

# Glass Coat Liquid Gloss Kit (Part A & B)

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

GHS Product Identifier	Glass Coat Liquid Gloss Part A Resin
Company Name	Shamrock Australia Pty Ltd
Address	21-23 Joseph Street Blackburn North Victoria, 3130 Australia
Telephone/Fax Number	Phone: +61 3 9895 4300 Fax: +61 3 9895 4399
Emergency Phone Number	24 hours
Contact Poison Information Centre:	13 11 26 (Australia) 0800 764 766 (New Zealand)
Recommended use of the chemical and restrictions on use	Ideal for art and craft applications.
Other Information	This SDS summarises to the best of our knowledge the health and safety hazard information of the product and how to safely handle and use the product in the workplace.

## SECTION 2: Hazards identification

### • 2.1 Classification of the substance or mixture

*Skin corrosion/irritation—category 2 Causes skin irritation*

*Skin sensitisation—category 1 May cause an allergic skin reaction*

*Serious eye damage/irritation—category 2A Causes serious eye irritation*

*Hazardous to the aquatic environment (chronic) – category 2 Toxic to aquatic life with long lasting effects*

### • 2.2 Label elements

#### • Hazard pictograms:



*Exclamation mark*



*Environment*

#### • Signal word: Warning

#### • Hazard statements:

*H315 Causes skin irritation*

*H317 May cause an allergic skin reaction*

*H319 Causes serious eye irritation*

*H411 Toxic to aquatic life with long lasting effects*

#### • Precautionary Statement Prevention:

*P261 Avoid breathing vapours.*

*P264 Wash hands and face 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.

• **Precautionary Statement Response:**

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

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P321 Specific treatments see the first aid measure on this label.

P362 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

• **Precautionary Statement Storage:** Void

• **Precautionary Statement Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

### SECTION 3: Composition and information on ingredients

• **3.1 Chemical characterization:** Mixture

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

CAS No.	Name	%, weight
25068-38-6	Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol (number average molecular weight $\leq$ 700)	90
68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs	5
100-51-6	Benzyl alcohol	4
57834-33-0	Benzoic acid, 4-(((methylphenylamino)methylene)amino)-, ethyl ester	1

### SECTION 4: First aid measures

• **4.1 Description of necessary first-aid measures**

**General advice:** If medical advice is needed, have product container or label at hand.

**After inhalation:** Supply fresh air. If feel unwell, get medical advice/attention.

**After skin contact:** Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention.

**After eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**After swallowing:** Rinse mouth. Call a POISON CENTER/doctor if you feel unwell.

• **4.2 Symptoms caused by exposure:** Causes skin irritation; May cause an allergic skin reaction; Causes serious eye damage.

• **4.3 Medical attention and special treatment:** Treated according to symptoms, there is not known specific medicine.

### SECTION 5: Fire-fighting measures

• **5.1 Suitable extinguishing equipment:** Use CO<sub>2</sub>, chemical dry powder, water spray or alcohol resistant foam to extinguish

• **5.2 Specific hazards arising from the chemical:** May produce corrosive or allergic reaction including vapour in a fire.

• **5.3 Special protective equipment and precautions for firefighters:** Wear fully protective suit and self-contained respiratory protective device.

## SECTION 6: Accidental release measures

### • 6.1 Personal precautions, protective equipment and emergency procedures:

Cut off leakage source and collect spillage timely if safe to do it; Wear protective gloves/ eye protection /face protection; Evacuate personnel to safe areas; Avoid contact with skin and eyes; Avoid release to the environment.

### • 6.2 Environmental precautions:

Do not allow the product to enter sewers/surface or ground water; Inform respective authorities in case of seepage into water course or sewage system.

### • 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust); Ensure good ventilation; Dispose of contaminated material as waste according to item 13.

