



SAFETY DATA SHEET - MatterHackers PRO Series ESD-Safe PLA

Section 1: Identification of the Substance and Preparation

1.1 Product Identifiers

Product Name: PRO Series ESD-Safe PLA

1.2 Relevant Identified Uses

3D printing filament. Material for FDM/FFF additive manufacturing.

1.3 Supplier Information

MatterHackers, Inc.

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Section 2: Hazard(s) Identification

2.1 Classification of the Substance or Mixture

This product is **not classified as hazardous** under applicable regulations.

2.2 Label Elements

Appearance: Solid monofilament

Color: Black

Odor: None

2.3 Other Hazards

Mechanical handling may generate dust. Thermal decomposition may release irritating fumes.

Section 3: Composition / Information on Ingredients

Description: Polylactic Acid (PLA) with conductive carbon additives.

Components:

- PLA Resin (>90%)
- Conductive carbon additives (<10%)

No hazardous components present above regulatory thresholds.

Section 4: First Aid Measures

Eye Contact:

Flush thoroughly with water. Remove contact lenses if present. Seek medical attention if irritation persists.

Skin Contact:

Wash with soap and water.

If molten material contacts skin, immediately cool with cold water. Do not remove solidified polymer — seek medical attention.

Inhalation:

Move to fresh air. If irritation persists, obtain medical attention.

Ingestion:

Not expected due to product form. If swallowed, rinse mouth and drink water. Do not induce vomiting.

Notes to Physician:

Treat symptomatically.

Section 5: Firefighting Measures

Suitable Extinguishing Media:

Water spray, dry chemical, foam, or carbon dioxide (CO₂).

Special Protective Equipment:

Firefighters should wear self-contained breathing apparatus and protective gear.

Hazardous Combustion Products:

Carbon monoxide, carbon dioxide, dense smoke, and irritating fumes.

Section 6: Accidental Release Measures**Personal Precautions:**

Avoid creating dust. For molten material, allow to cool before handling.

Environmental Precautions:

Prevent material from entering drains or waterways.

Clean-Up Procedures:

Sweep or vacuum to prevent slipping hazards. Dispose in accordance with local regulations.

Section 7: Handling and Storage**Safe Handling:**

Avoid dust accumulation. Use with adequate ventilation when processing. Avoid contact with molten polymer. Keep away from ignition sources.

Storage:

Store in a cool, dry place away from direct sunlight. Keep sealed to prevent moisture absorption.

Section 8: Exposure Controls / Personal Protection**Exposure Limits:**

No exposure limits established.

Respiratory Protection:

Not required under normal use. Use a NIOSH-approved respirator if fumes or dust are generated during processing.

Eye Protection:

Safety glasses with side shields recommended.

Skin Protection:

Protective gloves recommended when handling molten material.

Engineering Controls:

Use local exhaust ventilation when printing or machining.

Section 9: Physical and Chemical Properties

- **Form:** Solid
- **Appearance:** Black filament
- **Odor:** None
- **Melting/Softening Range:** $T_g \approx 55^{\circ}\text{C}$
- **Auto-Ignition Temperature:** $>375^{\circ}\text{C}$
- **Decomposition Temperature:** $>250^{\circ}\text{C}$
- **Flammability:** Combustible as dust; moderately flammable when exposed to flame
- **Density:** $>1.0 \text{ g/cc}$
- **Solubility in Water:** Insoluble
- **Vapor Pressure:** Negligible

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Reactivity: None known.

Conditions to Avoid: Ignition sources, strong oxidizing agents.

Hazardous Decomposition Products: Phenols, carbon monoxide, carbon dioxide, smoke.

Section 11: Toxicological Information

No known significant acute or chronic toxicity.
Possible mild mechanical irritation to eyes or respiratory tract from dust.
Thermal decomposition vapors may cause irritation.

Section 12: Ecological Information

No known ecological hazards.
Material is not water-soluble and is expected to settle in aquatic environments.

Section 13: Disposal Considerations

Dispose of unused material in accordance with federal, state, and local regulations.
Mechanical recycling is preferred when available.

Section 14: Transport Information

Not regulated by DOT, IMDG, or IATA.

Section 15: Regulatory Information

This product complies with applicable chemical inventory requirements.

Section 16: Other Information

Prepared for: MatterHackers, Inc.
For questions, contact: support@matterhackers.com
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