

Safety Data Sheet

according to WHS Regulations

Printing date 25.11.2021

Revision: 25.11.2021

1 Identification

Product Name: Water Washable Filament Resin

Other Means of Identification: Mixture

Part Number: TL4450, TL4451, TL4452, TL4453

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.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



Environment

Aquatic Chronic 2

H411 Toxic to aquatic life with long lasting effects.



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.

H411 Toxic to aquatic life with long lasting effects.

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.

P273 Avoid release to the environment.

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.

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P391 Collect spillage.
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: 61788-97-4	Phenolic epoxy resin	40-50%
	⚠ Aquatic Chronic 2, H411; ⚠ Skin Corrosion/Irritation 2, H315; Serious Eye Damage/Irritation 2, H319; Skin Sensitisation 1, H317	
CAS: 13048-33-4	Hexamethylene diacrylate	20-40%
	⚠ Skin Corrosion/Irritation 2, H315; Serious Eye Damage/Irritation 2, H319; Skin Sensitisation 1, H317	
CAS: 482-89-3	C.I. Vat Blue 1	1-5%
	⚠ Skin Corrosion/Irritation 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	

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 15 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. Rinse mouth repeatedly with water, ensuring that the water is not swallowed. 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 skin reaction.

Eye Contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal irritation.

5 Fire Fighting Measures

Suitable Extinguishing Media: Chemical foam, carbon dioxide, and dry chemical powder.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include acrid smoke or fumes, oxides of carbon, and oxides of nitrogen. Product is not flammable. However, heat and light may cause spontaneous polymerisation, generating heat and pressure that may cause containers to rupture or explode.

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

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

HAZCHEM Code: •3Z

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. Ensure adequate ventilation. Protect the spill from light. 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:

Spread the spilled material out to maximise surface area. Once the product has hardened, 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 dust or vapours. 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 light, heat, and sources of ignition. Do not store in an oxygen-free environment. Avoid freezing. Keep away from oxidising agents, reducing agents, peroxides, and amines. Recommended storage temperature is -1.7-32.2 °C.

8 Exposure Controls and Personal Protection

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection:

Use an approved 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:

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 aprons and boots (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:

Eye and face protectors for protection against splashing materials or liquids and vapour. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:**Form:**

Liquid

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Colour:	According to product specification
Odour:	Ester-like odor
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:	93.3 °C
Flammability:	Not flammable
Ignition Temperature	No information available
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:	1.10-1.125
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Nearly insoluble
Partition Coefficient (n-octanol/water):	No information available
Viscosity at 25 °C:	220-250 cps

10 Stability and Reactivity

Possibility of Hazardous Reactions:

Contact with heat, light, and incompatible materials, and inhibitor depletion may cause spontaneous polymerisation, generating heat and pressure. Closed containers may rupture or explode during runaway polymerisation.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid: Protect from light, heat, and sources of ignition. Avoid freezing.

Incompatible Materials: Oxidising agents, reducing agents, peroxides, and amines.

Hazardous Decomposition Products: Acrid smoke or fumes, oxides of carbon, and oxides of nitrogen.

11 Toxicological Information

Toxicity:

LD50/LC50 Values:

CAS: 13048-33-4 Hexamethylene diacrylate

Oral	LD50	>5,000 mg/kg (rat)
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Dermal	LD50	>3,000 mg/kg (rab)
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Acute Health Effects

Inhalation: 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.

Respiratory or Skin Sensitisation: May cause an allergic skin reaction.

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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:**

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:** Toxic to aquatic life with long lasting effects.**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	UN3082
ADG, IMDG, IATA	
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
ADG, IATA	LIQUID, N.O.S. (Phenolic epoxy resin)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
	LIQUID, N.O.S. (Phenolic epoxy resin), MARINE
	POLLUTANT
Dangerous Goods Class	
ADG Class:	9
Subsidiary Risk:	
Packing Group:	
ADG, IMDG, IATA	III
Marine pollutant:	Symbol (fish and tree)
EMS Number:	F-A,S-F
Hazchem Code:	•3Z

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Special Provisions:	274, 331, 335, 375, AU01
Transport/Additional information:	Not subject to the ADG Code when transported in Australia by Road or Rail in packages 500kg(L) or less; or IBCs (refer to SP AU01)
Limited Quantities:	5L
Packagings & IBCs - Packing Instruction:	P001, IBC03, LP01
Packagings & IBCs - Special Packing Provisions:	PP1
Portable Tanks & Bulk Containers - Instructions:	T4
Portable Tanks & Bulk Containers - Special Provisions:	TP1, TP29

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

CAS: 13048-33-4 Hexamethylene diacrylate

CAS: 482-89-3 C.I. Vat Blue 1

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

Poisons Schedule: 5

16 Other Information

Date of Preparation or Last Revision: 21.10.2021**Prepared by:** MSDS.COM.AU Pty Ltd

www.msds.com.au

Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

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

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

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

Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

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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