

1. IDENTIFICATION OF THE SUBSTRATE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name/designation: Caltech Metedge Primer Activator

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

Relevant identified uses: Primer.

Recommended restrictions: Reserved for industrial and professional use.

1.3 Supplier details

Alumasc Building Products Ltd
White House Works, Bold Road, Sutton, St Helens, Merseyside, United Kingdom, WA9 4JG
Tel: +44 (0)1744 648400
e-mail: technical@alumascroofing.com

1.4 Emergency telephone number

Association / Organisation: National Poisons Information Service
Emergency telephone numbers: 0344 892 0111 (Healthcare professionals only)
Other emergency telephone numbers Alumasc Building Products: +44 17 4464 8400
(Mon-Thurs – 08.30-17.00 Fri – 08.30-16.00)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP][1]:

Acute Tox. 4, H332. Skin Irrit. 2, H315. Eye Irrit. 2, H319. Skin Sens. 1, H317.

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictures:



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.

Prevention:

P280 - Wear protective gloves and eye protection:
- neoprene gloves and safety glasses with side-shields.

Response:

P302 - IF ON SKIN:
P352 - Wash with plenty of soap and water.
P333 - If skin irritation or rash occurs:
P313 - Get medical attention.

Storage:

Not applicable.

Disposal:

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients: Bisphenol-A-Epoxy Resin Avg.Mol.Wght. ≤ 700 and 1,6-Bis(2,3-Epoxypropoxy)Hexane.

Supplemental label elements:

Contains epoxy constituents. May produce an allergic reaction.

Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:

Not applicable.

Special packaging requirements:

Containers to be fitted with child-resistant fastenings:

Not applicable.

Tactile warning of danger:

Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification:

None known.

The mixture may be a skin sensitiser. It may also be a skin irritant and repeated contact may increase this effect. The mixture may be a skin sensitiser. It may also be a severe skin irritant.

3. COMPOSITION AND INFORMATION ABOUT THE COMPONENTS

3.1 Substances

See 'Composition on ingredients' in Section 3.2.

3.2 Mixtures

United Kingdom: Great Britain:

Product/ingredient name	Identifiers	%	Classification	Type
Bisphenol-A-Epoxy Resin Avg.Mol.Wght. ≤ 700	REACH #: 01-2119456619-26 EC: 500-033-5 CAS: 25068-38-6 Index: 603-074-00-8	≥10 - ≤25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
Benzyl Alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤25	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1]
Trizinc Bis (Orthophosphate)	REACH #: 01-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	≥10	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
1,6-Bis (2,3-Epoxypropoxy) Hexane	REACH #: 01-2119463471-41 EC: 240-260-4 CAS: 16096-31-4	≥5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]
Zinc Oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	≥0,3	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]

See Section 16 for the full text of the H statements declared above.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type:

- [1] Substance classified with a health or environmental hazard
 - [2] Substance with a workplace exposure limit
 - [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
 - [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
 - [5] Substance of equivalent concern
 - [6] Additional disclosure due to company policy
- Occupational exposure limits, if available, are listed in Section 8.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General:	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
Eye contact:	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Skin contact:	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Inhalation:	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Ingestion:	If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details. Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided. Based on the properties of epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitiser and a severe irritant. It contains epoxy based reactive diluents which are moderate to severely irritating to eyes, mucous membrane and skin and are strong sensitisers. Repeated skin contact may lead to irritation and to hyper-sensitivity, possibly with cross-sensitisation to other epoxies. Single oral exposure to doses of the epoxy based reactive diluents at or close to the lethal dose has been shown to cause transient neurotoxic effects in animals in some cases. However, uptake through skin and by inhalation has not caused such effects in animals.

Prolonged exposure to high concentration may cause adverse effects in target organs such as liver and kidney.

Contains bisphenol-A-epoxy resin avg.mol.wght. ≤ 700, 1,6-bis(2,3-epoxypropoxy)hexane. May produce an allergic reaction.

