

# Casting Eco Epoxy Resin



## Safety Data Sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Material Name: Casting Eco Epoxy Resin  
Product code: PCE\_R1

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Use of the substance/mixture: Liquid thermoset resin for composite manufacture

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Professional Epoxy Coatings  
Old Cooperage Yard  
Gatebeck  
KENDAL  
LA8 0HW  
UNITED KINGDOM

Telephone: +44 (0)1539 267 171  
Email: info@pecepoxy.co.uk

#### 1.4. Emergency telephone number

+44 (0)1539 267 171 – English speaking (UK office hours)

### 2. Hazards identification

#### 2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments.

Eye irritation, category 2A.  
Skin irritation, category 2.  
Skin sensitisation, category 1.  
Chronic aquatic hazard, category 2.

##### Hazard-determining components of labelling:

Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran  
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.  
Benzyl Alcohol

#### 2.2. Label elements

Hazard pictograms:



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 statements:**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P264 Wash skin 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/protective clothing/eye protection/face protection.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.  
 P304+P340+P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison centre or doctor/physician if you feel unwell.  
 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 Take off contaminated clothing and wash before reuse.  
 P391 Collect spillage.  
 P501 Dispose of contents and container as instructed in Section 13.

**2.3. Other hazards**

None known

**Information concerning particular hazards for humans and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**Classification system:**

The classification is according to EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

### 3. Composition/information on ingredients

**3.1. Substance**

Not applicable

**3.2. Mixture**

Identification	Name	Classification according to Regulation (EC) No. 1278/2008 (CLP)	Weight %
CAS number: 25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Skin Sens. 1; H317 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	50-80
CAS number: 68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Skin Sens. 1; H317 Skin Irrit. 2; H315 Eye Irrit. 2; H319	10-20
CAS number: 100-51-6	Benzyl Alcohol	Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Irrit. 2; H319 Aquatic Acute 2; H401	<10

Additional information: None

Full Text of H and EUH statements: See section 16

## 4. First aid measures

### 4.1. Description of first aid measures

General information: None.

#### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position.  
Maintain an unobstructed airway.  
Get medical advice/attention if you feel unwell.

#### After skin contact:

Wash affected area with soap and water.  
Seek medical attention if symptoms develop or persist.

#### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes.  
Remove contact lens(es) if able to do so during rinsing.  
Seek medical attention if irritation persists or if concerned.

#### After swallowing:

Rinse mouth and then drink plenty of water.  
Do not induce vomiting.  
Get medical advice/attention if you feel unwell.

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

None

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information.

## 5. Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media: Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.  
Unsuitable extinguishing media: Do not use water as an extinguisher.

### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapours.

### 5.3. Advice for firefighters

#### Protective equipment:

Wear protective eye wear, gloves and clothing.  
Refer to Section 8.  
Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.

### 5.4. Additional information

Heating causes a rise in pressure, risk of bursting and combustion.  
Shut off sources of ignition.  
Carbon monoxide and carbon dioxide may form upon combustion.

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.  
Ensure air handling systems are operational.  
Wear protective eye wear, gloves and clothing.

## 6.2. Environmental precautions

Should not be released into the environment.  
Prevent from reaching drains, sewer or waterway.

## 6.3. Methods and material for containment and cleaning up

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders).  
Dispose of contents / container in accordance with local regulations.

## 6.4. Reference to other sections

None

# 7. Handling and storage

## 7.1. Precautions for safe handling

Do not eat, drink, smoke or use personal products when handling chemical substances.  
Avoid breathing mist or vapour.  
Use only with adequate ventilation.

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

Store in a cool, well-ventilated area.  
Store away from foodstuffs.

## 7.3. Specific end use(s)

No additional information.

# 8. Exposure controls/personal protection



## 8.1. Control parameters

### Occupational Exposure limit values:

100-51-6, Benzyl Alcohol, WEEL TWA 10.0 ppm.

## 8.2. Exposure controls

### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.  
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

### Personal protection equipment

#### *Eye and face protection:*

Safety goggles or glasses, or appropriate eye protection.

#### *Skin and body protection:*

Select glove material impermeable and resistant to the substance.  
Select glove material based on rates of diffusion and degradation.

#### *Respiratory protection:*

When necessary, use NIOSH-approved breathing equipment.

### General hygienic measures:

Wash hands before breaks and at the end of work.  
Avoid contact with skin, eyes and clothing.  
Perform routine housekeeping.  
Wash contaminated clothing before reusing.

## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance (physical state, colour)	Clear/pale yellow liquid	Explosion limit lower	No data available
Odour	Slight	Explosion limit upper	No data available
Odour threshold	No data available	Vapour pressure	No data available
pH	No data available	Vapour density	No data available
Melting/Freezing point	No data available	Relative density	No data available
Boiling point/range	No data available	Solubilities	No data available
Flash point (closed cup)	> 200°C (> 392°F)	Partition coefficient (n-octanol/water)	No data available
Evaporation rate	No data available	Auto/Self-ignition temperature	No data available
Flammability (solid, gaseous)	No data available	Decomposition temperature	No data available
Density	1100 - 1200 kg/m <sup>3</sup> @ 25°C	Dynamic viscosity	8 - 13 Pa·s @ 25°C
		Kinematic viscosity	No data available

## 10. Stability and reactivity

### 10.1. Reactivity

Reacts with oxidising agents.

### 10.2. Chemical stability

Stable under normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

Polymerises exothermically with amines, mercaptans and Lewis acids at ambient temperature and above. Polymerises in contact with bases (e.g. caustic soda), ammonia, primary and secondary amines, alcohols and acids.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

Caustic soda. Strong oxidising agents.

### 10.6. Hazardous decomposition products

None known.

## 11. Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

Name	Route	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	oral	LD50 – Rat – 13,800 mg/kg
Benzyl Alcohol	oral	LD50 – Rat – 1,230 mg/kg

#### Skin corrosion/irritation

Benzyl Alcohol BLK: Rabbit – No skin irritation 24h.

#### Serious eye damage/irritation

Benzyl Alcohol BLK: Rabbit – Eye irritation 24h.

**Respiratory or skin sensitisation**

No additional information.

**Carcinogenicity**

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

**Germ cell mutagenicity**

No additional information.

**Reproductive Toxicity**

No additional information.

**Specific target organ toxicity (single exposure)**

No additional information.

**Specific target organ toxicity (repeated exposure)**

No additional information.

**Aspiration toxicity**

No information available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

## 12. Ecological information

**12.1. Toxicity**

Name	Result
Benzyl Alcohol	LC50, Fish – <i>Lepomis macrochirus</i> (Bluegill) – 10 mg/L – 96 h
	EC50, Aquatic invertebrates – <i>Daphnia magna</i> (Water flea) – 55 mg/L – 24 h

**12.2. Persistence and degradability**

No data available.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

PBT: No data available.

vPvB: No data available.

**12.6. Other adverse effects:**

No data available.



## 13. Disposal considerations

**13.1. Waste treatment methods****Relevant information:**



It is the responsibility of the waste generator to properly characterise all waste materials according to applicable regulatory entities. (US 40CFR262.11).

## 14. Transport information



### United States Transportation of dangerous goods (49 CFR DOT)

14.1. UN number	3082
14.2. UN proper shipping name	Environmentally Hazardous Substance, Liquid, N.O.S. (Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)
14.3. UN transport hazard class(es)	9  
14.4. Packing group	III
14.5. Environmental hazards	Marine Pollutant
14.6. Special precautions for user	The DOT regulations above apply to Non-Bulk shipments only. Product is not regulated for air, rail and motor vehicle packages less than 119 gal (450 L). Product is regulated by vessel. 49 CFR / Highway, Rail & US Air Transport: Not Regulated per 49 CFR Regulation 171.4 Paragraph C and 172.101 Appendix B.



### International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

14.1. UN number	3082
14.2. UN proper shipping name	Environmentally Hazardous Substance, Liquid, N.O.S. (Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)
14.3. UN transport hazard class(es)	9  
14.4. Packing group	III
14.5. Environmental hazards	Marine Pollutant
14.6. Special precautions for user	None
Classification code	90
Transport category	3
Tunnel restriction code	E
Excepted quantities	30mL inner pckg; 1L outer pckg
Limited quantity	5L



### International Carriage of Dangerous Goods by Inland Waterways (ADN)

14.1. UN number	3082
14.2. UN proper shipping name	Environmentally Hazardous Substance, Liquid, N.O.S. (Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)
14.3. UN transport hazard class(es)	9  
14.4. Packing group	III
14.5. Environmental hazards	Marine Pollutant
14.6. Special precautions for user	None
Excepted quantities	30mL inner pckg; 1L outer pckg
Limited quantity	5L

**International Maritime Dangerous Goods (IMDG)**

14.1. UN number	3082
14.2. UN proper shipping name	Environmentally Hazardous Substance, Liquid, N.O.S. (Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)
14.3. UN transport hazard class(es)	9  
14.4. Packing group	III
14.5. Environmental hazards	Marine Pollutant
14.6. Special precautions for user	None
EmS number	F-A, S-F
Excepted quantities	30mL inner pckg; 1L outer pckg
Limited quantity	5L

