



## Material Safety Data Sheet (MSDS)

**Product Name:** PLA 3D Printing Filament

### Section 1: Product Identification

- **Product Name:** X3D PLA 3D Printing Filament
- **Product Code:** X3D-PLA-xxx-xxx
- **Importer Australia:** X3D
- **Manufacturer:** outside of Australia
- **Address:** 12/9 Sainsbury Rd, O'Connor WA 6163
- **Tel:** 08 6380 7488
- **Emergency Phone Number:** Poisons Information Line 13 11 26

### Section 2: Hazard Identification

#### Classification of the Substance or Mixture:

- Not classified as hazardous according to the Globally Harmonized System (GHS).

#### Potential Health Effects:

- **Inhalation:** Inhalation of dust or fumes may cause mild irritation of the respiratory tract.
- **Skin Contact:** PLA filament is generally non-irritating to the skin, but prolonged contact may cause minor irritation in some individuals.
- **Eye Contact:** May cause slight eye irritation. Redness, tearing, and discomfort may occur.
- **Ingestion:** PLA filament is not intended for ingestion. Ingestion may cause gastrointestinal discomfort.

### Section 3: Composition/Information on Ingredients

- **Chemical Name:** Polylactic Acid (PLA)
- **CAS Number:** 26100-51-6
- **Concentration:** 95.97%
- **Chemical Name:** 1,4-Benzendicarboxylic acid with 1,4 butanediol and hexanedioic acid
- **CAS Number:** 60961-73-1
- **Concentration:** 4%
- **Chemical Name:** N'N'-ethylenedi(stearamide)
- **CAS Number:** 110-30-5
- **Concentration:** 0.03%

#### Section 4: First Aid Measures

- **Inhalation:** Remove to fresh air. If respiratory irritation persists, seek medical attention.
- **Skin Contact:** Wash with plenty of soap and water. If irritation develops, seek medical advice.
- **Eye Contact:** Flush eyes with water for at least 15 minutes. If irritation persists, seek medical attention.
- **Ingestion:** Rinse mouth. Do not induce vomiting. Seek medical attention.

#### Section 5: Fire-Fighting Measures

- **Extinguishing Media:** Use water spray, carbon dioxide, dry chemical, or foam.
- **Fire Fighting Procedures:** Wear appropriate protective equipment. Avoid inhaling fumes. Evacuate personnel to a safe area.

#### Section 6: Accidental Release Measures

- **Personal Precautions:** Use appropriate personal protective equipment (PPE). Avoid dust formation.
- **Environmental Precautions:** Prevent product from entering drains or waterways.
- **Cleanup Procedures:** Sweep or vacuum up the spilled material. Dispose of according to local regulations.

#### Section 7: Handling and Storage

- **Handling:** Use in a well-ventilated area. Avoid inhalation of dust. Avoid skin and eye contact.
- **Storage:** Store in a cool, dry place away from direct sunlight and heat sources.

#### Section 8: Exposure Controls/Personal Protection

- **Respiratory Protection:** Use respiratory protection if ventilation is inadequate.
- **Hand Protection:** Wear appropriate gloves.
- **Eye Protection:** Wear safety glasses or goggles.
- **Skin Protection:** Wear protective clothing.

#### Section 9: Physical and Chemical Properties

- **Appearance:** Solid filament, various colors
- **Odor:** None
- **Melting Point:** Approximately 160 - 220°C
- **Solubility in Water:** Insoluble
- **Specific Gravity:** 1.24 - 1.27

#### Section 10: Stability and Reactivity

- **Stability:** Stable under recommended storage conditions. Avoid storing over 250°C
- **Hazardous Polymerization:** Will not occur.
- **Incompatibilities:** Avoid contact with strong acids, bases, and oxidizing agents.

## **Section 11: Toxicological Information**

- **Acute Toxicity:** Not considered acutely toxic.
- **Skin Irritation:** May cause mild irritation in some individuals. Molten material may cause burns.
- **Eye Irritation:** May cause slight eye irritation.
- **Sensitization:** Not known to cause sensitization.
- **Ingestion:** No information or significant adverse effects

## **Section 12: Ecological Information**

- **Ecotoxicity:** PLA is considered non-toxic to aquatic and terrestrial organisms.
- **Environmental Persistence:** PLA is biodegradable under certain conditions.

## **Section 13: Disposal Considerations**

- Dispose of in accordance with local, state, and federal regulations.

## **Section 14: Transport Information**

- Not regulated for transport.

## **Section 15: Regulatory Information**

- This product is not classified as hazardous according to GHS.

## **Section 16: Other Information**

- This MSDS is prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200).

**Disclaimer:** The information provided in this Material Safety Data Sheet is based on our current knowledge and is intended to describe the product for the purposes of health, safety, and environmental requirements only. It should not be considered as a guarantee of any specific properties of the product.