

SECTION 1: IDENTIFICATION

Product Name Crystal Seal
Other Names: Waterproofing slurry
Chemical Family: Blended polymer solution
Molecular Formula: Not applicable
Recommended Use: Waterproofing of concrete

Supplier information

New Zealand Decorative Concrete Ltd T/A Permacolour
 42A Egmont Road, Waiwhakaiho, New Plymouth
 0508 444 555 or 06 755 3320
 www.permacolour.co.nz

SECTION 2: HAZARDS IDENTIFICATION

Product is classified as hazardous according to Schedules 1 to 6 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 of the HSNO Act, 1996.

HSNO Classifications: 6.3A, 8.3A, 6.5B, 6.6B



Signal word: WARNING

Hazard Statements :

H315 Causes skin irritation	H318 Causes serious eye damage
H317 May cause an allergic skin reaction	H341 Suspected of causing genetic defects
H335 May cause respiratory irritation	H400 Very toxic to aquatic life

Precaution Statements :

P201 Obtain special instructions before use	P271 Use only outside or in well ventilated areas
P280 Wear protective gloves, protective clothing, eye protection, face protection	P281 Use personal protective equipment as required
P273 Avoid release to the environment	P261 Avoid breathing dusts, fumes, gas, mists, vapour, spray
	P272 Contaminated work clothing should not be allowed in the workplace

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Portland Cement	No Data Available	65997-15-1	30-60
Silica Crystalline—Quartz	No Data Available	14808-60-7	30-60
Silica Amorphous	No Data Available	61790-53-2	<10
Calcium Aluminate Cement	No Data Available	65997-16-2	<10
Zinc Stearate	Zn(C18H35O2)2	557-05-1	<5
Fly Ash—Low Quartz	No Data Available	68131-74-8	<1
Blast Furnace Slag	No Data Available	65996-96-2	<1
Calcium Oxide	CaO	1305-78-8	<1

SECTION 4: FIRST AID MEASURES

For advice, contact **National Poison Centre (Phone New Zealand: 0800 764 766) or a doctor.**

Swallowed If swallowed, do not induce vomiting. Seek immediate medical attention. Begin artificial respiration if the person is not breathing. Use mouth to nose rather than mouth to mouth.

Eye Hold eyelids apart and flush the eye continuously with running water. Remove contact lenses. Continue flushing for at least 15 minutes. Get medical attention if irritation persists.

Skin If skin or hair contact occurs, remove contaminated clothing and flush affected area with large amounts of water then wash with soap and water.

Inhaled Move the victim to fresh air immediately. Keep warm and at rest. Begin artificial respiration if breathing has stopped. Use mouth to nose rather than mouth to mouth. Seek immediate medical

First Aid Facilities Provide eye baths and safety showers close to areas where splashing may occur.

Medical Attention **Call Poison Centre Immediately.** Treat according to symptoms. Avoid gastric lavage: risk of aspiration of product to lungs with the potential to cause chemical pneumonitis. General measures should be taken to control acidosis and maintain urine output.

SECTION 5: FIRE-FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing fire-fighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media : Dry chemical or foam

Hazards from combustion products: Silicon Dioxide

Precautions for fire fighters and special protective equipment: Full protective clothing and self-contained breathing apparatus

Hazchem Code: 3[Y]

SECTION 6: ACCIDENTAL RELEASE MEASURES

Prevent fluid from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

Methods and materials for containment:

Minor Spill

- Eliminate sources of ignition.
- Clean up all spills immediately
- Avoid contact with skin and eyes
- Control personal contact with substance by using protective equipment
- Use dry clean up procedures and avoid generating dust
- Place in a suitable, labelled container for waste disposal

Major Spill

- **CAUTION:** Advise personnel in area.
- Alert Emergency Services and tell them location and nature of hazard.
- Control personal contact by wearing protective clothing.
- Prevent, by any means available, spillage from entering drains or water courses.
- Recover product wherever possible.
- **IF DRY:** Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. **IF WET:** Vacuum/shovel up and place in labelled containers for disposal.
- **ALWAYS:** Wash area down with large amounts of water and prevent runoff into drains.
- **If contamination of drains or waterways occurs, advise Emergency Services.**

SECTION 7: HANDLING AND STORAGE

Safe handling:

- Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling,
- DO NOT eat, drink or smoke.

- Keep containers securely sealed when not in use. Avoid physical damage to containers.
- Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice.
- Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

Other Information:

Consider storage under inert gas:

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry area protected from environmental extremes.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storage and handling recommendations contained within this SDS.