Over-exposure signs/symptoms:

Eye contact: Adverse symptoms may include the following:
Pain or irritation,
Watering,
Redness.

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following:
Irritation
Redness.

Ingestion: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician:

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments:

No specific treatment.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

Recommended: alcohol-resistant foam, CO₂, powders, water spray.

Extinguishing media which must not be used for safety reasons:

Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture:

In a fire or if heated, a pressure increase will occur and the container may burst.
This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

Decomposition products may include the following materials:

- Carbon Dioxide
- Carbon Monoxide
- Sulfur Oxides
- Phosphorus Oxides
- Halogenated Compounds
- Metal Oxide/Oxides

5.3 Advice for fire-fighters

Special protective actions for fire-fighters:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Additional information :

No unusual hazard if involved in a fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency Personnel:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental Precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill:

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill:

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

7. HANDLING AND STORAGE

The information in this section contains generic advice and guidance.

7.1 Precautions for safe handling

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight.

Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Seveso Directive – Reporting thresholds (in tonnes):

Danger criteria:

Category	Notification and MAPP threshold	Safety report threshold
E2	200 tonne	500 tonne

7.3 Specific end use(s)

Recommendation:

Not available.

Industrial sector specific solutions:

Not available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits:

No exposure limit value known.

Recommended monitoring procedures:

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs:

Product/ingredient name	Type	Exposure	Value	Population	Effects
bisphenol-A-epoxy resin avg.mol. Wght. ≤ 700	DNEL	Short term Dermal	8,3 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	12,3 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	8,3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	12,3 mg/m³	Workers	Systemic
	DNEL	Short term Dermal	3,6 mg/kg bw/day	General population [Human via the environment]	Systemic
	DNEL	Short term Inhalation	0,75 mg/m³	General population [Human via the environment]	Systemic
	DNEL	Short term Oral	0,75 mg/ kg bw/day	General population [Human via the environment]	Systemic
	DNEL	Long term Dermal	3,6 mg/kg bw/day	General population [Human via the environment]	Systemic
	DNEL	Long term Inhalation	0,75 mg/m³	General population [Human via the environment]	Systemic
Benzyl Alcohol	DNEL	Long term Oral	0,75 mg/ kg bw/day	General population [Human via the environment]	Systemic
	DNEL	Short term Dermal	47 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	450 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	9,5 mg/kg	Workers	Systemic

Trizinc Bis(Orthophosphate)	DNEL	Long term Inhalation	bw/day 90 mg/m³	Workers	Systemic
	DNEL	Short term Dermal	28,5 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	40,55 mg/m³	General population [Consumers]	Systemic
	DNEL	Short term Oral	25 mg/kg bw/day	General population [Consumers]	
	DNEL	Long term Dermal	5,7 mg/kg bw/day	General population [Consumers]	
	DNEL	Long term Inhalation	8,11 mg/m³	General population [Consumers]	
	DNEL	Long term Oral	5 mg/kg bw/day	General population [Consumers]	
	DNEL	Long term Inhalation	5 mg/m³	Workers	
	DNEL	Long term Inhalation	2,5 mg/m³	General population [Consumers]	
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	
Zinc Oxide	DNEL	Long term Dermal	83 mg/kg bw/day	General population [Consumers]	
	DNEL	Long term Oral	0,83 mg/ kg bw/day	General population [Consumers]	
	DNEL	Long term Inhalation	5 mg/m³	Workers	
	DNEL	Long term Inhalation	2,5 mg/m³	General population [Consumers]	
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	
	DNEL	Long term Dermal	83 mg/kg bw/day	General population [Consumers]	
	DNEL	Long term Oral	0,83 mg/ kg bw/day	General population [Consumers]	
	DNEL	Long term Oral	0,83 mg/ kg bw/day	General population [Consumers]	

PNECs:

Product/ingredient name	Compartment Detail	Value	Method Detail
Bisphenol-A-Epoxy Resin Avg.Mol.Wght. ≤700	Fresh water	3 µg/l	-
	Marine	0,3 µg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	0,5 mg/kg dwt	-
	Marine water sediment	0,5 mg/kg dwt	-
	Sediment	0,05 mg/kg dwt	-
Benzyl Alcohol	Fresh water	1 mg/l	Assessment Factors
	Marine	0,1 mg/l	Assessment Factors
	Fresh water sediment	5,27 mg/kg	Assessment Factors
	Marine water sediment	0,527 mg/kg	Assessment Factors
	Soil	0,456 mg/kg	Assessment Factors
	Sewage Treatment Plant	39 mg/l	Assessment Factors
Trizinc Bis(Orthophosphate)	Fresh water	48,1 µg/l	-
	Marine	14,2 µg/l	-
	Fresh water sediment	550,2 mg/kg	-
	Marine water sediment	263,9 mg/kg	-
	Soil	249,4 mg/kg	-
	Sewage Treatment Plant	121,4 µg/l	-
Zinc Oxide	Fresh water	25,6 µg/l	-
	Marine	7,6 µg/l	-
	Sewage Treatment Plant	64,7 µg/l	-
	Fresh water sediment	146 mg/kg dwt	-
	Marine water sediment	70,3 mg/kg dwt	-
	Soil	44,3 mg/kg dwt	-

8.2 Exposure controls

8.2.1. Appropriate engineering Controls:	Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.
8.2.2. Personal protection:	
Hygiene measures:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye and face protection:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: safety glasses with side-shields. (EN 166).
Hands protection:	There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. Gloves For prolonged or repeated handling, use the following type of gloves: Recommended: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Wear suitable gloves. > 8 hours (breakthrough time): neoprene (0.65mm) The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN 374 The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
Body protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Wear overalls or long sleeved shirt. (EN 467).
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour (Type A) and particulate filter (as filter combination A-P2) (EN 141)
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Important health, safety and environmental information

Physical state:	Liquid	Colour:	Not available.
Form:	Liquid	Relative density [g/cm³]:	Not available
Odour:	Not available	Temperature [°C]:	2,092
Odour threshold:	Not available	Relative density:	Not applicable
pH:	Not applicable	Partition coefficient n-octanol/water:	Not applicable
pH : Justification:	Not available.	Auto-ignition temperature (°C):	Not applicable
Melting point/freezing point (°C):	Not available.	Decomposition temperature:	Not available
Initial boiling point and boiling range (°C):	Not available.	Viscosity (cSt):	Dynamic (room temperature): 28270 mPa s
Flash point (°C):	Closed cup: 101°C	Explosive properties:	Not available
Evaporation rate [kg/(s m²)]:	Not available	Vapour pressure (kPa):	Not available
Oxidising properties:	Not available	Vapour density (Air = 1):	Not available
Flammability (solid, gas):	Not available	Solubility (ies)	Not applicable

9.2 Other information

No additional information.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

When exposed to high temperatures may produce hazardous decomposition products.

10.5 Incompatible materials

Keep away from the following materials to prevent strong exothermic reactions:
oxidising agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO₂ and smoke can be generated.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Product/ingredient name	Result	Species	Dose	Exposure
Bisphenol-A-Epoxy Resin Avg.Mol.Wght. ≤ 700	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Mouse	20 g/kg	-
	LD50 Oral	Rat	30 g/kg	-
Benzyl Alcohol	LC50 Inhalation Dusts and mists	Rat	>4,178 mg/l	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1230 mg/kg	-
	LD50 Oral	Rat	1620 mg/kg	-
Trizinc Bis(Orthophosphate)	LC50 Inhalation Dusts and mists	Rat	>5,7 mg/l	4 hours
	LD50 Oral	Rat	>5000 mg/kg	-
1,6-Bis(2,3-Epoxypropoxy)	LD50 Oral	Rat	2900 mg/kg	-
Hexane				
Zinc Oxide	LC50 Inhalation Dusts and mists	Mouse	2500 mg/m³	4 hours
	LC50 Inhalation Dusts and mists	Rat	>5700 mg/m³	4 hours
	LD50 Oral	Rat	>15 g/kg	-

Conclusion/Summary: Based on available data, the classification criteria are not met.