## SECTION 7: Handling and storage

### • 7.1 Precautions for safe handling:

Ensure good ventilation/ exhaust at the workplace; Wear protective gloves/ eye protection /face protection; Avoid breathing vapor; Use respiratory protective device against the effects of vapor; Prevent contact with eyes and skin; Avoid release to the environment.

• **Information about fire and explosion protection:** Normal measures for preventive fire protection.

### • 7.2 Conditions for safe storage, including any incompatibilities

• **Requirements to be met by storerooms and receptacles:** Store in original container.

• **Information about storage in one common storage facility:** Keep away from flammable substance.

• **Further information about storage conditions:** Store locked up.

## SECTION 8: Exposure controls/personal protection

### • 8.1 Exposure control measures

#### • **Ingredients with limit values that require monitoring at the workplace:**

Source	Ingredient	TWA	STEL	Peak
Australia Exposure Standards	Polymer of 2-aminoethanol / 2-(chloromethyl) oxirane / 4,4'-(isopropylidene) diphenol	Not available	Not available	Not available
Australia Exposure Standards	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs	Not available	Not available	Not available
Australia Exposure Standards	Benzyl alcohol	Not available	Not available	Not available
Australia Exposure Standards	Benzoic acid, 4-(((methylphenylamino)methylene) amino)-, ethyl ester	Not available	Not available	Not available

• **8.2 Biological monitoring:** Not available

• **8.3 Control banding:** Handle in accordance with good industrial hygiene and safety practice; Wash hands and face before breaks and at the end of work; Ensure good ventilation at workplace.

### • 8.4 Engineering controls

• **Based on the composition shown in section 3, the following measures are suggested for occupational safety measure.**

#### • **Appropriate engineering controls:**

Use only in a well-ventilated area; Take off contaminated clothing and wash it before reuse; See Section 7 for information about design of technical facilities.

• 8.3 Individual protection measures

• Eye and face protection:



Safety glasses with side-shields (frame goggles) (e.g. EN 166)

• Skin protection:



Protective gloves

Latex gloves, butyl rubber gloves (thickness > 0.11 mm, break through time approx. 480 min).

• Respiratory protection: Dust mask is recommended; keep well-ventilated.

• Thermal hazards: Not available

## SECTION 9: Physical and chemical properties

• 9.1 Information on basic physical and chemical properties

• Appearance:

Physical state	Liquid
Color	Colorless and transparent.
Odor	Mild
Odor threshold	Not determined.
• pH-value	Not determined.
• Change in condition	
Melting point/melting range	Not determined.
Boiling point and boiling range	Not determined.
• Freezing point	Not determined.
• Flash point	>93°C(closed cup)
• Flammability (solid, gas)	Not applicable
• Decomposition temperature	Not determined.
• Self-ignition	Product is not self-igniting.
• Danger of explosion	Product does not present an explosion hazard.
• Explosion limits	
Lower:	Not explosive
Upper:	Not explosive
• Oxidizing properties	Not determined.
• Vapor pressure	Not determined.
• Density	Not determined.
• Relative density	Not determined.
• Vapor density	Not determined.
• Evaporation rate	Not determined.
• Solubility in/Miscibility with	
Water	Almost insoluble in water
• Partition coefficient (n-octanol/water)	Not determined.
• Viscosity	
Dynamic	Not determined.
Kinematic	Not determined.
• 9.2 Other information	Data not available

## SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No decomposition if used according to specification.
- **10.2 Chemical stability:** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions:** No further relevant information available.
- **10.4 Conditions to avoid:** High temperature.
- **10.5 Incompatible materials:** Strong oxidizing agent and strong acid, alkali.
- **10.6 Hazardous decomposition products:** No known hazardous decomposition products.

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:** ATE (LD50-oral): >5000mg/kg; ATE (LD50-skin): >5000mg/kg.
- **LD/LC50 values relevant for classification:** No animal test has been done for this product.

