

ECOPLANET

1. Identification

Product Names: ECOPLANET

UN Number: Not Applicable

Recommended Use: Cement for the production of concrete, mortar, and paste.

Proper Shipping Name: Not Applicable

Supplier:

Name: Holcim NZ Ltd

Phone: 0800 HOLCIM (465 246)

Address: Unit 1, Show Place,
Addington
Christchurch, 8024

Website: www.holcim.co.nz

Emergency Contacts: Emergency Services (Fire, Ambulance, Police) – Dial 111
National Poisons Information Centre – 0800 764 766 (0800 POISON)
Company Contact – 0800 HOLCIM (465 246)

2. Hazard Identification

Statement of Hazardous Nature:

This preparation is classified as a health or environmental hazard according to the Hazardous Substances (Hazard Classification) Notice 2020.

Not classified as a Dangerous Good according to NZS 5433.

Hazard Classification:

Skin irritation category 2

Serious eye damage category 1

Skin sensitisation category 1

Specific target organ toxicity - single exposure category 3
respiratory tract irritation

Specific target organ toxicity - repeated exposure category 2

Hazard Statements:



Danger

Causes skin irritation

Causes serious eye damage

May cause an allergic skin reaction

May cause respiratory irritation

May cause damage to organs through prolonged or repeated exposure

Prevention Statements:

Wash hands thoroughly after handling.

Wear protective gloves.

Wear eye protection/face protection.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Use only outdoors or in a well-ventilated area.

Do not breathe dust/fume/gas/mist/vapours/spray.

Note: The properties of cement and associated hazards change when water is added.

SAFETY DATA SHEET: ECOPLANET

3. Composition & Information on Ingredients

Ingredient	CAS Number	Concentration (%)
Fly Ash	68131-74-8	0 – 35 %
Ground Granulated Blast Furnace Slag (GGBFS)**	65996-69-2	0 – 70 %
Portland Cement*	65997-15-1	30 - 65 %

*Portland Cement Includes**

Calcium carbonate (limestone)	13397-26-7	< 10%
Calcium sulphate (gypsum)	13997-24-5	5%
Silica (quartz)*	14808-60-7	18 – 22%
*Crystalline Silica		<0.05%

*Granulated blast furnace slag is an amorphous substance, but the following ingredients may crystallise in part***

Melilite	-	Not Confirmed
Calcium silicate	1344-95-2	Not Confirmed

4. First Aid Measures

New Zealand Poisons & Hazardous Chemicals National
Information Centre
phone 0800 POISON – 0800 764 766

Skin: IF ON SKIN: Wash with plenty of water/... Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: IF SWALLOWED, rinse mouth and lips with water. Do NOT induce vomiting. Immediately call a POISON CENTRE or doctor/physician.

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell or experience breathing difficulties.

Advice to Doctor: Treat symptomatically.

5. Fire Fighting Measures

Flammability: Non-combustible, non-explosive.

Extinguishing media: Use appropriate for surrounding materials. Prevent contamination of drains or water ways.

Hazardous Combustion products: Carbon and nitrogen oxides may be formed.

Fire Fighting Instructions: None specified.

6. Accidental Release Measures

Protect yourself and others from harm. Wear appropriate protective equipment (see Section 8) including suitable respiratory protection in dusty environments or when ventilation is insufficient. Avoid inhalation of dust and contact with skin.

Spills: Use dry clean-up methods that do not disperse dust into the air such as gentle sweeping or an industrial vacuum cleaner with filters suitable for this product. Do not use compressed air.

Do not use water for cleaning bulk material as this will cause cement to set. Prevent spill from entering drain or waterways. Contain spillage, collect, and place in suitable containers for reuse or disposal. If water is used to clean up residual material, ensure the water is recovered and neutralised before disposal.

If product is spilt into a waterway notify the appropriate Regional Council.

7. Handling & Storage

Safe Handling

The material should be kept free from moisture until used.

Do not breathe dust. Avoid eye and skin contact. Do not allow wet cement to remain in contact with skin.

Wash hands / exposed skin thoroughly after handling.

Immediately after working with cement or cement-containing materials, workers should shower with soap and water. Promptly remove dusty clothing or clothing which is wet with cement or associated liquid and launder before reuse. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wear protective gloves and eye/face protection.

SAFETY DATA SHEET: ECOPLANET

Certified Handler: Not required

Store in a well-ventilated area. Keep container / package tightly closed. Store locked up.

Storage

Keep dry and store off the ground.

