## in accordance with EPA and WORKSAFE regulations

Printing date 09.02.2022 Revision: 09.02.2022

## 1 Identification of the substance or mixture and of the supplier

Product Name: PLA Pro eResin Liquid Other Means of Identification: Mixture Part Number: TL4440, TL4441, TL4442

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

#### **Details of Manufacturer or Importer:**

Electus Distribution 16-18 Fisher Crescent

Mt Wellington, Auckland 1060 **Phone Number:** 0800 235 328

Emergency telephone number: National Poison Centre: 0800 POISON (0800 764-766)

#### 2 Hazards identification

#### **Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Health and Safety at Work (Hazardous Substances) Regulations 2017, New Zealand. Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2020 Transport of Dangerous Goods on Land.



Skin Corrosion/Irritation 2 H315 Causes skin irritation.

Eye Irrit. 2A 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**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

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.

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## 3 Composition/Information on ingredients

**Chemical Characterization: Mixtures** 

**Description:** Mixture of substances listed below with nonhazardous additions.

Hazardous Components:		
CAS: 68987-79-1	Acrylated Aliphatic Urethane	40-50%
	♦ Skin Corrosion/Irritation 2, H315; Eye Irrit. 2A, H319; Skin Sensitisation 1, H317	
CAS: 13048-33-4	Hexamethylene diacrylate	20-40%
	♦ Skin Corrosion/Irritation 2, H315; Eye Irrit. 2A, H319; Skin Sensitisation 1, H317	
CAS: 947-19-3	1-Hydroxycyclohexyl phenyl ketone	1-5%
	♦ Eye Irrit. 2A, H319	
CAS: 1333-86-4	Carbon black	1-5%
	♦ Carcinogenicity 2, H351	

#### 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 occur.

### **Eye Contact:**

In case of eye contact, hold eyelids open and rinse with water for at least 10 minutes. Seek medical attention if symptoms persist.

### Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Seek immediate medical attention.

#### Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: Causes skin irritation. May cause an allergic skin 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, alcohol resistant 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 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.

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### 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.

#### **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.

## 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.

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/personal protection

Exposure St	tandards:
-------------	-----------

CAS: 1333-86-4 Carbon black

WES TWA: 3 mg/m<sup>3</sup>

Suspected carcinogen (inhalation route)

#### **Engineering Controls:**

Ensure adequate ventilation of the working area, keeping airborne concentrations below occupational exposure standards.

#### **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.

#### **Eve and Face Protection:**

Safety glasses for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/ NZS 1337.

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## 9 Physical and chemical properties

Appearance:

Form: Liquid
Colour: Grey
Odour: Borneol-like

Odour Threshold:

pH-Value:

No information available

Flash Point: >110 °C
Flammability: Not flammable

Ignition TemperatureNo information availableDecomposition Temperature:No information available

**Explosion Limits:** 

Lower:
Upper:
Vapour Pressure:
Relative Density:
Vapour Density:
Evaporation Rate:
No information available
No information available
1.1094 (Water = 1)
No information available
No information available

Solubility in Water: Insoluble

Partition Coefficient (n-octanol/water): No information available

Viscosity at 27 °C: 239 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:**

· •···•·· <b>·</b>					
LD50/L	LD50/LC50 Values:				
CAS: 13	CAS: 13048-33-4 Hexamethylene diacrylate				
Oral	LD50	>5,000 mg/kg (rat)			
Dermal	LD50	>3,000 mg/kg (rab)			
CAS: 1333-86-4 Carbon black					
Oral	LD50	>5,000 mg/kg (rat)			
	LD50	>3,000 mg/kg (rabbit)			

#### **Acute Health Effects**

Inhalation: May cause respiratory irritation.

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

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

Ingestion: May cause gastrointestinal irritation.

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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:** Carbon Black is classified by IARC as Group 2B - Possibly carcinogenic to humans.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

**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: 1333-86-4 Carbon black

LC50/96 h >1,000 mg/l (brachydanio rerio)

Persistence and Degradability: No data available on finished product.

**Bioaccumulative Potential:** No data available on finished product.

Other adverse effects: No further relevant information available.

Mobility in Soil: No data available on finished product.

#### 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

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Product Name: PLA Pro eResin Liquid

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## 15 Regulatory information

#### **HSNO Approval Code / Group Standard:**

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard

HSNO Approval Number: HSR002503

New Zealand Inv	New Zealand Inventory of Chemicals		
CAS: 1333-86-4	Carbon black		
CAS: 947-19-3	1-Hydroxycyclohexyl phenyl ketone		
CAS: 13048-33-4	Hexamethylene diacrylate		

## 16 Other information

Date of Preparation or Last Revision: 09.02.2022

Prepared by: MSDS.COM.AU Pty Ltd www.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 WES: Workplace Exposure Standard

Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

Carcinogenicity 2: Carcinogenicity - Category 2

### Disclaimer

This SDS is prepared in accord with the New Zealand Chemical Industry Council document 'Code of Practice (No. HSNO CoP 8-1 09-06)' and Hazardous Substances (Safety Data Sheets) Notice 2020.

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