

Hazardous, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: EPAR CTA Hardener

Recommended use: Thixotropic epoxy coating for protection of concrete and steel. Hardener is part of a two part system including EPAR CTA Resin.

Supplier: Stratmore Construction Solutions Ltd

Company No.: 8706

Street Address: 185 Rata Street,

Naenae, Lower Hutt 5041

New Zealand

Telephone: +644 567 8436 **Email:** info@stratmore.co.nz

Emergency Telephone number: 0800 POISON / 0800 764766

2. HAZARDS IDENTIFICATION

This material is hazardous according to the criteria of EPA New Zealand GHS 7.

EPA Group Standard: HSR002658 - Surface Coatings and Colourants (Corrosive) Group Standard 2020



Signal Word

Danger

Hazard Classifications

Acute Toxicity - Oral - Category 4
Skin Corrosion/Irritation - Category 1B
Serious Eye Damage/Irritation - Category 1
Sensitisation - Respiratory - Category 1
Sensitisation - Skin - Category 1
Toxic to Reproduction - Category 2

Specific Target Organ Toxicity following Repeated Exposure - Category 2

Long Term Hazards to the Aquatic Environment - Category 3

Hazard Statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Prevention Precautionary Statements

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 dust, fume, gas, mist, vapours or spray.

Product Name: EPAR CTA Hardener Reference No: SCS012501
Issued: 2022-05-16 Version: 3.0 Page 1 of 9



P264 Wash hands, face and all exposed 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.

P281 Use personal protective equipment as required.

P285 In case of inadequate ventilation wear respiratory protection.

Response Precautionary Statements

P101 If medical advice is needed, have product container or label at hand. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower].

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a

position 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.

P310 Immediately call a POISON CENTER/doctor.

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

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

P363 Wash contaminated clothing before reuse.

Storage Precautionary Statement

P405 Store locked up.

Disposal Precautionary Statement

P501 Dispose of contents/container in accordance with local, regional, national and

international regulations.

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous Goods Class: 8

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Benzyl alcohol	100-51-6	10 - 30 %
Phenol, 2,4,6-tris[(dimethylamino)methyl]-	90-72-2	1 - 10 %
Phenol, 4-nonyl-, branched	84852-15-3	1 - 10 %
Triethylenetetramine	112-24-3	1 - 10 %
1,3-Benzenedimethanamine	1477-55-0	1 - 10 %
1-Piperazineethanamine	140-31-8	1 - 10 %
Phenol, 4,4'-(1-methylethylidene)bis-	80-05-7	<1 %
1,2-Ethanediamine	107-15-3	<1 %
Phenol	108-95-2	<1 %
Ingredients determined to be non-hazardous	-	Balance
		4000/

100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Product Name: EPAR CTA Hardener Reference No: SCS012501

Issued: 2022-05-16 Version: 3.0 Page 2 of 9



Inhalation: Effects may be delayed. Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.

Skin Contact: Effects may be delayed. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Immediately call Poisons Centre or Doctor.

PPE for First Aiders: Wear rubber boots, overalls, gloves, apron, face shield. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically. Effects may be delayed. Can cause corneal burns.

5. FIRE FIGHTING MEASURES

Hazchem Code: 2X

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Combustible material.

Fire fighting further advice: On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No: 36

Product Name: EPAR CTA Hardener Reference No: SCS012501

Issued: 2022-05-16 Version: 3.0 Page 3 of 9



7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of dust.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Keep container standing upright. Keep containers closed when not in use - check regularly for spills.

This material is classified as a Class 8 Corrosive as per the criteria of the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and/or the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and must be stored in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Ethylenediamine m-Xylene a,a'-diamine	10	25 Ceiling 0.1			Sen Skin Skin
Phenol	5				Skin

As published by WorkSafe New Zealand.

WES-TWA (Workplace Exposure Standard - Time-weighted average). The average airborne concentration of a substance calculated over an eight-hour working day.

WES-Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded at any time during any part of the working day.

WES-STEL (Workplace Exposure Standard - Short-term exposure limit). The 15-minute time weighted 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. Exposures at concentrations between the WES-TWA and the WES-STEL should be less than 15 minutes, should occur no more than four times per day, and there should be at least 60 minutes between successive exposures in this range.

(skin) - Skin absorption. Skin absorption—applicable to a substance that is capable of being significantly absorbed into the body through contact with the skin.

(sen) - Sensitiser. A substance that can 'sensitise' the skin or respiratory system, inducing a state of hypersensitivity to it, so that on subsequent exposures, an allergic reaction can occur (which would not develop in non-sensitised individuals). It is uncommon to become sensitised to a compound after just a single reaction to it.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the WorkSafe New Zealand the ingredients in this material do not have a Biological Limit Allocated.

Product Name: EPAR CTA Hardener Reference No: SCS012501
Issued: 2022-05-16 Version: 3.0 Page 4 of 9



Page 5 of 9

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask.