25068-38-6 Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol		
Rat	LD50-oral	30000mg/kg
	LD50-skin	> 1200mg/kg
Mouse	LD50-oral	20000mg/kg
	LD50-skin	> 1270mg/kg
68609-97-2 Oxirane, 2-((C12-14-alkyloxy)methyl) derivs		
Rat	LD50-oral	17100mg/kg
100-51-6 Benzyl alcohol		
Guinea pig	LD50-oral	2500mg/kg
Mouse	LD50-oral	1360mg/kg
Rabbit	LD50-oral	1040mg/kg
	LD50-skin	2000mg/kg
Rat	LD50-oral	1230mg/kg
Remark: The above data are from literature.		

- **Skin corrosion/irritation:** Causes irritation to skin on contact.
- **Serious eyes damage/irritation:** Causes irritant contact eyes.
- **Respiratory or skin sensitization:** Causes allergic contact dermatitis
- **Germ cell mutagenicity:** Data is not available
- **Carcinogenicity:** Data is not available
- **Reproductive toxicity:** Data is not available
- **STOT-single exposure:** Data is not available
- **STOT-repeated exposure:** Data is not available
- **Aspiration hazard:** Data is not available
- **11.2 Information on possible routes of exposure:** Ingestion; Skin exposure.
- **11.3 Early onset symptoms related to exposure:** Skin irritant and allergic; Eye irritant.
- **11.4 Delayed health effects from exposure:** Data is not available.
- **11.5 Exposure levels and health effects:** Data is not available.
- **11.6 Interactive effects:** Data is not available.
- **11.7 Other information:** Data is not available

## SECTION 12: Ecological information

### • 12.1 Toxicity

• **Aquatic toxicity:** Toxic to aquatic life with long lasting effects.

25068-38-6 Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol	
Short-term toxicity to fish	LC50 (4 days) 1.2 - 3.6 mg/L
Short-term toxicity to aquatic invertebrates	EC50 (48 h) 1.1 - 2.8 mg/L LC50 (48 h) 2.7 mg/L
Long-term toxicity to aquatic invertebrates	NOEC (21 days) 300 µg/L LOEC (21 days) 1 mg/L
Toxicity to aquatic algae and cyanobacteria	EC50 (72 h) 9.4 - 11 mg/L NOEC (72 h) 2.4 - 4.2 mg/L
Toxicity to microorganisms	IC50 (3 h) 100 mg/L
68609-97-2 Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	
Short-term toxicity to fish	NOEC (4 days) 100 mg/L LL50 (4 days) 100 mg/L
Short-term toxicity to aquatic invertebrates	EL50 (48 h) 7.2 mg/L
Toxicity to aquatic algae and cyanobacteria	IC50 (72 h) 843.75 mg/L NOEC (72 h) 500 mg/L
Toxicity to microorganisms	EC50 (3 h) 100 mg/L
100-51-6 Benzyl alcohol	
Short-term toxicity to fish	LC50 (4 days) 460 mg/L
Short-term toxicity to aquatic invertebrates	EC50 (48 h) 230 mg/L
Long-term toxicity to aquatic invertebrates	NOEC (21 days) 51 mg/L EC50 (21 days) 66 mg/L
Toxicity to aquatic algae and cyanobacteria	EC50 (72 h) 500 - 770 mg/L NOEC (72 h) 310 mg/L
Toxicity to microorganisms	IC50 (48 h) 2.1 g/L

• **12.2 Persistence and degradability:** Not readily degradable.

25068-38-6	Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol	Under test conditions no biodegradation observed
100-51-6	Benzyl alcohol	Readily Biodegradable in water

• **12.3 Bio-accumulative potential:** Low bio-accumulation.

25068-38-6	Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol	Log Pow = 2.64 - 3.78 @ 25 °C and pH 7 - 7.1
100-51-6	Benzyl alcohol	Log Pow = 0.87 - 1.1 at 20 - 25 °C

• **12.4 Mobility in soil:** Low mobility in soil.

