

Safety Data Sheet

according to WHS Regulations

Printing date 25.11.2021

Revision: 25.11.2021

1 Identification

Product Name: PLA Filament eResin

Other Means of Identification: Mixture

Part Number: TL4433, TL4434, TL4435, TL4436, TL4437, TL4438, TL4439

Recommended Use of the Chemical and Restriction on Use: 3D Printer Filament Resin.

Details of Manufacturer or Importer:

Electus Distributions Pty Ltd
320 Victoria Road
Rydalmere, NSW 2116
Australia

Phone Number: 02 8832 3200

Emergency telephone number: National Poisons Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



Skin Corrosion/Irritation 2	H315 Causes skin irritation.
Serious Eye Damage/Irritation 2	H319 Causes serious eye irritation.
Skin Sensitisation 1	H317 May cause an allergic skin reaction.

Signal Word Warning

Hazard Statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

Precautionary Statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves / eye protection / face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362+P364	Take off contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P321	Specific treatment (see on this label).
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

(Contd. on page 2)

Safety Data Sheet

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Printing date 25.11.2021

Revision: 25.11.2021

Product Name: PLA Filament eResin

(Contd. of page 1)

Hazardous Components:		
CAS: 13048-33-4	Hexamethylene diacrylate ⚠ Skin Corrosion/Irritation 2, H315; Serious Eye Damage/Irritation 2, H319; Skin Sensitisation 1, H317	>30%
Non Hazardous Components:		
CAS: 13463-67-7	Titanium oxide (TiO ₂)	1-5%

4 First Aid Measures

Inhalation: If inhaled, remove to fresh air. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms persist.

Eye Contact:

In case of eye contact, rinse cautiously with water for at least 10 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if symptoms persist.

Ingestion:

If swallowed, induce vomiting by drinking warm water. Keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek medical attention if symptoms occur.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: Causes skin irritation. May cause an allergic reaction. May cause redness.

Eye Contact: Causes serious eye irritation. May cause tearing and redness.

Ingestion: May cause gastrointestinal irritation.

5 Fire Fighting Measures

Suitable Extinguishing Media: Water mist, anti-ethanol foam, dry chemical powder, and carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon.

Product is not flammable. However, when exposed to light, product reacts violently and solidifies, giving off intense heat and irritating gases.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Minimise run-off from fire fighting measures entering drains or water courses.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate personal protective equipment. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material.

Collect the spilled material and place into a suitable container for disposal. Use only non-sparking tools.

(Contd. on page 3)

Safety Data Sheet

according to WHS Regulations

Printing date 25.11.2021

Revision: 25.11.2021

Product Name: PLA Filament eResin

(Contd. of page 2)

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Take precautionary measures against static discharge. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from sunlight, heat, and sources of ignition. Keep away from oxidising agents, acids, bases, and illuminants. The recommended storage temperature is 18-35 °C.

8 Exposure Controls and Personal Protection

Exposure Standards:**CAS: 13463-67-7 Titanium oxide (TiO₂)**WES | TWA: 10 mg/m³**Engineering Controls:**

Ensure adequate ventilation and heat dissipation, keeping airborne concentrations below occupational exposure standards. Use explosion-proof ventilating equipment.

Respiratory Protection:

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Chemical safety glasses. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Liquid
Colour:	According to product specification
Odour:	Slight, ester-like
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	No information available
Flammability:	No information available
Ignition Temperature	No information available

(Contd. on page 4)

Safety Data Sheet

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Printing date 25.11.2021

Revision: 25.11.2021

Product Name: PLA Filament eResin

(Contd. of page 3)

Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Density:	No information available
Relative Density at 25 °C:	1.104 (Water = 1)
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Insoluble
Partition Coefficient (n-octanol/water):	No information available
Viscosity at 25 °C:	250±50 mPas

10 Stability and Reactivity

Possibility of Hazardous Reactions:

Contact with light may cause product to violently solidify, giving off intense heat and irritating gas.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.**Conditions to Avoid:** Protect from sunlight, heat, and sources of ignition.**Incompatible Materials:** Oxidising agents, acids, bases, and illuminants.**Hazardous Decomposition Products:** Oxides of carbon.

11 Toxicological Information

Toxicity:**LD50/LC50 Values:****CAS: 13048-33-4 Hexamethylene diacrylate**

Oral LD50 >5,000 mg/kg (rat)

Dermal LD50 >3,000 mg/kg (rab)

CAS: 13463-67-7 Titanium oxide (TiO2)

Oral LD50 >20,000 mg/kg (rat)

LD50 >10,000 mg/kg (rabbit)

Inhalation LC50/4 h 6,082 mg/l (rat)

Acute Health Effects**Inhalation:** May cause respiratory irritation.**Skin:** Causes skin irritation. May cause an allergic reaction. May cause redness.**Eye:** Causes serious eye irritation. May cause tearing and redness.**Ingestion:** May cause gastrointestinal irritation.**Skin Corrosion / Irritation:** Causes skin irritation.**Serious Eye Damage / Irritation:** Causes serious eye irritation.**Respiratory or Skin Sensitisation:** May cause an allergic skin reaction.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** Titanium dioxide is classified by IARC as Group 2B - Possibly carcinogenic to humans.**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.

(Contd. on page 5)

Safety Data Sheet

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Revision: 25.11.2021

Product Name: PLA Filament eResin

(Contd. of page 4)

Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** No information available**Existing Conditions Aggravated by Exposure:** No information available

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:**

No adverse ecological effects are expected. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

CAS: 13463-67-7 Titanium oxide (TiO₂)

EC50/48 h	>100 mg/l (daphnia)
EC50/72 h	>10,000 mg/l (skeletonema costatum)
LC50/96 h	>1,000 mg/l (fish)
	>100 mg/l (rainbow trout)

Persistence and Degradability: No data available on finished product.**Bioaccumulative Potential:** No data available on finished product.**Mobility in Soil:** No data available on finished product.**Other adverse effects:** No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number Not regulated**Proper Shipping Name** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

All ingredients are listed.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:

Not a scheduled poison.

(Contd. on page 6)

Safety Data Sheet

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Printing date 25.11.2021

Revision: 25.11.2021

Product Name: PLA Filament eResin

(Contd. of page 5)

16 Other Information

Date of Preparation or Last Revision: 21.10.2021**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2

Serious Eye Damage/Irritation 2: Serious eye damage/eye irritation – Category 2

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020”

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