

Material Safety Data Sheet

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1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER	
Product Name	PLA 3D Printer filament
Company Name	Aurarum Pty Ltd (ABN)
Address	11/107-113 Heatherdale road Ringwood 3134 VIC
Telephone	61 3 8822 3606
Email	Sales@aurarum.com.au
2. HAZARDS IDENTIFICATION	
Hazard Classification	Not Dangerous Goods, nor Workplace Hazardous Substance, nor Scheduled Poison. Not classified as a GHS Hazardous Chemical in Australia.
Other Information	MELTED PLASTIC: Will cause heat burns if the hot melted resin contacts the skin. Thermal decomposition can create toxic vapours, gases or fumes Vapours emitted during overheating from decomposing resin may be irritating to the eyes
3. COMPOSITION/INFORMATION ON INGREDIENTS	
Chemical Characterization	Solid
Ingredients Name	Proportion
(PLA)	>93%
Other (colour)	<7%
4. FIRST AID MEASURES	
Inhalation	GASES FROM MELTED PLASTIC: In the case of gases evolving from the melted resin causing discomfort move to fresh air. If discomfort continues seek medical advice.
Ingestion	In the case of gases evolving from the melted resin causing discomfort move to fresh air. If discomfort continues seek medical advice.
Skin	If a person touches the molten plastic, cool the affected part with fresh water. Do not try to remove the plastic by force and seek medical advice if the person got burnt.
Eye	Irrigate with copious quantity of water for 15 minutes. Eyelids to be held open. Seek medical assistance if symptoms persist.
First Aid Facilities	Normal wash room facilities, soap, water, eye wash, safety shower.
Advice to Doctor	Treat symptomatically.
5. FIRE FIGHTING MEASURES	
Fire Fighting Measures	EXTINGUISHING MEDIA: Water, foam, dry chemical powder or carbon dioxide. If involved in a fire from another source, use extinguishing media for that fire. SPECIAL FIREFIGHTING PROCEDURES: Fire-fighters should wear self-contained breathing apparatus and full protective clothing. Fire-fighting equipment should be thoroughly decontaminated after use. SPECIAL HAZARDS: Forms large amounts of smoke and soot in a fire.
Decomposition Temp.	Not available
6. ACCIDENTAL RELEASE MEASURES	
Emergency Procedures	Collect and dispose
7. HANDLING AND STORAGE	
Handling and Storage	HANDLING: Avoid breathing dust and gases/vapours from heating. If a dust is formed there is a potential to have an organic dust

	explosion. Wear protective equipment. STORAGE: Store in a dry area. Keep away from direct sunlight and protect against large temperature fluctuations. Avoid heat and ignition sources in and around the storage area.
Stability and Reactivity	Not bio-degradable Recyclable Keep away from solvents, specifically Acetone
8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
National Exposure Standards	No specific exposure standard has been established by Safe Work Australia (formerly the ASCC, formerly NOHSC) Keep atmospheric contamination as low a level as practically possible. Nuisance Dusts 10 mg/m ³ TWA (inspirable dust)
Engineering Controls	No special requirements when handled as pellets at room temperature. When heated provide sufficient ventilation to control exposure below exposure standards. Use local exhaust ventilation at sources of air contamination such as open process equipment.
Personal Protective Equipment	RESPIRATORY: Avoid breathing dust and gases/vapours from heating. Wear a respirator when cleaning moulding machines. Use approved respiratory protection equipment suitable for dust and/or organic vapours in accordance with AS1715/1716 when exposure standards are exceeded. SKIN: Wear protection gloves of heat-resistance when handling melting polymer. Eye protection Wear protective eyeglasses or chemical safety goggles Always wash hands before smoking, eating, drinking or using the toilet. Laundry clothes before reuse.
9. PHYSICAL AND CHEMICAL PROPERTIES	
Form	Solid thread/filament
Appearance	Various colours
Odour	None when at room temperature, might be unpleasant when heated
Decomposition Temperature	260°C
Melting Point	150-180°C
Boiling Point	Decomposes
Specific Gravity	1.15-1.13 at 23°C
Other Information	SOLUBILITY: Insoluble in water.
10. STABILITY AND REACTIVITY	
Stability and Reactivity	Stable and non-reactive under normal handling and storage conditions. CONDITIONS TO AVOID: Heat and ignition sources. INCOMPATIBLE MATERIALS: Strong oxidizers. HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce carbon dioxide and carbon monoxide. HAZARDOUS POLYMERISATION: Will not occur.
11. TOXICOLOGICAL INFORMATION	
Inhalation	Material may be irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness. Overheated resin will decompose and release harmful gases.
Skin	No effects expected from handling the filament MELTED RESIN: Will cause heat burns if the hot melted resin contacts the skin.
Ingestion	Slightly harmful if swallowed.
Eye	Vapours emitted during overheating from decomposing resin may be irritating to the eyes. Any dust formed will only be a mechanical irritant.
Chronic Effects	Dust generated may cause mechanical irritation which may lead to dermatitis with prolonged exposure.

12. ECOLOGICAL INFORMATION	
Ecological Information	Not expected to a significant environmental hazard. May be a slightly water-polluting substance. To avoid being swallowed by ocean species or birds, do NOT dispose of the waste filament to ocean or water courses.
13. DISPOSAL CONSIDERATIONS	
Disposal Considerations	DISPOSAL: In accordance with Local, State & Federal EPA waste regulations. If feasible, recycle for low grade moulded products. Properly cured (plastic) waste may be disposed of in a sanitary landfill. Alternatively, burn in an approved incinerator (which may need fume scrubbers)
14. TRANSPORT INFORMATION	
Transport Information	NOT defined as Dangerous Goods by the Australian Code for the Transport of Dangerous Goods by Road & Rail; by the IATA Air Transport Dangerous Goods Regulations; or by the IMDG (International Maritime Dangerous Goods) Code.
15. REGULATORY INFORMATION	
Poisons Schedule	Not Scheduled
Packaging & Labelling	Not Dangerous Goods, nor Workplace Hazardous Substance, nor Scheduled Poison. Not classified as a GHS Hazardous Chemical in Australia.
16. OTHER INFORMATION	
	NOTE: This MSDS summarises our best knowledge of the health and safety hazard information on the product, and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company, or in the event of an emergency, the Emergency Response. Our responsibility for products sold is subject to our standard terms and conditions.
	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.