• **12.5 Other adverse effects:** No further relevant information available.

## SECTION 13: Disposal consideration

### • 13.1 Disposal methods

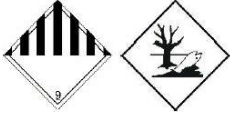
#### • Recommendation:

Must not be disposed together with household garbage. Dispose of the product must be in according to the local regulation, for example landfill.

- 13.2 Un-cleaned packaging
- Recommendation: Dispose of contents/container in according to the local regulation.

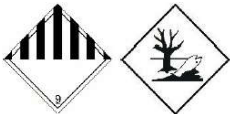
## SECTION 14: Transport information

### Land transport (ADG) :

• UN-Number	UN3082
• Proper shipping name or technical name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
• Transport hazard class	
Class	9 Miscellaneous dangerous substances and articles
Label	9
Subsidiary risks	Void
• Packing group number	III
• Environmental hazards for transport purposes	Yes
• Special precautions for user	Special provisions: 274 331 335 375 AU01 Limited quantity: 5L Excepted quantities: E1 Packing Instruction: P001 IBC03 LP01 Special Packing: PPI Instructions: T4 Special Provisions: TPI TP29

### • Additional information

### IMDG, IATA

• UN-Number	UN3082
• Proper shipping name or technical name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
• Transport hazard class	
Class	9 Miscellaneous dangerous substances and articles
Label	9
• Danger code (Kemler)	90
• EMS Number	F-A,S-F
• Hazchem or emergency action code	•3Z

## SECTION 15: Regulatory information

### • 15.1 Australia Inventory of Chemical Substances (AICS):

25068-38-6	Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol	Listed
68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs	Listed
100-51-6	Benzyl alcohol	Listed

- 15.2 Montreal Protocol (Ozone depleting substances): Not regulated.
- 15.3 The Stockholm Convention (Persistent Organic Pollutants): Not regulated.
- 15.4 The Rotterdam Convention (Prior Informed Consent): Not regulated.



- **15.5 Basel Convention (Hazardous Waste):** Not regulated.
- **15.6 International Convention for the Prevention of Pollution from Ships (MARPOL):** Not regulated.
- **15.7 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:** Poisons Schedule: 5
- **IARC (International Agency for Research on Cancer):** Not regulated.
- **Proposition 65**
  - **Chemicals known to cause cancer:** Not regulated.
  - **Chemicals known to cause reproductive toxicity for females:** Not regulated.
  - **Chemicals known to cause reproductive toxicity for males:** Not regulated.
  - **Chemicals known to cause developmental toxicity:** Not regulated.
- **15.8 NICNAS assessment report:** An Assessment report has not been carried out.

## SECTION 16: Other information

- **The date of preparation of the latest revision:** Jun. 16, 2019
- **The latest revision:** 1.0

\*\*\*\*\*  
**The contents and format of this SDS are in accordance with the Work Health and Safety Act of Australia and ADG requirements**  
**DISCLAIMER OF LIABILITY:**

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

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• **Abbreviations and acronyms:**

WHS : Work Health and Safety

ADG Code: The Australian Code for the Transport of Dangerous Goods by Road and Rail, as in force or remade from time to time, approved by the Transport and Infrastructure Council.

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

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

LD50: Lethal dose, 50 percent

LC50: Lethal concentration, 50 percent

EC50: Concentration of maximal effect, 50 percent

IC50: Half maximal inhibitory concentration

NOEC: No observed effect concentration

LL50: Lethal loading rate, 50 percent

EL50: Effective loading rate, 50 percent

\*\*\*\*\*  
**End of safety data sheet**



## SECTION 1: Identification of the substance/mixture and of the company/undertaking

GHS Product Identifier	Glass Coat Liquid Gloss Part B Hardener
Company Name	Shamrock Australia Pty Ltd
Address	21-23 Joseph Street Blackburn North Victoria, 3130 Australia
Telephone/Fax Number	Phone: +61 3 9895 4300 Fax: +61 3 9895 4399
Emergency Phone Number	24 hours
Contact Poison Information Centre:	13 11 26 (Australia) 0800 764 766 (New Zealand)
Recommended use of the chemical and restrictions on use	Ideal for art and craft applications.
Other Information	This SDS summarises to the best of our knowledge the health and safety hazard information of the product and how to safely handle and use the product in the workplace.