For major quantities:

- Consider storage in bunded areas - ensure storage areas are isolated from sources of community water (including stormwater, ground water, lakes and streams).
- Ensure that accidental discharge to air or water is the subject of a contingency disaster management plan; this may require consultation with local authorities.

Conditions for safe storage, including any incompatibilities:

Suitable container:

- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

Storage incompatibility:

- Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.
- Avoid contact with copper, aluminium and their alloys.
- Keep dry
- NOTE: May develop pressure in containers; open carefully. Vent periodically.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Health Exposure Standards: The following Tolerable Exposure Limit (TEL) Workplace Exposure Standards (WES), 2002 have been set by the Occupational Safety and Health Service, NZ Department of Labour for components in this substance:

	WES-TWA	WES-STE
Portland Cement	10 ppm	Not Available

Manufacturers recommendation for product : TWA 350 mg/m³ (80 ppm), STEL 543 mg/m³ (125 ppm).

Ventilation: The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Personal Protective Equipment

Respiratory Protection: Where concentrations in air may exceed the limits described in the Health Exposure Standards, it is recommended to use a half-face filter mask to protect from over-exposure by inhalation. A type "A" filter material is considered suitable for this product.

Eye Protection: Always use safety glasses or a face shield when handling this product.

Skin/ Body Protection: Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves be worn when handling this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Neutral coloured solid; partially mixes with water. React with water and hardeners.

PROPERTY	UNIT OF MEASUREMENT	TYPICAL VALUE
Boiling Point/Range	°C	Not available
Flash Point	°C	Not available
Density at 15°C	g/ml	Not available
Vapour Pressure at 20°C	Mm Hg	Not available
Vapour Density at 20°C	kPa	Not available
Auto ignition Temperature	°C	Not available
Explosive Limits In Air	%	Not available
Viscosity	cSt	Not available
Volatiles	%	Not available
Solubility in Water	% w/w	Negligible

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable at room temperature and pressure. Unstable in the presence of incompatible materials.

Conditions to avoid: Sources of heat and ignition, open flames.

Hazardous decomposition products: No decomposition products except on burning. See "Fire Fighting Measures".

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion: Small amounts of liquid aspirated into the lungs during ingestion or from vomiting, may cause chemical pneumonitis, or pulmonary oedema. Ingesting any amount of this product will result in headaches, nausea, dizziness, and tracheal burning.

Eye Contact: This product will be irritating to eyes resulting in redness and swelling with a burning sensation and blurred vision.

Skin Contact: Harmful in contact with skin. Symptoms include a burning sensation, redness, swelling and possible blistering.

Inhalation: Product is harmful by inhalation. The inhalation of vapours will cause dizziness and drowsiness. There is a possibility of organ damage over prolonged use or exposure. Central nervous system depression includes nausea, headaches, dizziness and possibly loss of consciousness.

Other Health Effects Information:

Persons with pre-existing liver, kidney, central nervous system or skin complaints should avoid unnecessary exposure to this product. Every effort should be made to protect eyes, respiratory tract and skin from exposure should be taken under these circumstances.

Toxicological Information: N/A

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not Available

Aquatic toxicity: Not Available

Persistence/degradability: LOW

Mobility in Soil: LOW

Environmental Exposure Standards: Not Available

Bioaccumulative potential: LOW

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods: Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are Flammable and harmful. Ensure that empty packaging is allowed to dry.

Special Precautions for Landfill or Incineration:

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product is ash less and can be burned directly in appropriate equipment.

SECTION 14: TRANSPORT INFORMATION

Land Transport: Not regulated for transport of dangerous goods

Air Transport: Not regulated for transport of dangerous goods

Sea Transport: Not regulated for transport of dangerous goods

SECTION 15: REGULATORY INFORMATION

Country/ Region: New Zealand

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

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number

HSR002544

Group Standard

Construction Products Subsidiary Hazard Group Standard 2020

Please refer to Section 8 of the SDS for any applicable tolerable exposure limit or Section 12 for environmental exposure limit.

Refer www.ermanz.govt.nz for information on Controls. New Zealand Inventory of Chemicals (NZIoC) for regulatory lists

SECTION 16: OTHER INFORMATION**Reasons for Issue:**

Updating information. Replaces Safety Data Sheet dated August 2018.

Abbreviations:

CAS Number: Chemical Abstracts Number

IARC: International Agency for Research on Cancer

NIOSH: National Institute of Occupational Safety & Health

NOHSC: National Occupational Health and Safety Council

NZIoC: New Zealand Inventory of Chemicals

REL: Recommended Exposure Limits

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact Permacolour by New Zealand Decorative Concrete.