

SAFETY DATA SHEETS (SDS)

Enviro Plug



Version:2

Issued by: Envirosystems Technologies

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Hazard Identifiers



SECTION 1 – IDENTIFICATION OF MATERIAL & SUPPLIER

- 1.1 Product Name:** Enviro Plug
Manufacturer's Product Code: N/A
- 1.2 Recommended Use:** Rapid set, non shrink cement based compound that forms an instant waterproof seal against active water leaks under pressure
- 1.3 Company:** Envirosystems Technologies Pty Ltd
Address: 295 Princes Highway St Peters, NSW 2044.
Website: www.envirosystems.com.au
Telephone: +61 2 85958699 (business hours)
Fax: +61 2 85958660
- 1.4 Emergency Telephone:** Info Safe – 1800 638 556, Poisons Centre – 131126
- Other Information:** All information in this SDS is to the best of our knowledge at time of publication. Users of this product should fully review this SDS prior to use to ensure best safety practices. Further information and or clarification can be obtained by contacting our technical department on the above telephone number.

SECTION 2 – HAZARDS IDENTIFICATION

- 2.1 Hazard Classification:** Classified as **Hazardous** according to WHS Regulations, Australian GHS criteria and a **Non-Dangerous Goods** according to the Australian Dangerous Goods Code.

Class	Category
Skin Corrosion/Irritation	2
Serious Eye Damage	1
Sensitisation - Respiratory	1A
Sensitisation - Skin	1
Specific Target Organ Toxicity (Single Exposure)	3, Respiratory Tract Irritation
Specific Target Organ Systemic Toxicity (Repeated Exposure):	2

- 2.2 Label Elements**



Signal word

Danger

H-code	Hazard Statements
H315	Causes skin irritation
H318	Causes serious eye damage
H334	May cause allergy or asthma symptoms or breathing

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	difficulties if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure
P-Code	Precautionary Statement - Prevention
P260	Do not breathe dust
P264	Wash hands, face and all exposed skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P-Code	Precautionary Statement - Response
P302, P352	IF ON SKIN: Wash with plenty of soap and water.
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 or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333, P313	If skin irritation or rash occurs: Get medical advice/attention.
P342, P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P362	Take off contaminated clothing and wash before reuse.
P-Code	Precautionary Statement - Storage
P402, P403	Store in a dry well-ventilated place.
P405	Store locked up.
P-Code	Precautionary Statement - Disposal
P501	Dispose of contents/container in accordance with relevant regulations.

2.3 Other Hazards

This dust of this product is hazardous. When water or part A liquid is added the product is alkaline, PH ≈11.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

See section below for Mixtures

CAS No.	Material	Content %
1305-62-0	Calcium hydroxide (Ca(OH) ₂)	0-10 %
65997-16-2	Cement, alumina, chemicals	10-30 %
65997-15-1	Cement, portland, chemicals	30-60 %
14808-60-7	Quartz (SiO ₂)	10-30 %
	Ingredients determined to be Non-Hazardous	Balance

SECTION 4 – FIRST AID MEASURES

- 4.1 Description of first aid measures** If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).
- Inhalation:** 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. Seek medical advice if effects persist.
- Skin Contact:** Effects may be delayed. If skin or hair contact occurs, immediately remove contaminated clothing and flush skin and hair with running water. Seek medical attention in event of irritation
- 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. Seek medical advice.
- 4.2 Most important symptoms and effects, both acute and delayed** Chronic exposure to crystalline silica may result in lung fibrosis (silicosis). Principal symptoms of silicosis are coughing and breathlessness. Crystalline silica is classified as carcinogenic to humans (IARC Group 1). Product will become corrosive when in contact with water (water in eyes). Product can also cause dermatitis with long term exposure. Any other relevant information can be found in other parts of this section and in sections 2 and 11.
- 4.3 Advice for doctor** Treat symptomatically. Effects may be delayed. Can cause corneal burns.

SECTION 5 – FIRE FIGHTING MEASURES

- 5.1 Extinguishing media** Suitable extinguishing media:
Use media suitable to surrounding source of fire.
- Unsuitable extinguishing media that may not be used for safety reasons:
None.
- 5.2 Special hazards arising from the substance or mixture** Non-combustible material but may evolve toxic gases if strongly heated.
- 5.3 Advice for firefighters** Wear full body protective clothing with breathing apparatus.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures** Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. If material is released indicate risk of slipping. Do not walk through spilled material.
- 6.2 Environmental precautions** Do not discharge into sewers or waterways.
- 6.3 Methods and material for** **SMALL SPILLS**

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containment and cleaning up

Clear area of all unprotected personnel. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Sweep or vacuum up, but avoid generating dust.

LARGE SPILLS

Clear area of all unprotected personnel. 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. 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.

6.4 Reference to other sections

Relevant information in other sections has to be considered. This applies in particular for information given on personal protective equipment (section 8) and on disposal (section 13).

SECTION 7 – HANDLING & STORAGE

7.1 Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink. Hands and/or face should be washed before breaks and at the end of the shift. Use of safe work practices are recommended to avoid eye or skin contact and inhalation.

7.2 Conditions for safe storage

Storage Requirements:

Store in a cool, dry place. 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.

Temperature Conditions:

Up to 40° C.

Protection from weather:

Store undercover and away from moisture.