Personal Protection Equipment: RUBBER BOOTS, OVERALLS, GLOVES, APRON, FACE SHIELD.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear rubber boots, overalls, gloves, apron, face shield. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: **Paste** Colour: Brown Odour: Ammoniacal

Solubility: N Av **Specific Gravity:** 1.36 Density: N Av Relative Vapour Density (air=1): N Av Vapour Pressure (20 °C): N Av Flash Point (°C): 96 Flammability Limits (%): agA N Autoignition Temperature (°C): N Av Melting Point/Range (°C): N Av **Boiling Point/Range (°C):** >200 pH: N Av Viscosity: N Av Total VOC (g/Litre): N Av

> (Typical values only - consult specification sheet) N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Oxidising agents, sodium hypochlorite, organic and mineral acids. Product slowly corrodes copper, aluminium, zinc and galvanised surfaces.

Hazardous decomposition products: Oxides of carbon and nitrogen, smoke and other toxic fumes.

Hazardous reactions: Contact with peroxides may result in violent decomposition with possible explosion resulting.

Product Name: EPAR CTA Hardener Reference No: SCS012501 Issued: 2022-05-16

Version: 3.0



11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract. A respiratory sensitiser. Can cause possible allergic reactions.

Skin contact: Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Ingestion: Harmful if swallowed. Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

Eye contact: A severe eye irritant. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

Acute toxicity

Inhalation: This material has been classified as not hazardous for acute inhalation exposure. Acute toxicity estimate (based on ingredients): $LC_{50} > 5.0$ mg/L for dust.

Skin contact: This material has been classified as not hazardous for acute dermal exposure. Acute toxicity estimate (based on ingredients): $LD_{50} > 2,000 \text{ mg/Kg}$ bw

Ingestion: This material has been classified as a Category 4 Hazard. Acute toxicity estimate (based on ingredients): $300 < LD_{50} \le 2,000 \text{ mg/Kg bw}$

Corrosion/Irritancy: Eye: this material has been classified as a Category 1 Hazard (irreversible effects to eyes). Skin: this material has been classified as a Category 1B Hazard (irreversible effects to skin).

Sensitisation: Inhalation: this material has been classified as a Category 1 Hazard (respiratory sensitiser). Skin: this material has been classified as a Category 1 Hazard (skin sensitiser).

Aspiration hazard: This material has been classified as not an aspiration hazard.

Specific target organ toxicity (single exposure): This material has been classified as not a specific hazard to target organs by a single exposure.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as a Category 2 - Substances that are suspected human reproductive or developmental toxicants.

Specific target organ toxicity (repeat exposure): This material has been classified as a Category 2 - Substances that are harmful to human target organs or systems. Ingestion or adsorption through the skin may result in damage to the central nervous system.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Product Name: EPAR CTA Hardener Reference No: SCS012501

Issued: 2022-05-16 Version: 3.0 Page 6 of 9



Acute aquatic hazard: This material has been classified as not hazardous for acute aquatic exposure. Acute toxicity estimate (based on ingredients): > 100 mg/L

Chronic aquatic hazard: This material has been classified as a Category Chronic 3 Hazard. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): 10 - 100 mg/L, where the substance is not rapidly degradable and/or BCF \geq 500 and/or log $K_{ow} \geq 4$.

Ecotoxicity in the soil environment: This material has been classified as non-hazardous.

Ecotoxicity to terrestrial vertebrates: This material has been classified as non-hazardous.

Ecotoxicity to terrestrial invertebrates: This material has been classified as non-hazardous.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".



UN No: 2735

Dangerous Goods Class: 8

Packing Group: III

Hazchem Code: 2X

Emergency Response Guide No: 36

Limited Quantities 5 L

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (M-PHENYLENBIS

(METHYLAMINE), 2-PIPERAZIN-1-YLETHANAMINE)

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity. Note 1: Concentrated strong alkalis are incompatible with concentrated strong acids. Note 2: Concentrated strong acids are incompatible with concentrated strong alkalis. Note 3: Acids are incompatible with Dangerous Goods of Class 6 which are cyanides. Exemptions may apply.

Product Name: EPAR CTA Hardener Reference No: SCS012501

Issued: 2022-05-16 Version: 3.0 Page 7 of 9



MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.



UN No: 2735

Dangerous Goods Class: 8

Packing Group: III

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (M-PHENYLENBIS

(METHYLAMINE), 2-PIPERAZIN-1-YLETHANAMINE)

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



UN No: 2735

Dangerous Goods Class: 8

Packing Group: III

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (M-PHENYLENBIS

(METHYLAMINE), 2-PIPERAZIN-1-YLETHANAMINE)

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)

The Stockholm Convention (Persistent Organic Pollutants)

The Rotterdam Convention (Prior Informed Consent)

International Convention for the Prevention of Pollution from Ships (MARPOL)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

• Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives

This material/constituent(s) is covered by the following requirements:

NZ EPA Status: All components of this product are listed on or exempt from the New Zealand Inventory of Chemical (NZIoC).

EPA Group Standard: HSR002658 - Surface Coatings and Colourants (Corrosive) Group Standard 2020

16. OTHER INFORMATION

Reason for issue: 5 Yearly Revision

Product Name: EPAR CTA Hardener Reference No: SCS012501

Issued: 2022-05-16 Version: 3.0 Page 8 of 9



This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.

Product Name: EPAR CTA Hardener Reference No: SCS012501

Issued: 2022-05-16 Version: 3.0 Page 9 of 9