

Fast Casting Eco Epoxy Activator



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: Fast Casting Eco Epoxy Activator
Product code: PCE_AF1

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 curing agent for epoxy resin

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.

Serious eye damage, category 1.
Skin corrosion, category 1B.
Skin sensitisation, category 1.
Acute toxicity (oral), category 4.
Chronic aquatic hazard, category 3.

Hazard-determining components of labelling:

Poly(oxypropylene)diamine
Piperazine (solid)
1-Piperazineethanamine

2.2. Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H300 Fatal if swallowed.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P234 Keep only in original container.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash skin 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.
P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE or doctor/physician.
P302+P352 IF ON SKIN: Wash with soap and water.
P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTRE or doctor/physician.
P304+P340+P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTRE or doctor/physician.
P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician.
P321 Specific treatment (see supplemental first aid instructions on this label).
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.
P391 Collect spillage.
P405 Store locked up.
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: 9046-10-0	Poly(oxypropylene)diamine	Skin Corr. 1B; H314	10-90
CAS number: 102-71-6	Triethanolamine		1-10
CAS number: 110-85-0	Piperazine		1-5
CAS number: 140-31-8	1-Piperazineethanamine	Acute Tox. 4; H302 Acute Tox. 3; H311 Skin Sens. 1; H317 Skin Corr. 1B; H314 Aquatic Chronic 3; H412	1-5

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:

Move exposed individual to fresh air.

Loosen clothing as necessary and position individual in a comfortable position.

Maintain an unobstructed airway.

Immediately call a POISON CONTROL CENTRE or seek medical attention.

After skin contact:

Immediately remove all contaminated clothing.

Wash affected area with soap and water.

Immediately call a POISON CONTROL CENTRE or seek medical attention.

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.

Immediately call a POISON CONTROL CENTRE or seek medical attention.

After swallowing:

Immediately call a POISON CONTROL CENTRE or seek medical attention.

Do not induce vomiting.

Rinse mouth and then drink plenty of water.

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.

Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapour and aerosols.
Avoid contact with skin, eyes and clothing.

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.
Do not add water to corrosives as this can cause a violent reaction.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated area.
Store in a corrosive resistant container with a resistant inner lining.
Keep away from incompatibles such as oxidising agents, organic materials, metals, alkalis and moisture.

7.3. Specific end use(s)

No additional information.

8. Exposure controls/personal protection



8.1. Control parameters

102-71-6, Triethanolamine, ACGIH TWA 5mg/m³.

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.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

Protection of skin:

Select glove material impermeable and resistant to the substance.

Eye protection:

Safety goggles or glasses, or appropriate eye protection.

General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

Environmental exposure controls:

Select controls based on a risk assessment of local conditions.

See section 6 for information on accidental release measures.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance (physical state, colour)	Clear to yellow liquid	Explosion limit lower	No data available
Odour	No data available	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 (water = 1)	No data available
Boiling point/range	> 220°C (> 428°F)	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	No data available	Dynamic viscosity (at 25°C)	0.05-0.2 Pa·s
		Kinematic viscosity	No data available

10. Stability and reactivity

10.1. Reactivity

Does not react under normal conditions of use and storage.

10.2. Chemical stability

Stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

None under normal conditions of use and storage.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Monomers, resins, water and oxidising agents.

10.6. Hazardous decomposition products

Will not occur.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Oral:

Poly(oxypropylene)diamine: LD50 Rat 2,885.3 mg/kg.

Triethanolamine: LD50 Mouse 5,846 mg/kg.

Piperazine (solid): LD50 Rat 2,600 mg/kg.

1-Piperazineethanamine: LD50 Oral – rat – male – 2,097 mg/kg.

Dermal:

Poly(oxypropylene)diamine: LD50 Rabbit 2,980 mg/kg.

Triethanolamine: LD50 Rabbit >22.5 g/kg.

Piperazine (solid): LD50 Rabbit 8,300 mg/kg.

1-Piperazineethanamine: LD50 Dermal – rabbit – male – 886 mg/kg.

Inhalation:

Poly(oxypropylene)diamine: LC50 Rat 8h 0.74 mg/l.

Piperazine (solid): LC50 Rat 4h 0.8 mg/l.

Skin corrosion/irritation

Poly(oxypropylene)diamine: Rabbit: Corrosive, category 1C – where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.

Piperazine (solid): Rabbit: causes burns.

Serious eye damage/irritation

Poly(oxypropylene)diamine: Rabbit: Corrosive to eyes.

Piperazine (solid): Rabbit: severe eye irritation, 24h.

Respiratory or skin sensitisation

Piperazine (solid): Guinea pig: may cause sensitisation by skin contact.

Carcinogenicity

IARC (International Agency for Research on Cancer):

Triethanolamine: Group 3 – Not classifiable as to its carcinogenicity to humans.