Acute toxicity estimates: Not available.

Irritation/Corrosion:

Product/ingredient name	Result	Species	Score	Exposure	Observation
Bisphenol-A-Epoxy Resin Avg. Mol.Wght. ≤ 700	Skin - Oedema	Rabbit	1	4 hours	-
	Skin - Erythema/Eschar	Rabbit	1,5	4 hours	-
	Skin - Mild irritant	Rabbit	-	4 hours	-
	Eyes - Irritant	Rabbit	-	-	-
	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 microliters	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
Benzyl Alcohol	Skin - Moderate irritant	Pig	-	100 Percent	-
	Eyes - Irritant	Rabbit	-	-	-
Zinc Oxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Conclusion/Summary:

Skin: Causes skin irritation.
Eyes: Causes serious eye irritation.
Respiratory: Based on available data, the classification criteria are not met.

Sensitisation:

Product/ingredient name	Route of exposure	Species	Result
Bisphenol-A-Epoxy Resin Avg. Mol.Wght. ≤ 700	Skin	Mouse	Sensitising
	Skin	Guinea pig	Sensitising

Conclusion/Summary:

Skin: May cause an allergic skin reaction.
Respiratory: Based on available data, the classification criteria are not met.

Mutagenicity:

Conclusion/Summary: Based on available data, the classification criteria are not met.

Carcinogenicity:

Product/ingredient name	Result	Species	Dose	Exposure
Bisphenol-A-Epoxy Resin Avg. Mol.Wght. ≤ 700	Negative - Oral – TDLo	Rat – Female	>1000 mg/kg	2 years; 7 days per week
	Negative - Oral – TDLo	Mouse – Male	>100 mg/kg	2 years; 3 days per week
Benzyl Alcohol	Negative - Oral - TD	Rat	-	103 weeks; 5 days per week

Conclusion/Summary: :Based on available data, the classification criteria are not met.

Reproductive toxicity:

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
Bisphenol-A-Epoxy Resin Avg. Mol.Wght. ≤ 700	-	Negative	-	Rat	Oral: 750 mg/kg	7 days per week

Conclusion/Summary: Based on available data, the classification criteria are not met.

Teratogenicity:

Product/ingredient name	Result	Species	Dose	Exposure
Bisphenol-A-Epoxy Resin Avg. Mol.Wght. ≤ 700	Negative – Oral	Rat – Female	>540 mg/kg	7 days per week
	Negative – Dermal	Rabbit – Female	>300 mg/kg	7 days per week
Benzyl Alcohol	Negative - Route of exposure unreported	Mouse - Female	550 mg/kg	-

Conclusion/Summary: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure):

Not available.

Specific target organ toxicity (repeated exposure):

Not available.

Aspiration hazard:

Not available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Short term exposure:

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Long term exposure:

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Potential chronic health effects:

Product/ingredient name	Result	Species	Dose	Exposure
Bisphenol-A-Epoxy Resin Avg. Mol.Wght. ≤ 700	Sub-chronic NOAEL Oral	Rat	50 mg/kg	-
	Sub-chronic LOEL Oral	Rat	250 mg/kg	-
	Sub-chronic LOEL Oral	Rat	1000 mg/kg	-
	Sub-chronic NOAEL Dermal	Rat	100 mg/kg	90 days; 5 days per week
	Sub-chronic NOEL Dermal	Rat	10 mg/kg	90 days; 5 days per week

Conclusion/Summary:

General: Based on available data, the classification criteria are not met.
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Reproductive toxicity: No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information: Not available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment, but contains substance(s) hazardous to the environment. See section 3 for details.

