

# SAFETY DATA SHEET

## Section 1. Identification of the material and the supplier

Product: **HTL Resin - Black**  
Product Use: 3D Printing Resin  
Restriction of use: See Section 15

Supplier: Embedded Logic Solutions Pty. Ltd  
5/23 Hunt Street  
North Parramatta NSW 2151 Australia  
Telephone: +61 2 9687 1880  
Fax Number: +61 2 9687 1881  
Website: [www.emlogic.com.au](http://www.emlogic.com.au)

New Zealand Contact: Responsible Care New Zealand  
Level 7, City Chambers  
Johnston St  
Wellington  
Telephone: 04 499 4311

**Emergency Telephone:** **Australia - 13 1126**  
**NZ - 0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 1 May 2025

## Section 2. Hazards Identification

### Australia:

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

### New Zealand:

Classified as hazardous according to Regulation (EC) No. 1272/2008 [CLP] which meets New Zealand jurisdiction criteria as per EPA Hazardous Substances (Safety Data Sheets) Notice 2020

**EPA Approval Code: Surface Coatings and Colourants (Subsidiary) – HSR002670**

### Pictograms



Signal Word: **Danger**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Skin irritation Cat. 2	H315	Causes skin irritation.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Reproductive toxicity Cat. 2	H361	Suspected of damaging fertility or the

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		unborn child.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment chronic Cat. 3	H412	Harmful to aquatic life with long lasting effects.

#### **Prevention Code      Prevention Statement**

P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe fumes, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in SDS Section 8.

#### **Response Code      Response Statement**

P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash before reuse.

#### **Storage Code      Storage Statement**

P405	Store locked up.
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#### **Disposal Code      Disposal Statement**

P501	Triple rinse and dispose of in accordance with Local Regulations
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### **Section 3.      Composition / Information on Ingredients**

<b>Ingredients</b>	<b>Wt%</b>	<b>CAS NUMBER.</b>
2-Propenoic acid, 2-hydroxyethyl ester, polymer with 1,1'-methylenebis[4-isocyanatocyclohexane] and 2-oxepanone	25-50	52404-33-8
2-Propenoic acid,1,1'-(2-methyl-1,8-octanediyl) ester	10-30	120515-20-0
4-(1-oxo-2-propenyl)- Morpholine	10-30	5117-12-4
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	1-3	75980-60-8

### **Section 4.      First Aid Measures**

Routes of Exposure:

If in Eyes	In case of eye contact, immediately rinse with clean water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
If on Skin	Rinse immediately with plenty of water for 15 minutes. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention.
If Swallowed	Rinse mouth. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

### Most important symptoms and effects, both acute and delayed

Symptoms:

**Ingestion:** Harmful if swallowed.

**Inhalation:** Not applicable.

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

**Eye:** Serious damage to eyes.

**Chronic:** May cause damage to organs through prolonged or repeated exposure. Suspected of damaging fertility or the unborn child.

**Notes to Doctor:** Treat symptomatically.

## Section 5. Fire Fighting Measures

<b>Hazard Type</b>	Non Flammable and Non Combustible
<b>Hazards from combustion products</b>	Under fire conditions, hazardous fumes will be present. Thermal decomposition may produce: Carbon oxides (CO, CO <sub>2</sub> ). Nitrogen oxides. Phosphorus oxides. Toxic fumes may be released.
<b>Suitable Extinguishing media</b>	Water fog. foam. dry chemical powder. Do not use water jet.
<b>Precautions for firefighters and special protective clothing</b>	Self-contained breathing apparatus. Complete protective clothing. Prevent firefighting water from entering the environment.
<b>HAZCHEM CODE</b>	<b>3Z</b>

## Section 6. Accidental Release Measures

Wear protective clothing as described in Section 8. Ventilate spillage area. Do not breathe spray, mist, vapours. Avoid contact with skin and eyes. Evacuate unnecessary personnel. Stop leak if safe to do so.

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

Collect spillage. Take up liquid spill into inert absorbent material. Notify authorities if product enters sewers or public waters. Collect all waste in suitable and labelled containers and dispose according to local legislation. Dispose as per Section 13.

## Section 7. Handling and Storage

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### Handling:

- Read carefully and follow all instructions.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe fumes, gas, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective clothing as detailed in SDS Section 8.
- Take precautionary measures to prevent the formation of static electricity.
- Cool heated containers to prevent curing.
- Ensure good ventilation of the work station.
- Avoid contact with skin and eyes.
- Wash contaminated clothing before reuse.

### Storage:

- Store locked up.
- Store in a well-ventilated place. Keep cool.
- Keep out of reach of children.
- Incompatible materials: Strong reducing agents. Strong acids, strong bases and oxidation agents. Amines. Peroxides. Free radical initiators.
- Storage temp = 0°C - 40 °C

## Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	CAS #	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices FEB 2025 15TH EDITION.