7.3 Specific end use(s)

Single component polymer modified cementitious product

7.4 Regulations and standards (Australia):

Classified as Hazardous which should be stored and handled in accordance with regulations

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits safe work Australia

Ingredient	STEL	TWA (mg/m3)
Calcium hydroxide		5
Portland cement		10
Quartz (respirable dust)		0.1
Silica Crystalline - Quartz (respirable dust)		0.1

Emergency Limits:

Ingredient	TEEL-1	TEEL-2	TEEL-3
Quartz (respirable dust)	0.025 mg/m3	0.025 mg/m3	0.025 mg/m3

8.2 Exposure controls

General protection and hygiene measures:

General ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations. Do not eat, drink or smoke when handling. Maintain dust levels below the recommended exposure standard.

Personal protection equipment:

Respiratory protection

Where an inhalation risk exists wear a Class P1 (Particulate) respirator, dependent on a site specific risk assessment. Use negative pressure respirators when exceeding exposure limits.

Eye protection

Chemical goggles. Full face respiratory may be required if exposure causes discomfort. Once dust is no longer a hazard safety glasses with side shield are adequate for most applications.

Hand protection

When handling wear chemical resistant gloves. PVC, neoprene or nitrile glove.

Skin protection

Overalls clothing.

Other Information

Always wash hands before smoking, eating, drinking or using the toilet and after finishing work. Observe the usual precautions when handling chemicals.

8.3 Further information for system design and engineering measures

Ventilation is recommended under normal use conditions. State regulations on speed and direction of airflow away from operators must be observed. Keep containers closed when not in use.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

9.1	Odour:	None
	Odour Threshold	Not determined
	Colour:	Grey sandy mixture of sand/cement blend
	Physical State:	Solid powder
	Flash Point:	Not determined
	Autoignition Temperature:	Not determined
	Boiling Point:	>1200°C
	Melting Point:	Not determined
	Specific Gravity:	≈2.8
	pH:	≈12 when combined with water
	Solubility in Water (g/L):	Partially soluble
	Flammability:	Not flammable
	Lower Limit:	Not determined
	Higher Limit:	Not determined
	Vapour Pressure:	Not determined
	Vapour Density (Air = 1)	Not determined
9.2	Other information	None available

SECTION 10 – STABILITY AND REACTIVITY

10.1 -3	Reactivity; Chemical stability; Possibility of hazardous reactions	Stable when stored and used as directed.
10.4	Conditions to avoid	None known
10.5	Incompatible materials	Incompatible with oxidising agents, strong acids (e.g. hydrofluoric acid) and water.

10.6 Hazardous decomposition products

Smoke, oxides of carbon, nitrogen and other toxic fumes.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity/Effects

Acute toxicity

Expected to be of low toxicity

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

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

Ingestion: Swallowing can result in nausea, vomiting and irritation of 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 non-hazardous. Acute toxicity estimate (based on ingredients): >5 mg/L

Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Ingestion: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

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 2 Hazard (reversible effects to skin).

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

Aspiration hazard: This material has been classified as non-hazardous.

Chronic Toxicity/Effects

Specific target organ toxicity (single exposure): This material has been classified as a Category 3 Hazard. Exposure via inhalation may result in respiratory irritation.

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

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non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as a Category 2 Hazard.

No data available.

Long Term Effects:

Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Cement contact dermatitis (CCD) may occur when contact shows an allergic response, which may progress to sensitisation. Sensitisation is due to soluble chromates (chromate compounds) present in trace amounts in some cements and cement products. Soluble chromates readily penetrate intact skin. Cement dermatitis can be characterised by fissures, eczematous rash, dystrophic nails, and dry skin; acute contact with highly alkaline mixtures may cause localized necrosis.

SECTION 12 – ECOLOGICAL INFORMATION

- | | |
|---|--|
| 12.1 Toxicity | May be harmful to the aquatic environment due to the alkaline nature of the product. This product is non-toxic to aquatic organisms when present as a cured solid. |
| 12.2 Persistence and degradability | Product is persistent and non-degradable. |
| 12.3 Bioaccumulative potential | This product is not expected to bioaccumulate. |
| 12.4 Mobility in soil | A low mobility would be expected in a landfill situation. |
| 12.5 Additional Information | Do NOT discharge into sewer or waterways. |

SECTION 13 – DISPOSAL CONSIDERATIONS

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| 13.1 Waste treatment methods | <p>Material Recommendation:
Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.</p> <p>Uncleaned packaging Recommendation:
Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.</p> |
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SECTION 14 – TRANSPORT INFORMATION

Transport Information

Not classified as a **Non-Dangerous Good** according to the Australian Code for the Transportation of Dangerous Goods by Road and Rail.

U.N. Number: N/A
DG Class: N/A
EPG card: N/A
Hazchem Code: N/A
Proper Shipping Name: N/A.

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	Packing Group:	N/A
Classification for SEA transport (IMO-IMDG)	U.N. Number:	N/A
	DG Class:	N/A
	Proper Shipping Name:	N/A
	Packing Group:	N/A
	Marine Pollutant:	No
Classification for AIR transport (IATA/ICAO)	U.N. Number:	N/A
	DG Class:	N/A
	Proper Shipping Name:	N/A
	Packing Group:	N/A

Label None

SECTION 15 – REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture** National and local regulations must be observed. For information on labeling please refer to section 2 of this document.
- Poisons Schedule Number: N/A**
- Australian Inventory:** Listed
Controlled Schedule Not listed substances
Carcinogenic Substances:

SECTION 16 – OTHER INFORMATION

Safety Data Sheets are updated regularly. Please ensure you have a current copy. SDS can be obtained from our website: www.envirosystems.com.au

The SDS should be used to assist in the Risk Management. Many other factors determine whether the reported Hazards are risks in any given workplace.

Specific Risks may be determined by reference to various Exposure Scenarios, Scale of use, Frequency of use and current or available engineering controls must be considered.

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Emergency Telephone: Info Safe – 1800 638 556, Poisons Centre – 13112