Product/ingredient name	Result	Species	Exposure
Bisphenol-A-Epoxy Resin Avg. Mol.Wght. ≤ 700	Acute EC50 2,1 mg/l	Daphnia spec.	48 hours
	Acute LC50 1,3 mg/l	Fish	96 hours
	Chronic NOEC 0,3 mg/l	Daphnia spec.	21 days
	Acute EC50 770 mg/l		
Benzyl Alcohol	Acute LC50 646 mg/l	Algae	72 hours
	Acute LC50 460000 µg/l Fresh water	Fish - Leuciscus idus	48 hours
		Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
		Algae	72 hours
Trizinc Bis(Orthophosphate)	Acute NOEC 310 mg/l		
Zinc Oxide	Acute EC50 5,7 mg/l	Daphnia spec. - ceriodaphnia dubia	48 hours
	Acute IC50 1,87 mg/l	Algae - selenastrum capricornutum	72 hours
	Acute EC50 0,024 mg/l	Algae	72 hours
	Acute EC50 0,137 mg/l	Algae	72 hours
	Acute EC50 0,413 mg/l	Daphnia spec.	48 hours
	Acute EC50 0,481 mg/l Fresh water	Daphnia spec. - Daphnia magna - Neonate	48 hours
	Acute IC50 46 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute LC50 98 µg/l Fresh water	- Exponential growth phase Daphnia spec. - Daphnia magna - Neonate	48 hours
	Acute LC50 0,33 to 0,78 mg/l	Fish	96 hours
	Chronic NOEC 0,019 mg/l	Algae	7 days
	Chronic NOEC 0,037 mg/l	Daphnia spec.	21 days
	Chronic NOEC 0,082 mg/l	Daphnia spec.	7 days
	Chronic NOEC 0,199 mg/l	Fish	30 days

Conclusion/Summary: Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Bisphenol-A-Epoxy Resin Avg. Mol.Wght. ≤ 700	OECD 301B	6 to 12 % - Not readily - 28 days	-	-
	OECD 301F	5 % - Not readily - 28 days	-	-
Benzyl Alcohol	OECD 301A	96 % - Readily - 21 days	-	-

Conclusion/Summary: This product has not been tested for biodegradation. Based on available data, the classification criteria are not met.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Bisphenol-A-Epoxy Resin Avg. Mol.Wght. ≤ 700	-	-	Not readily
Benzyl Alcohol	-	-	Readily
1,6-Bis(2,3-Epoxypropoxy)	-	-	Not readily
Hexane	-	-	

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Bisphenol-A-Epoxy Resin Avg. Mol.Wght. ≤ 700	2.64 to 3.78	31	low
Benzyl Alcohol	0,87	-	low
Trizinc Bis(Orthophosphate)	-	60960	high
1,6-Bis(2,3-Epoxypropoxy)	0,822	-	low
Hexane	-		
Zinc Oxide	-	177	low

12.4 Mobility in soil

Soil/water partition coefficient (KOC): Not available.
Mobility: Non-volatile.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

The information in this section contains generic advice and guidance.

13.1 Waste treatment methods

Disposal Considerations:	Disposal of this product and its packaging must comply with all applicable environmental protection and waste disposal legislation, including any requirements set by local authorities. Any unwanted or non-recyclable material should be disposed of through a licensed waste disposal contractor. Transportation of such waste may be subject to ADR (International Carriage of Dangerous Goods by Road) regulations and must be managed in accordance with those requirements.
Waste code:	Uncured product: 08 01 11* waste paint and varnish containing organic solvents or other hazardous substances. Cured product inert residue: 17 09 04 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03 Empty metal paint tins with only hardened, inert residue: 15 01 04 metallic packaging

Special precautions:	This material and its container must be disposed of in a safe way. Caution should be exercised when handling empty containers that have not been properly cleaned or rinsed, as they may retain hazardous residues. Spillage and wash water from cleaning tools must be prevented from entering soil, watercourses, drains, or sewer systems. Empty containers should be directed to authorised waste disposal or appropriate local recycling facilities.
Further information available via:	https://www.alumascroofing.com/downloads/disposal-guides/ 