8. Exposure Controls & Personal Protection

Exposure Standards

Workplace Exposure Standards (WES):

Ingredient	CAS Number	TWA	STEL
Portland Cement (d _{sen})	65997-15-1	3 mg/m ³ 1 mg/m ³ (r)	-
Limestone	1317-65-3	10 mg/m ³	-
Silica, crystalline (all forms) 6.7A	14808-60-7	0.05 mg/m ³ (r)	-

d_{sen} Dermal sensitiser

6.7A Confirmed carcinogen; α-quartz and cristobalite are confirmed carcinogens

(r) Value for respirable dust

Data source: Workplace Exposure Standards and Biological Indices (Edition 13, April 2022, WorkSafe)

Biological Exposure Indices (BEI): No biological exposure indices have been set for this product or its ingredients in the Workplace Exposure Standards and Biological Indices (Edition 13, April 2022, WorkSafe).

Engineering Controls

Ventilation: Use only outdoors or in a well-ventilated area. An exhaust fan ducted from near point of dust generation can be used to control airborne dust levels. When handling large amounts, a dust collection system should be considered.

Personal Protection (PPE)

Precautions must be taken. Cement can induce chemical burns with little warning - little heat is sensed on the skin during this process. Do not kneel in wet cement.

Wear protective gloves and eye/face protection. Contaminated clothing should not be allowed out of the workplace.

Eyes/Face: Use tight fitting goggles or protective eyewear in dusty environments. Eye protection must comply with AS/NZS 1337.

Skin: Use impervious, abrasion- and alkali-resistant gloves and barrier creams, boots, and protective clothing to protect the skin from prolonged contact with wet cement in plastic concrete, mortar, or slurries. The glove material must be impermeable and resistance to the product (in accordance with AS/NZS 2161). Consult your glove supplier for additional information on glove selection.

Respiratory: In dusty environments where engineering controls are inadequate to minimize dust exposure, the use of an approved Class P2 particulate disposable respirator (not a nuisance dust mask) is recommended. At high dust levels greater protection may be required. Respiratory protection must comply with AS/NZS 1716 and be maintained in accordance with AS/NZS 1715.

9. Physical & Chemical Properties

Appearance: Grey or white powder.

Odour: No odour.

Odour threshold: No data available.

pH: Alkaline, approx. 12

Boiling point: Not applicable

Melting point: ~1,350°C

Flash point: Not applicable

Autoignition Temp: Not applicable

Decomposition Temp: No data available

Flammability: Non-flammable.

Lower Flammability Limit (LEL): Not applicable

Upper Flammability Limit (UEL): Not applicable

Vapour pressure: Not applicable

Vapour density (Air =1): No data available.

Specific gravity (H₂O=1): 2.93 – 3.09

Solubility (water): Slight (~0.1 – 1.0%)

Viscosity (dynamic): Not applicable

Viscosity (kinematic): No data available

Evaporation rate: Not applicable.

Partition coefficient (n-octanol/water): No data available.

SAFETY DATA SHEET: ECOPLANET

10. Stability & Reactivity

Stability: Stable under normal conditions of use and storage. Keep dry until used.

Conditions to avoid: Unintended contact with water, excessive dust generation.

Incompatible Materials: Incompatible with oxidising agents (e.g. hypochlorite or bleach), ethanol, acids.

Aluminium powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas.

Hazardous decomposition products: May evolve toxic gases if heated to decomposition.

Hazardous polymerisation: Does not occur

11. Toxicological Information

Health Effects / Symptoms of Exposure

Acute Exposure (short term)

Inhalation: May cause respiratory irritation. Inhalation of dust can cause irritation and inflammation of the upper respiratory system.

Skin: Causes skin irritation. May cause an allergic skin reaction. Contact with powder may result in rash or dermatitis. Wet cement, especially as an ingredient in plastic (unhardened) concrete, mortar, or slurries, can dry the skin and cause caustic burns.

Eyes: Causes serious eye damage. Direct contact with the eyes can cause irritation, lacrimation (formation of tears), inflammation or burns of the cornea and possible permanent damage.

Ingestion: Not an expected route of entry. Ingestion may result in burns to the mouth and throat, nausea, vomiting and abdominal pain.

Aspiration hazard: No.

Chronic Exposure (long term)

Respiratory or Skin sensitisation: Contact sensitiser; may cause an allergic skin reaction. Portland Cement is a known dermal (skin) sensitiser.

Mutagenicity: Not classified as a mutagen

Carcinogenicity: Product is not classified as a carcinogen.

Note: This product may contain varying amounts of crystalline silica which is classified as carcinogenic to humans (IARC Group 1). Repeated exposure to dust may result in chronic inflammation of the respiratory system. Repeated exposure to crystalline silica may cause bronchitis, silicosis, and other respiratory disorders.

Reproductive Toxicity: Not classified as a reproductive toxicity substance/product.

