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# Material Safety Data Sheet

## 1. Company identification

1.1 Company: **AIO Robotics, Inc.**

1.2 Address: **3641 Watt Way, HNB Room 10, Los Angeles, CA, 90089, USA**

1.3 Tel: **+1 3104984049** Email: **contact@airobotics.com**

## 2. Substance identification

2.1 Trade Name: PLA Normal Filament

2.2 Components: Polymer-blend based on polylactic acid (PLA, more than 98%) , contains some additives..

2.3 CAS No: PLA: 9051-89-2

2.4 Additional information: no harmful ingredients.

## 3. Hazard identification

3.1 Contact with molten product may cause thermal burns.

3.2 Not cause eye, skin and respiratory contact irritation.

3.3 No data available concerning sensitizing effects, repeated dose toxicity and terrestrial toxicity.

## 4. First-aid measures

4.1 If inhaled: Remove the affected individual into fresh air and keep the person calm. If difficulties occur, seek medical attention.

4.2 If on skin: Areas affected by molten material should be quickly placed under cold running water. Burns caused by molten material require hospital treatment. Seek medical assistance for removal of adhering material.

4.3 If in eyes: In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek medical attention.

4.4 If swallowed: No hazards anticipated. Rinse mouth and then drink plenty of water. If difficulties occur, seek medical attention.

## 5. Fire-fighting measures

5.1 Flash point: > 550 °F, Auto ignition: 470 °C

5.2 Suitable extinguishing media: water, foam, dry extinguishing media

5.3 Protective equipment for fire-fighting: self-contained breathing apparatus and turn-out gear.

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## 6. Accidental release measures

6.1 Avoid inhalation. Avoid contact with the skin, eyes and clothing. Sources of ignition should be kept well clear.

6.2 Avoid raising dust. Ensure adequate ventilation. After decontamination, spill area can be washed with water.

## 7. Handling and storage

7.1 Keep container tightly closed and dry; store in a cool place below 50 °C

7.2 Avoid extreme heat. Avoid direct sunlight.

7.3 Avoid all sources of ignition: heat, sparks, opening flame.

## 8. Physical and chemical properties

8.1 Density (20°C): 1.26 g/cm<sup>3</sup>

8.2 Form: filament

8.3 Melting range: 150-170 °C (DSC, 10 K/min)

8.4 Thermal decomposition: 250°C (TGA, 10 K/min)

8.5 Odour: odourless

8.6 Oxidising properties: not self igniting / flammable

8.7 Explosions limits: not applicable

8.8 Solubility in water: insoluble

## 9. Stability and reactivity

9.1 Stability: The product is stable at recommended storage conditions.

9.2 Conditions to be avoided: Avoid exposure to extreme heat and all sources of ignition.

9.3 Substances to be avoided: Strong oxidizing agents

9.4 Hazardous decomposition products: Carbon monoxide, carbon dioxide, aldehydes, low molecular weight oligomers.

## 10. Toxicological information

10.1 Local irritation: Dust can cause irritation of eyes, respiratory organs and skin. After ingestion stomach pain or nausea are possible.

10.2 Other remarks: Based on our state of knowledge and experience no injurious health effects are expected if product is properly handled for the designated use.

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## **11. Ecological information**

11.1 Ecotoxicological effects: No negative ecological effects known at the present state of knowledge, test results are not available. Due to insolubility in water most probably not hazardous to aquatic organisms.

11.2 Biological degradation: PLA is biodegradable.

11.3 Bioaccumulation: Due to its consistency and insolubility in water biological accumulation is not expected

## **12. Disposal considerations**

Composting or incineration.

## **13. Regulatory information**

Complies with TSCA.

## **14. Other information**

Please call to (1)-3104984049 or Email: [contact@airobotics.com](mailto:contact@airobotics.com)

### **Important:**

All information on this data sheet is based on the present state of our knowledge and does not guarantee of any kind of usage, application or purpose, whether implied or expressed since conditions of use are outside our control. It is provided for your guidance only. For your particular purpose, we recommend that you make tests to determine the suitability of a product prior to use. Each customer should establish his own rules and take proper steps appropriate to the circumstances within his control and must take responsibility for observing existing laws and regulations. This Data Sheet does not form part of the conditions of sale of our products and is of a general nature.

**End of data sheet**