14. TRANSPORT INFORMATION

Labels required:

	ADR/RID	ADN	IMDG	IATA
14.1 UN-No	UN3082	UN3082	UN3082	UN3082
14.2 Description of the goods	Environmentally hazardous substance, liquid, n.o.s. [trizinc bis (orthophosphate)]	Environmentally hazardous substance, liquid, n.o.s. [trizinc bis (orthophosphate)]	Environmentally hazardous substance, liquid, n.o.s. Marine pollutant [trizinc bis (orthophosphate)]	Environmentally hazardous substance, liquid, n.o.s. [trizinc bis (orthophosphate)]
14.3 Transport hazard class(es)	9 	9 	9 	9 
14.4 Packaging group	III	III	III	III
14.5 Environmental hazards	Yes	Yes	Yes	Yes
Additional information	Remarks: (≤ 5L:) Exempted ADR Tunnel code: (E)	-	Emergency schedules (EmS): F-A + S-F Marine pollutant (P) Remarks: (≤ 5L:) Exempted	Passenger and Cargo Aircraft Quantity limitation: 450 L Packaging instructions: 964 Cargo Aircraft Only Quantity limitation: 450 L Packaging instructions: 964 Limited Quantities - Passenger Aircraft Quantity limitation: 30 Kg Packaging instructions: Y 964

14.6 Special precautions for user

Transport within user's premises:

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. REGULATORY INFORMATION

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation:

Annex XIV:

None of the components are listed.

Substances of very high concern:

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:

Not applicable.

Other EU regulations:

VOC

The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

VOC for Ready-for-Use Mixture: 2004/42/EC - IIA/j: 500g/l (2010). ≤ 300g/l VOC.

Europe inventory : All components are listed or exempted.

Ozone depleting substances (1005/2009/EU): Not listed.

Prior Informed Consent (PIC) (649/2012/EU): Not listed.

Seveso Directive: This product is not controlled under the Seveso Directive

National regulations:

Industrial use: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

References: EH40/2005 Workplace exposure limits
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2016/918

International regulations:

Chemical Weapon Convention List Schedules I, II & III Chemicals:	Not listed
Montreal Protocol (Annexes A, B, C, E):	Not listed
Stockholm Convention on Persistent Organic Pollutants:	Not listed
Rotterdam Convention on Prior Informed Consent (PIC):	Not listed
UNECE Aarhus Protocol on POPs and Heavy Metals:	Not listed
CN code:	3208 90 91

International lists

Australia:	All components are listed or exempted
Canada:	At least one component is not listed in DSL but all such components are listed in NDSL
China:	All components are listed or exempted
Japan:	Japan inventory (ENCS): Not determined Japan inventory (ISHL): Not determined
Malaysia:	Not determined
New Zealand:	All components are listed or exempted
Philippines:	All components are listed or exempted
Republic of Korea:	All components are listed or exempted
Taiwan:	Not determined
Turkey:	Not determined
United States:	All components are listed or exempted
Thailand:	Not determined
Viet Nam:	Not determined

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out.

16. OTHER INFORMATION

Abbreviations and acronyms:

ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]:

Classification	Justification
Skin Irrit. 2, H315	Expert judgment
Eye Irrit. 2, H319	Expert judgment
Skin Sens. 1, H317	Expert judgment
Aquatic Chronic 2, H411	Expert judgment

Full text of H-phrases referred to in sections 2 and 3:

Full text of abbreviated H statements:

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]:

Acute Tox. 4, H302 ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H332 ACUTE TOXICITY (inhalation) - Category 4
Aquatic Acute 1, H400 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2, H411 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3, H412 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1, H317 SKIN SENSITISATION - Category 1

SDS version summary:

Version	Date of Update	Section Updated
1.1	17/04/2024	New
2.0	27/05/2025	Section 13 update

Other information:

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios.

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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.