Specific Target Organ Toxicity (STOT): May cause damage to organs (lungs) through prolonged or repeated exposure through inhalation

Other effects: Cement may contain trace [less than 0.05%] amounts of chromium salts or compounds including hexavalent chromium, or other metals found to be hazardous or toxic in some chemical forms. These metals are mostly present as trace substitutions within the principal minerals

Toxicological Data

No toxicological data available for the product or its ingredients.

Biological Exposure Indices

No biological exposure indices allocated.

12. Ecological Information

The product forms an alkaline slurry when mixed with water which may affect the pH of aquatic systems if contact occurs in large quantities. Once set, product is persistent and has low degradability. Avoid release to the environment. Do not allow to enter drains or waterways.

Persistence in environment: No data available.

Biodegradability: No data available.

Mobility: No data available.

Ecotoxicological Data

The product forms an alkaline slurry when mixed with water which may affect the pH of aquatic systems if contact occurs in large quantities.

Calcium hydroxide (forms from reaction of calcium oxide with water)	LC50 (96hr): Bioaccumulative: Rapidly degradable :	33.9mg/L (Clarias gariepinus (Zambezi barbel) [Fish]) No Yes
---	--	--

SAFETY DATA SHEET: ECOPLANET

Data source: *Chemical Classification and Information Database (CCID)*

13. Disposal Considerations

Do not allow into drains, sewers, or watercourses. Bulk or contaminated product may be disposed of through an approved hazardous waste contractor.

Dust from product is hazardous. Small amounts of material can be disposed of through normal household / commercial waste removal facilities. Unused product may be returned to the original container for later use if it is not contaminated.

Large amounts of waste product may require special handling.

Material should be kept out of storm water and sewer drains. Any discharge during clean-up should comply with Resource Consent requirements and any relevant District or Regional Council rules. Packaging of this product is not expected to be able to be cleaned or recycled and must be disposed of as waste. Disposal waste contractors must comply with the New Zealand Hazardous Substances (Disposal) Notice 2017.

14. Transport Information

Not classified as a Dangerous Good according to NZS 5433:2007

15. Regulatory Information

HSNO Approval

HSNO Group Standard: Construction Products (Subsidiary Hazard) Group Standard 2020

Approval Number: HSR002544

Health and Safety at Work (Hazardous Substances) Regulations

IMPORTANT: Quantities of all hazardous substances present at a site contribute to Hazardous Substances Control thresholds.

Location Certification: Not required

Tracking: Not required

Certified Handlers: Not Required

Secondary containment: Not required (solid)

Refer to the following for full details:

- Construction Products Group Standard(s) (available at www.epa.govt.nz)

- Health and Safety at Work (Hazardous Substances) Regulations (available at www.legislation.govt.nz)

16. Other Information

Hazard Classification under GHS7:

Skin irritation Category 2

Skin sensitisation Category 1

Serious eye damage Category 1

Specific target organ toxicity – repeated exposure Category 2

Specific target organ toxicity – single exposure Category 3

(Respiratory tract irritation)

(Previous HSNO classes for reference only)

(6.3A)

(6.5B)

(8.3A)

(6.9B)

(6.1E (*respiratory*))

Note: Crystalline Silica (quartz) in respirable form is a known or presumed human carcinogen, however the EPA classification information includes the following statement:

EXPERT JUDGEMENT: This substance only triggers 6.7A if it is in the form of a fine respirable dust in an occupational (chronic exposure) setting.

Total respirable crystalline silica reported at less than 0.05%; however, it should be assumed that silica content is sufficient to create a silica hazard in work conditions where fine, respirable dust becomes airborne.

Prepared with reference to:

- *Hazardous Substances (Safety Data Sheets) Notice 2017* published by Environmental Protection Authority, New Zealand.

Current Version: 28 February 2023

Revision Information: Amalgamated data from two separate Safety Data Sheets, and compared them against current databases to check hazard classifications.

SDS may be revised from time to time, please ensure you have a current copy.

SAFETY DATA SHEET: ECOPLANET

This revision: 28 February 2023

Previous revision dated: Not Applicable

Disclaimer:

This safety data sheet attempts to describe as accurately as possible the potential exposures associated with normal use of the product described herein. Health and safety precautions in the data sheet may not be adequate for all individuals and/or situations. Users have the responsibility to evaluate and use this product safely and to comply with all applicable laws and regulations.

Whilst the information contained in this document is based on data, which, to the best of our knowledge, was accurate and reliable at the time of preparation, no warranty or responsibility can be accepted by us for errors and omissions. The provision of this information should not be construed as a recommendation to use any of our products in violation of any patent rights or in breach of any statute or regulation. Users are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by us for any loss or damage caused by any person acting or refraining from action as a result of this information.

--END OF SDS