## SECTION 2: Hazards identification

### • 2.1 Classification of the substance or mixture

*Acute toxicity—oral- category 4 Harmful if swallowed*

*Skin corrosion/irritation—category 1B Causes severe skin burns and eye damage*

*Skin sensitisation—category 1 May cause an allergic skin reaction*

*Hazardous to the aquatic environment (chronic) – category 2 Toxic to aquatic life with long lasting effects*

### • 2.2 Label elements

#### • Hazard pictograms:



**Corrosion**



**Exclamation mark**



**Environment**

#### • Signal word: *Danger*

#### • Hazard statements:

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H317 May cause an allergic skin reaction

H411 Toxic to aquatic life with long lasting effects

#### • Precautionary Statement Prevention:

P260 Do not breathe vapours.

- P264 Wash hands and face 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 gloves/ protective clothing/ eye protection/ face protection.

• **Precautionary Statement Response:**

- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
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.  
P321 Specific treatments see the first aid measure on this label.  
P363 Wash contaminated clothing before reuse.  
P391 Collect spillage.

• **Precautionary Statement Storage:** Void

- P405 Store locked up.

• **Precautionary Statement Disposal:**

- P501 Dispose of contents/container in accordance with local regulation.

### SECTION 3: Composition and information on ingredients

• **3.1 Chemical characterization:** Mixture

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

CAS No.	Name	%, weight
25068-38-6	Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol (number average molecular weight ≤ 700)	45
100-51-6	Benzyl alcohol	35
2855-13-2	Isophorone diamine	20

### SECTION 4: First aid measures

• **4.1 Description of necessary first-aid measures**

**General advice:** Immediately call a POISON CENTER or doctor/physician.

**After inhalation:** Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

**After skin contact:** Take off immediately all contaminated clothing. Rinse skin with water/ shower. Immediately call a POISON CENTER or doctor/physician.

**After eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

**After swallowing:** Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

• **4.2 Symptoms caused by exposure:** Causes severe skin burns and eye damage; May cause an allergic skin reaction.

• **4.3 Medical attention and special treatment:** Treated according to symptoms, there is not known specific medicine.

### SECTION 5: Fire-fighting measures

- **5.1 Suitable extinguishing equipment:** Use CO<sub>2</sub>, chemical dry powder, water spray or alcohol resistant foam to extinguish
- **5.2 Specific hazards arising from the chemical:** May produce corrosive or allergic reaction including vapour in a fire.
- **5.3 Special protective equipment and precautions for firefighters:** Wear fully protective suit and self-contained respiratory protective device.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures:**  
Cut off leakage source and collect spillage timely if safe to do so; Do not breathe the vapor; Wear protective gloves/ protective clothing / eye protection /face protection; Evacuate personnel to safe areas; Avoid contact with skin and eyes; Avoid release to the environment.
- **6.2 Environmental precautions:**  
Do not allow the product to enter sewers/surface or ground water; Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust); Ensure good ventilation; Dispose of contaminated material as waste according to item 13.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling:**  
Ensure good ventilation/ exhaustion at the workplace; Wear protective gloves/ protective clothing / eye protection /face protection; Do not breathe the vapor; Use respiratory protective device against the effects of vapor; Prevent contact with eyes and skin; Avoid release to the environment.
- **Information about fire and explosion protection:** Normal measures for preventive fire protection.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** Store in original container.
- **Information about storage in one common storage facility:** Keep away from flammable substance.
- **Further information about storage conditions:** Store locked up.

