

1. IDENTIFICATION

Product name: PLA 3D Printer Filament

Product Use: For use in 3D printing machines

Supplier: Fenner Drives 311 W Stiegel Street, Manheim, PA 17545

Emergency telephone numbers (24 hours a day): (717) 665-2421

2. HAZARDS IDENTIFICATION

Emergency Overview:

This product is not classified according to 29 CFR 1910.1200 Hazard Communication Standard 2012

Potential Health Effects:

Eyes:	None
Skin:	None
Ingestion:	None
Inhalation:	None

Chronic Health Hazards: See section 11 for more information

Other Hazards: Dust may be generated from processing or other means that may become combustible.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance or Preparation: Substance

Chemical Name: Polylactide resin

Content: >98 wt%

Formula: (C₃H₄O₂)_n

CAS No: 9051-89-2

Notes: Particulates may be generated that are not otherwise classifiable (PNOC). OSHA and/or ACGIH guidelines should be followed for PNOC

OSHA: 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction)

ACGIH: 10 mg/m³ (inhalable particulates), 3 mg/m³ (respirable particulates)

4. FIRST AID MEASURES

Inhalation: In case of gases evolving from melted filament, move subject to fresh air. Treat symptomatically. Call physician.

Skin Contact: Not expected to cause irritation. After contact with skin, wash immediately with water. If irritation persists, contact physician.

Eye Contact: In case of small particles, flush with plenty of water for at least 15 minutes. Seek medical advice if any small particles still remain. In case of gases evolving from melted filament of high temperature, flush with plenty of water for at least 15 minutes. Seek medical advice if necessary.

Ingestion: Do not induce vomiting without medical advice. Rinse mouth with water. Call physician immediately.

5. FIRE-FIGHTING MEASURES

Flammability Class: 1

Extinguishing Media: Water, Foam, carbon dioxide, Dry chemical powder

Special Fire-Fighting Procedure: Self-contained breathing apparatus, MSHA/NIOSH approved full protective gear.

Fire and Explosion Hazards: Fine dust may ignite

6. ACCIDENTAL RELEASE MEASURES

Methods for Cleaning up: Recovery if not contaminated or disposal

Personal Precautions: Strands/string remaining on ground may cause slipping

Environmental Precautions: Do not allow material to contaminate ground water.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Use personal protective equipment to protect against the possibility of contact with molten material. Avoid dust formation. Avoid overheating.

Storage: Keep the materials in a cool dry place below 50 °C. Protect from UV / direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Engineering Controls: Use local ventilation and good general extraction.

Respiratory Protection: Use an approved respirator to protect against particulate exposure

Eye Protection: Safety glasses with side shields

Skin Protection: Impervious clothing

Work Hygienic Practices: Avoid contact with skin, eyes, and clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: String/strand

Color: Varies

Odor: Sweet

Physical State: Solid

pH: N/A

Melting Temperature: 150-180 °C

Decomposition Temperature: 250 °C

Solubility: Insoluble in water

Specific Gravity: 1.25

10. STABILITY AND REACTIVITY

Stability: Stable and non-reactive under normal handling and storage conditions

Conditions to Avoid: Avoid temperatures above the decomposition temperature (250 °C).

Auto-ignition Temperature: 388 °C

Materials to Avoid: Strong bases, oxidizing agents

Hazardous Decomposition Products: aldehydes, carbon monoxide, carbon dioxide

11. TOXICOLOGICAL INFORMATION

Principal Routes of Exposure: Eye contact, skin contact, inhalation, ingestion

Acute Toxicity: No target organ effects during animal studies.

Local Effects: Dust may be irritating to eyes, skin, and respiratory system. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Specific Effects: May cause skin irritation. Fumes may cause shortness of breath, chest tightness, sore throat. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Long Term Toxicity: None Found

Mutagenic Effects: None Found

Reproductive Toxicity: No data

Carcinogenic Effects: None Found

Target Organ Effects: None found

Skin: LD50/dermal/rabbit > 2000 mg/kg

Ingestion: LD50/dermal/rabbit > 5000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects: EC50/72h/algae > 1100 mg/kg

Persistence and Degradability: Inherently biodegradable

Bioaccumulation: Not expected

Mobility: No data

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: In accordance with local and federal regulations

14. TRANSPORT INFORMATION

Not regulated by the US Department of Transportation

15. REGULATORY INFORMATION

Federal Regulations:

SARA 313: Not listed

TSCA Inventory List: Listed



State Regulations:

California Proposition 65: Not listed

16. OTHER INFORMATION

REVISION SUMMARY:

Date Prepared: April 26, 2016 **Last Revised:**

Previous Revision:

Summary of Revisions:

4/26/2016 - New SDS

The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made. Consult the Company for Further Information.

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: The company does not recommend any of its products, including samples, for use: (A) in any application which is intended for any internal contact with human body fluids or body tissues (B) as a critical component in any medical device that supports or sustains human life; and (C) specifically pregnant women or in any applications designed specifically to promote or interfere with human reproduction.