### Engineering Controls

Ensure good ventilation of the work station. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

### Personal Protection Equipment



<b>Eyes</b>	Chemical goggles or safety glasses. EN 166
<b>Hands</b>	Chemically resistant protective gloves. EN 374
<b>Skin</b>	Long sleeved protective clothing.
<b>Respiratory</b>	In case of inadequate ventilation wear respiratory protection. An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits.

**Section 9 Physical and Chemical Properties**

<b>Appearance</b>	Opaque Black Liquid
<b>Odour</b>	Acrylic
<b>Odour Threshold</b>	Not available
<b>pH</b>	5.68
<b>Boiling Point</b>	> 100 °C
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	> 100 °C
<b>Flammability</b>	Non-Flammable
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	3.52Kpa ( 25°C)
<b>Vapour Density</b>	Not available
<b>Relative Density</b>	1.12 g/cm <sup>3</sup>
<b>Solubilities</b>	Water: Very little Organic solvent: Soluble
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Dynamic, Viscosity</b>	≈ 85 mPa·s (25 °C)

**Section 10. Stability and Reactivity**

<b>Stability of Substance &amp; Reactivity</b>	This product is stable under normal conditions.
<b>Possibility of hazardous reaction</b>	No dangerous reactions known under normal conditions of use. Can polymerise exothermically in the absence of stabilisers, particularly in acid conditions or if shelf life exceed.
<b>Conditions to Avoid</b>	Direct sunlight. UV sources. Heat sources. Extremely high or low temperatures.
<b>Incompatible Materials</b>	Strong reducing agents. Strong acids, strong bases and oxidation agents. Amines. Peroxides. Free radical initiators.
<b>Hazardous Decomposition Products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Section 11 Toxicological Information****Acute Effects:**

<b>Swallowed</b>	Harmful if swallowed. ATE CLP = 1667 mg/kg
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not applicable.
<b>Eye</b>	Causes serious eye damage.
<b>Skin</b>	Causes skin irritation. May cause an allergic skin reaction.

**Chronic Effects:**

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Suspected of damaging fertility or the unborn child.
<b>Germ Cell Mutagenicity</b>	Not applicable.

<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	May cause damage to organs through prolonged or repeated exposure.
<b>STOT/RE</b>	Not applicable.

#### **Individual component information from NZ EPA CCID Database:**

##### **Acute Toxicity:**

<b>Chemical Name</b>	<b>Oral – LD50</b>	<b>Dermal – LD50</b>	<b>Inhalation – LC50</b>
Diphenyl-2,4,6-trimethyl-benzoyl phosphine oxide	-	>2000 mg/kg (rat)	-
4-(1-oxo-2-propenyl)-Morpholine	-	>2000 mg/kg (rat)	-

#### **Section 12. Ecotoxicological Information**

Harmful to aquatic life with long lasting effects.

<b>Persistence and degradability</b>	No additional information available
<b>Bioaccumulation</b>	No additional information available
<b>Mobility in Soil</b>	No additional information available
<b>Other adverse effects</b>	Avoid release to the environment.

Do not allow to enter waterways.

#### **Section 13. Disposal Considerations**

**Disposal Method:** Dispose of contents/container in accordance with licensed collector's sorting instructions.

**Disposal methods to avoid:** Do not allow to enter the waterways.

#### **Section 14 Transport Information**

**This product is NOT classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).**

**This product is NOT classified as a Dangerous Good for transport in NZ; NZS 5433:2020**

#### **Section 15 Regulatory Information**

##### **Australia:**

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

##### **New Zealand:**

Classified as hazardous according to Regulation (EC) No. 1272/2008 [CLP] which meets New Zealand jurisdiction criteria as per EPA Hazardous Substances (Safety Data Sheets) Notice 2020.

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<b>HSW (HS) Regulations 2017 and EPA No-</b>	<b>Trigger Quantity</b>
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<b>tices</b>	
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L
Emergency Response Plan	1000L
Secondary Containment	1000L
Restriction of Use	Only use for the intended purpose.

## Section 16 Other Information

### Glossary

Cat	Category
EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms in-
haling or ingesting it.	
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

### References:

#### Australia:

1. Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
2. Standard for the Uniform Scheduling of Medicines and Poisons.
3. Australian Code for the Transport of Dangerous Goods by Road & Rail.
4. Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
5. Workplace exposure standards for airborne contaminants, Safe work Australia.
6. American Conference of Industrial Hygienists (ACGIH).
7. Globally Harmonised System of classification and labelling of chemicals.

#### New Zealand:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices FEB 2025 15<sup>th</sup> edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

### Disclaimer:

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