## SECTION 8: Exposure controls/personal protection

- **8.1 Exposure control measures**
- **Ingredients with limit values that require monitoring at the workplace:**

Source	Ingredient	TWA	STEL	Peak
Australia Exposure Standards	Polymer of 2-aminoethanol / 2-(chloromethyl) oxirane / 4,4'-(isopropylidene) diphenol	Not available	Not available	Not available
Australia Exposure Standards	Benzyl alcohol	Not available	Not available	Not available
Australia Exposure Standards	Isophorone diamine	Not available	Not available	Not available

- **8.2 Biological monitoring:** Not available
- **8.3 Control banding:** Handle in accordance with good industrial hygiene and safety practice; Wash hands and face before breaks and at the end of work; Ensure good ventilation at workplace.

• **8.4 Engineering controls**

• *Based on the composition shown in section 3, the following measures are suggested for occupational safety measure.*

• **Appropriate engineering controls:**

*Use only in a well-ventilated area; Take off contaminated clothing and wash it before reuse; See Section 7 for information about design of technical facilities.*

• **8.3 Individual protection measures**

• **Eye and face protection:**



*Safety glasses with side-shields (frame goggles) (e.g. EN 166)*

• **Skin protection:**



*Protective gloves*

*Latex gloves, butyl rubber gloves (thickness > 0.3 mm, break through time approx. 480 min).*

• **Respiratory protection:** *Dust mask is recommended; keep well-ventilated.*

• **Thermal hazards:** *Not available*

## SECTION 9: Physical and chemical properties

• **9.1 Information on basic physical and chemical properties**

• **Appearance:**

<b>Physical state</b>	<i>Liquid</i>
<b>Color</b>	<i>Colorless and transparent.</i>
<b>Odor</b>	<i>Mild</i>
<b>Odor threshold</b>	<i>Not determined.</i>
• <b>pH-value</b>	<i>Not determined.</i>
• <b>Change in condition</b>	
<b>Melting point/melting range</b>	<i>Not determined.</i>
<b>Boiling point and boiling range</b>	<i>Not determined.</i>
• <b>Freezing point</b>	<i>Not determined.</i>
• <b>Flash point</b>	<i>&gt;93°C(closed cup)</i>
• <b>Flammability (solid, gas)</b>	<i>Not applicable</i>
• <b>Decomposition temperature</b>	<i>Not determined.</i>
• <b>Self-ignition</b>	<i>Product is not self-igniting.</i>
• <b>Danger of explosion</b>	<i>Product does not present an explosion hazard.</i>
• <b>Explosion limits</b>	
<b>Lower:</b>	<i>Not explosive</i>
<b>Upper:</b>	<i>Not explosive</i>
• <b>Oxidizing properties</b>	<i>Not determined.</i>
• <b>Vapor pressure</b>	<i>Not determined.</i>
• <b>Density</b>	<i>Not determined.</i>
• <b>Relative density</b>	<i>Not determined.</i>
• <b>Vapor density</b>	<i>Not determined.</i>
• <b>Evaporation rate</b>	<i>Not determined.</i>
• <b>Solubility in/Miscibility with</b>	
<b>Water</b>	<i>Almost insoluble in water</i>

· Partition coefficient (n-octanol/water)	Not determined.
· Viscosity	
Dynamic	Not determined.
Kinematic	Not determined.
· 9.2 Other information	Data not available

## SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No decomposition if used according to specification.
- **10.2 Chemical stability:** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions:** No further relevant information available.
- **10.4 Conditions to avoid:** High temperature.
- **10.5 Incompatible materials:** Strong oxidizing agent and strong acid, alkali.
- **10.6 Hazardous decomposition products:** No known hazardous decomposition products.

## SECTION 11: Toxicological information

### · 11.1 Information on toxicological effects

- **Acute toxicity:** Harmful if swallowed.

