up：	Shovel into suitable container for disposal.

7. HANDLING AND STORAGE

Safe handling advice:	Avoid contact with skin and eyes. Workers should be protected from the possibility of contact with molten material during fabrication. Low hazard for usual industrial

	or commercial handling. Use personal protective equipment.
Storage conditions:	Store in cool place. No special restrictions on storage with other products.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:	Not established.
Eye/face protection:	Wear safety glasses for general purpose.
Hand protection:	Wear gloves (product handled in molten state).
Skin and body protection:	Wear protective clothing (product handled in molten state).
Respiratory protection:	In case of dust formation, wear a dust mask. In case of insufficient ventilation, wear suitable respiratory equipment.
Hygiene measures:	Avoid contact with skin, eyes, and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Opaque, filament. Solid at room temperature.
Color:	Opaque, black.
Odour:	None
pH:	Not applicable.
Vapor pressure:	Not determined.
Evaporation rate:	Not determined.
Density:	1.03-1.10 g/cm3
Boiling point/range:	Not applicable.

Water solubility:	Insoluble.
Solubility in other solvents:	Noneknown.

STABILITY AND REACTIVITY

10. STABILITY AND REACTIVITY

Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical stability:	Stable.
Conditions to avoid:	Avoid temperatures above 300 °C. Exposure to elevatedtemperatures can cause product to decompose.
Incompatibility:	None known.
Hazardous decomposition products:	Decomposition products depend upon temperature,air products supply and the presence of other materials. Processing mayrelease fumes and other decomposition products. At temperatures exceeding melt temperatures, polymer fragments can be released. Fumes can be irritating.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Ingestion:	Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause choking if swallowed.
Inhalation:	No adverse effects are anticipated from single exposure to

	dust. Vapours released during thermal processing may cause respiratory irritation. The LC50 has not been determined.
Eye damage/eye irritation:	Solid or dust may cause irritation or corneal injury due to mechanical action. Elevated temperatures may generate vapour levels sufficient to cause eye irritation. Effects may include discomfort and redness.
Skin corrosion/irritation:	Prolonged contact is essentially nonirritating to skin. Mechanical injury only. Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns.

12.ECOLOGICAL INFORMATION

Toxicity:	Not expected to be acutely toxic, but material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life.
Persistence and Degradability:	This water-insoluble polymeric solid is expected to be inert in the environment. Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.
Mobility:	No data available

13. DISPOSAL CONSIDERATIONS

Controlled incineration or landfill according to local, state or national laws and regulations concerninghealth and pollution.

14. TRANSPORT INFORMATION

IMDG:	Not regulated.
ADR / RID:	Not regulated
ADN/ADNR:	Not regulated
IATA-DGR:	Not regulated

15. REGULATORY INFORMATION

NOTICE: The information herein is presented in good faith and believed to be accurate as of the print date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws.

16. OTHER INFORMATION

The information in this Material Safety Data Sheet (MSDS) is based on current knowledge and experience. No liability can be assumed for the accuracy and completeness of this information.