

# Safety Data Sheet

according to WHS Regulations

Printing date 25.11.2021

Revision: 25.11.2021

## 1 Identification

**Product Name:** eSilk Filament**Other Means of Identification:** Mixture**Part Number:** TL4477, TL4478, TL4479, TL4480**Recommended Use of the Chemical and Restriction on Use:** 3D Printer Filament.**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:**

Not 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)



Health hazard

Respiratory Sensitisation 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



Acute Toxicity (Inhalation) 4 H332 Harmful if inhaled.

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.

STOT SE 3 H335 May cause respiratory irritation.

**Signal Word** Danger**Hazard Statements**

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

**Precautionary Statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves / eye protection / face protection.

P284 [In case of inadequate ventilation] wear respiratory protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

(Contd. on page 2)

# Safety Data Sheet

## according to WHS Regulations

Printing date 25.11.2021

Revision: 25.11.2021

**Product Name: eSilk Filament**

(Contd. of page 1)


P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P321	Specific treatment (see on this label).
P362+P364	Take off contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
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.

#### Hazardous Components:

CAS: 51852-81-4	1,3 Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with bis[isocyanatomethyl] benzene	20.0%
		

#### Additional information:

This product contains hazardous ingredients, but any potential hazards will not be presented under normal conditions and use.

### 4 First Aid Measures

#### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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 several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if symptoms persist.

#### Ingestion:

If swallowed, do not induce vomiting. Give a glass of water. Do not give anything by mouth to an unconscious person. Seek medical attention if symptoms occur.

#### Symptoms Caused by Exposure:

Inhalation: Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

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

Eye Contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal irritation.

### 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

(Contd. on page 3)

# Safety Data Sheet

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Printing date 25.11.2021

Revision: 25.11.2021

**Product Name: eSilk Filament**

(Contd. of page 2)

**Specific Hazards Arising from the Chemical:**

No hazardous decomposition products known.

Product will burn in a fire but propagates flames with difficulty. If finely divided product is suspended in air or some other oxidising medium, it may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions).

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 dusts. 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 collect spilled material, avoiding the generation of dust.

### 7 Handling and Storage

**Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust.

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 in original container or a polyethylene or polypropylene container, tightly closed when not in use. Keep away from foodstuffs. Keep away from oxidising agents.

### 8 Exposure Controls and Personal Protection

**Exposure Standards:**

Nuisance dust:

TWA - 10 mg/m<sup>3</sup> (inspirable dust)

**Engineering Controls:**

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

**Respiratory Protection:**

Use an approved particulate respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of dust, 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:**

Chemical resistant 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 such as overalls, a PVC apron, and barrier cream (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

(Contd. on page 4)

# Safety Data Sheet

## according to WHS Regulations

Printing date 25.11.2021

Revision: 25.11.2021

**Product Name: eSilk Filament**

(Contd. of page 3)

Standard AS/NZS 4501 for more information.

**Eye and Face Protection:**

Safety glasses with side shields or chemical goggles. See Australian/New Zealand Standard AS/NZS 1337 for more information.

### 9 Physical and Chemical Properties

**Appearance:**

<b>Form:</b>	Solid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Odourless
<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	No information available
<b>Melting point/freezing point:</b>	No information available
<b>Initial Boiling Point/Boiling Range:</b>	No information available
<b>Flash Point:</b>	No information available
<b>Flammability:</b>	No information available
<b>Auto-ignition Temperature:</b>	No information available
<b>Decomposition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Lower:</b>	No information available
<b>Upper:</b>	No information available
<b>Vapour Pressure:</b>	No information available
<b>Density:</b>	1.21 g/cm <sup>3</sup>
<b>Vapour Density:</b>	No information available
<b>Evaporation Rate:</b>	No information available
<b>Solubility in Water:</b>	Insoluble
<b>Partition Coefficient (n-octanol/water):</b>	No information available
<b>Viscosity:</b>	No information available

### 10 Stability and Reactivity

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.**Chemical Stability:** Stable at ambient temperature and under normal conditions of storage and use.**Conditions to Avoid:** No further relevant information available.**Incompatible Materials:** Oxidising agents.**Hazardous Decomposition Products:** No hazardous decomposition products known.

### 11 Toxicological Information

**Toxicity:****Acute Health Effects****Inhalation:**

Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

**Skin:** Causes skin irritation. May cause an allergic skin reaction.**Eye:** Causes serious eye irritation.**Ingestion:** May cause gastrointestinal irritation.**Skin Corrosion / Irritation:** Causes skin irritation.**Serious Eye Damage / Irritation:** Causes serious eye irritation.

(Contd. on page 5)

# Safety Data Sheet

## according to WHS Regulations

Printing date 25.11.2021

Revision: 25.11.2021

**Product Name: eSilk Filament**

(Contd. of page 4)

**Respiratory or Skin Sensitisation:**

May cause an allergic skin reaction.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:** May cause respiratory irritation.**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.

**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:**

CAS: 51852-81-4 1,3 Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with bis[isocyanatomethyl]benzene

**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: eSilk Filament**

(Contd. of page 5)

### 16 Other Information

**Date of Preparation or Last Revision:** 25.11.2021**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://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)

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)

Acute Toxicity (Inhalation) 2: Acute toxicity – Category 2

Acute Toxicity (Inhalation) 4: Acute toxicity – Category 4

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

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Respiratory Sensitisation 1: Respiratory sensitisation, Hazard Category 1

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

**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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