ATE (LD50-oral): 1429mg/kg; ATE (LD50-skin): >5000mg/kg.

- **LD/LC50 values relevant for classification:** No animal test has been done for this product.

25068-38-6 Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol		
Rat	LD50-oral	30000mg/kg
	LD50-skin	> 1200mg/kg
Mouse	LD50-oral	20000mg/kg
	LD50-skin	> 1270mg/kg
100-51-6 Benzyl alcohol		
Guinea pig	LD50-oral	2500mg/kg
Mouse	LD50-oral	1360mg/kg
Rabbit	LD50-oral	1040mg/kg
	LD50-skin	2000mg/kg
Rat	LD50-oral	1230mg/kg
Remark: The above data are from literature.		

- **Skin corrosion/irritation:** Corrosive to skin - contact may cause permanent damage to skin and body.
- **Serious eyes damage/irritation:** Corrosive contact eyes.
- **Respiratory or skin sensitization:** Cause allergic contact dermatitis
- **Germ cell mutagenicity:** Data is not available
- **Carcinogenicity:** Data is not available
- **Reproductive toxicity:** Data is not available
- **STOT-single exposure:** Data is not available
- **STOT-repeated exposure:** Data is not available
- **Aspiration hazard:** Data is not available
- **11.2 Information on possible routes of exposure:** Ingestion; Skin exposure.
- **11.3 Early onset symptoms related to exposure:** Skin corrosive and allergic; Eye corrosive.

- 11.4 Delayed health effects from exposure: Data is not available.
- 11.5 Exposure levels and health effects: Data is not available.
- 11.6 Interactive effects: Data is not available.
- 11.7 Other information: Data is not available

## SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity: Toxic to aquatic life with long lasting effects

25068-38-6 Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol	
Short-term toxicity to fish	LC50 (4 days) 1.2 - 3.6 mg/L
Short-term toxicity to aquatic invertebrates	EC50 (48 h) 1.1 - 2.8 mg/L
	LC50 (48 h) 2.7 mg/L
Long-term toxicity to aquatic invertebrates	NOEC (21 days) 300 µg/L
	LOEC (21 days) 1 mg/L
Toxicity to aquatic algae and cyanobacteria	EC50 (72 h) 9.4 - 11 mg/L
	NOEC (72 h) 2.4 - 4.2 mg/L
Toxicity to microorganisms	IC50 (3 h) 100 mg/L
100-51-6 Benzyl alcohol	
Short-term toxicity to fish	LC50 (4 days) 460 mg/L
Short-term toxicity to aquatic invertebrates	EC50 (48 h) 230 mg/L
Long-term toxicity to aquatic invertebrates	NOEC (21 days) 51 mg/L
	EC50 (21 days) 66 mg/L
Toxicity to aquatic algae and cyanobacteria	EC50 (72 h) 500 - 770 mg/L
	NOEC (72 h) 310 mg/L
Toxicity to microorganisms	IC50 (48 h) 2.1 g/L
2855-13-2 Isophorone diamine	
Short-term toxicity to fish	LC50 (4 days) 110 mg/L
Short-term toxicity to aquatic invertebrates	EC50 (48 h) 23 mg/L
	LC50 (72 h) 362 mg/L
Long-term toxicity to aquatic invertebrates	NOEC (21 days) 3 mg/L
	LOEC (21 days) 10 mg/L
Toxicity to aquatic algae and cyanobacteria	EC50 (72 h) 37 - 50 mg/L
	NOEC (72 h) 1.5 mg/L

- 12.2 Persistence and degradability: Not readily degradable.

25068-38-6	Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol	Under test conditions no biodegradation observed
100-51-6	Benzyl alcohol	Readily Biodegradable in water
2855-13-2	Isophorone diamine	Under test conditions no biodegradation observed

- 12.3 Bio-accumulative potential: Low bio-accumulation.