**International Air Transport Association Dangerous Goods Regulations (IATA-DGR)**

14.1. UN number	3082
14.2. UN proper shipping name	Environmentally Hazardous Substance, Liquid, N.O.S. (Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)
14.3. UN transport hazard class(es)	9  
14.4. Packing group	III
14.5. Environmental hazards	Marine Pollutant
14.6. Special precautions for user	None
Excepted quantities	30mL inner pckg; 1L outer pckg
Limited quantity	30 kg G

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Bulk Name	None
Ship type	None
Pollution category	None

**15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****United States regulations****Inventory listing (TSCA):**

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Listed
100-51-6	Benzyl Alcohol	Listed

Significant New Use Rule (TSCA Section 5): Not listed

Export notification under TSCA Section 12(b): Not listed

SARA Section 311/312 (Specific toxic chemical listings): Not classified

SARA Section 302 (Extremely hazardous substances): Not listed

SARA Section 313 (Specific toxic chemical listings): Not listed

CERCLA: Not listed



RCRA: Not listed  
 Section 112(r) of the Clean Air Act (CAA): Not listed  
 Massachusetts Right to Know: Not listed  
 New Jersey Right to Know: Not listed  
 New York Right to Know: Not listed  
 Pennsylvania Right to Know: Not listed  
 California Proposition 65: Not listed

#### European regulations

Inventory listing (EINECS): Not determined.  
 REACH SVHC candidate list: Not listed  
 REACH SVHC Authorisations: Not listed  
 REACH Restriction: Not listed  
 Water hazard class (WGK): Not determined.

#### Canada regulations

Domestic substances list (DSL):

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Listed
100-51-6	Benzyl Alcohol	Listed

Non-domestic substances list (NDSL): Not listed

#### China regulations

Inventory of Existing Chemical Substances in China (IECSC):

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Listed
100-51-6	Benzyl Alcohol	Listed

Inventory of Prohibited Chemicals: Not listed

Catalog of Hazardous Chemicals: Not listed

List of Toxic Chemicals Restricted to be Imported and Export in China: Not listed

List of Hazardous Chemicals for Priority Management - SAWS: Not listed

The Catalog of Priority Hazardous Chemicals for Environment Management (PHCs)-MEP: Not listed

#### Australia regulations

Australian Inventory of Chemical Substances (AICS):

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Listed
100-51-6	Benzyl Alcohol	Listed

#### Japan regulations

Existing and New Chemical Substances (ENCS):

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Listed
100-51-6	Benzyl Alcohol	Listed

Industrial Safety and Health Law (ISHL): Not determined.

#### Korea regulations

Korea Existing Chemicals List (KECL):

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Listed
100-51-6	Benzyl Alcohol	Listed

#### New Zealand regulations

New Zealand Inventory of Chemicals (NZIoC):

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
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68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Listed
100-51-6	Benzyl Alcohol	Listed

#### Philippine regulations

Philippine Inventory of Chemicals and Chemical Substances (PICCS):

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Listed
100-51-6	Benzyl Alcohol	Listed

#### Taiwan regulations

Taiwan Chemical Substance Inventory (TCSI):

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Listed
100-51-6	Benzyl Alcohol	Listed

### 15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## 16. Other information

Indication of changes: Not applicable.

Abbreviations and Acronyms: None

#### Summary of classification in section 3:

Acute Tox. 4; H302	Acute toxicity (oral), category 4
Acute Tox. 4; H332	Acute toxicity (inhalation), category 4
Skin Sens. 1; H317	Skin sensitisation, category 1
Skin Irrit. 2; H315	Skin irritation, category 2
Eye Irrit. 2; H319	Eye irritation, category 2A
Aquatic Chronic 2; H411	Chronic aquatic hazard, category 2
Aquatic Acute 2; H401	Acute aquatic hazard, category 2

#### Summary of hazard statements in section 3:

H302	Harmful if swallowed
H332	Harmful if inhaled
H317	May cause an allergic skin reaction
H315	Causes skin irritation
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects
H401	Toxic to aquatic life.

The information and recommendations contained herein are based upon data believed to be correct. However, as much of the information has been received from sources outside our company, we cannot guarantee its accuracy or completeness. Health and safety precautions contained within this data sheet may not be adequate for all individuals and /or situations. It is the user's obligation to evaluate and use this data in order to comply with all applicable laws and regulations. Additionally, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.