NTP (National Toxicology Program):

None of the ingredients are listed.

Reproductive toxicity

No additional information.

STOT-single and repeated exposure

No additional information.

Aspiration toxicity

No information available.

Additional toxicological information

No additional information.

12. Ecological information

12.1. Toxicity

Name	Result
Poly(oxypropylene)diamine	Fish, semi-static test LC50 – Oncorhynchus mykiss (rainbow trout) – >15 mg/L – 96 h.
Poly(oxypropylene)diamine	Fish, static test NOEC – Oncorhynchus mykiss (rainbow trout) – >15 mg/L – 96 h.
Poly(oxypropylene)diamine	Aquatic invertebrates, static test EC50 – Daphnia – 80 mg/L – 48 h.
Poly(oxypropylene)diamine	Aquatic invertebrates, NOEC – Daphnia – 18 mg/L – 48 h.

Triethanolamine	Fish, <i>Lepomis macrochirus</i> (Bluegill) – 450-1000 mg/L – 96 h.
Triethanolamine	Aquatic invertebrates – <i>Daphnia magna</i> (Water flea) – 609.98 mg/L – 48 h.
Piperazine (solid)	Fish, LC50 – <i>Poecilia reticulata</i> (guppy) – >1800 mg/L – 96 h.
Piperazine (solid)	Aquatic invertebrates, EC50 – <i>Daphnia magna</i> (Water flea) – 21 mg/L – 48 h.
Piperazine (solid)	Aquatic plants, EC50 – <i>Pseudokirchneriella subcapitata</i> (green algae) – >1000 mg/L – 72 h.
1-Piperazineethanamine	Fish, static test LC50 – <i>Pimephales promelas</i> (fathead minnow) – ca. 2190 mg/L – 96 h.
1-Piperazineethanamine	Aquatic invertebrates, static test EC50 – <i>Daphnia magna</i> (Water flea) – 58 mg/L – 48 h.

12.2. Persistence and degradability

No additional information.

12.3. Bioaccumulative potential

No additional information.

12.4. Mobility in soil

No additional information.

12.5. Results of PBT and vPvB assessment

PBT assessment: No additional information.

vPvB assessment: No additional information.

12.6. Other adverse effects:

No additional information.

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	2735
14.2. UN proper shipping name	Amines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine)
14.3. UN transport hazard class(es)	8  
14.4. Packing group	III
14.5. Environmental hazards	Yes
14.6. Special precautions for user	None



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

14.1. UN number	2735
14.2. UN proper shipping name	Amines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine)
14.3. UN transport hazard class(es)	8  
14.4. Packing group	III
14.5. Environmental hazards	Yes
14.6. Special precautions for user	None
Classification code	80
Transport category	3
Tunnel restriction code	E
Excepted quantities	30mL inner pckg; 1L outer pckg
Limited quantity	5L

International Maritime Dangerous Goods (IMDG)

14.1. UN number	2735
14.2. UN proper shipping name	Amines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine)
14.3. UN transport hazard class(es)	8  
14.4. Packing group	III
14.5. Environmental hazards	Yes
14.6. Special precautions for user	None
EmS number	F-A, S-B
Excepted quantities	30mL inner pckg; 1L outer pckg
Limited quantity	5L

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

14.1. UN number	2735
14.2. UN proper shipping name	Amines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine)
14.3. UN transport hazard class(es)	8  
14.4. Packing group	III
14.5. Environmental hazards	Yes
14.6. Special precautions for user	None
Excepted quantities	30mL inner pckg; 1L outer pckg
Limited quantity	5L

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

Not applicable

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

United States

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

SARA Section 302 (Extremely hazardous substances): None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings): None of the ingredients are listed.

TSCA (Toxic Substances Control Act): All ingredients are listed.

TSCA Rules and Orders: Not applicable.

Proposition 65 (California): None of the ingredients are listed.

European Union

REACH SVHC: None of the ingredients are listed.

Germany MAK: Not classified.

15.2. Chemical Safety Assessment

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

16. Other information

Abbreviations and Acronyms: None

Summary of classification in section 3:

Skin Corr. 1B; H314	Skin corrosion, category 1B
Acute Tox. 4; H302	Acute toxicity (oral), category 4
Acute Tox. 3; H311	Acute toxicity (dermal), category 3
Skin Sens. 1; H317	Skin sensitisation, category 1
Aquatic Chronic 3; H412	Chronic aquatic hazard, category 3

Summary of hazard statements in section 3:

H314	Causes severe skin burns and eye damage
H302	Harmful if swallowed
H311	Toxic in contact with skin
H317	May cause an allergic skin reaction
H412	Harmful to aquatic life with long lasting effects

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.