25068-38-6	Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol	Log Pow = 2.64 - 3.78 @ 25 °C and pH 7 - 7.1
100-51-6	Benzyl alcohol	Log Pow = 0.87 - 1.1 at 20 - 25 °C
2855-13-2	Isophorone diamine	Log Pow = 0.99 at 23 °C and pH 6.34


- 12.4 Mobility in soil: Low mobility in soil.
- 12.5 Other adverse effects: No further relevant information available.

### SECTION 13: Disposal consideration


- 13.1 Disposal methods
- Recommendation:  
Must not be disposed together with household garbage. Dispose of the product must be in according to the local regulation, for example landfill.
- 13.2 Un-cleaned packaging
- Recommendation: Dispose of contents/container in according to the local regulation.

### SECTION 14: Transport information

#### Land transport (ADG) :

• UN-Number	UN2289
• Proper shipping name or technical name	ISOPHORONEDIAMINE
• Transport hazard class	
Class	8 Corrosive substances
Label	8
• Packing group number	III
• Environmental hazards for transport purposes	Yes
• Special precautions for user	Limited quantity: 5L Excepted quantities: E1 Packing Instruction: P001 IBC03 LP01 Instructions: T4 Special Provisions: TP1
• Additional information	

#### IMDG, IATA

• UN-Number	UN2289
• Proper shipping name or technical name	ISOPHORONEDIAMINE
• Transport hazard class	
Class	8 Corrosive substances
Label	8
• Danger code (Kemler)	80
• EMS Number	F-A,S-B
• Hazchem or emergency action code	2X

### SECTION 15: Regulatory information

#### • 15.1 Australia Inventory of Chemical Substances (AICS):

25068-38-6	Polymer of 2-aminoethanol / 2-(chloromethyl)oxirane / 4,4'-(isopropylidene) diphenol	Listed
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68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs	Listed
2855-13-2	Isophorone diamine	Listed

- **15.2 Montreal Protocol (Ozone depleting substances):** Not regulated.
- **15.3 The Stockholm Convention (Persistent Organic Pollutants):** Not regulated.
- **15.4 The Rotterdam Convention (Prior Informed Consent):** Not regulated.
- **15.5 Basel Convention (Hazardous Waste):** Not regulated.
- **15.6 International Convention for the Prevention of Pollution from Ships (MARPOL):** Not regulated.
- **15.7 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:** Poisons Schedule: 5
- **IARC (International Agency for Research on Cancer):** Not regulated.
- **Proposition 65**
  - **Chemicals known to cause cancer:** Not regulated.
  - **Chemicals known to cause reproductive toxicity for females:** Not regulated.
  - **Chemicals known to cause reproductive toxicity for males:** Not regulated.
  - **Chemicals known to cause developmental toxicity:** Not regulated.
- **The Agricultural and Veterinary Chemicals Act 1994:** Not regulated.
- **The Industrial Chemicals (Notification and Assessment) Act 1989:** Not regulated.
- **15.8 NICNAS assessment report:** An Assessment report has not been carried out.

## SECTION 16: Other information

- **The date of preparation of the latest revision:** Jun. 16, 2019
- **The latest revision:** 1.0

\*\*\*\*\*  
**The contents and format of this SDS are in accordance with the Work Health and Safety Act of Australia and ADG requirements**  
**DISCLAIMER OF LIABILITY:**

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

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• **Abbreviations and acronyms:**

WHS : Work Health and Safety

ADG Code: The Australian Code for the Transport of Dangerous Goods by Road and Rail, as in force or remade from time to time, approved by the Transport and Infrastructure Council.

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

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

LD50: Lethal dose, 50 percent

LC50: Lethal concentration, 50 percent

*EC50: Concentration of maximal effect, 50 percent*

*IC50: Half maximal inhibitory concentration*

*NOEC: No observed effect concentration*

*LOEC: Lowest Observed Effect Concentration*

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*End of safety data sheet*