

HOLCIM PREMIXED CONCRETE

1. Identification

Product Names: HOLCIM PREMIXED CONCRETE

UN Number: Not Applicable

Recommended Use: ADHESIVE, CEMENTITIOUS, BINDING AGENT, CEMENT, and GROUT applications.

Proper Shipping Name: Not Applicable

NZ Supplier:

Name: Holcim NZ Ltd

Phone: 0800 HOLCIM (465 246)

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

Website: www.holcim.co.nz

AU Supplier:

Name: HOLCIM (AUSTRALIA) PTY LTD

Phone: -

Address: Level 8, Tower B, 799 Pacific Hwy,
Chatswood, NSW,
2067, Australia

Website: <http://www.holcim.com.au>

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

Skin Sensitisation: Category 1

Serious Eye Damage: Category 1

Specific Target Organ Toxicity (Single Exposure): Category 3
(Respiratory Irritation)

Prevention Statements:

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Hazard Statements:



DANGER

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye damage.

May cause respiratory irritation.

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3. Composition & Information on Ingredients

Ingredient	CAS Number	Concentration (%)
QUARTZ (CRYSTALLINE SILICA)*	14808-60-7	<30%
SILICIC ACID	7699-41-4	<4%
HEXAVALENT CHROMIUM**	18540-29-9	<0.0001%
AGGREGATE	-	~60%
ALUMINOSILICATE	1302-93-8	<30%
PORTLAND CEMENT, SLAG, FLY ASH	65996-69-2	<30%
WATER	7732-18-5	<20%
POLYPROPYLENE	-	<10%
STEEL	-	<10%
METALLIC OXIDES	-	<4%
ADMIXTURE(S)	-	<1%

Note: *Respirable crystalline silica fraction is < 0.1 %. ** Cement in concrete contains trace amounts (2-10 ppm) of Chromium VI (hexavalent chromium). Dependent on quarry location, the aggregate rock type can be described as meta-dolerite, amphibolite, granite with dolerite dykes or greenstone with varying concentrations of actinolite, epidote, feldspar, chlorite, calcite, sphenechlorite, pyroxene and limonite. In some cases natural rock dolerite aggregates may contain traces (<0.01% by weight) of fibrous actinolite.

4. First Aid Measures

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

Inhalation: IF INHALED, If inhaled, remove from contaminated area. Apply artificial respiration if not breathing

Skin: IF ON SKIN (or hair), If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Eyes: IF IN EYES, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Ingestion: For advice, contact a Poisons Information Centre or a doctor (at once). If swallowed, do not induce vomiting.

Advice to Doctor: Treat symptomatically. Wet cement is corrosive to skin and eye tissue, and may cause caustic type burns.

5. Fire Fighting Measures

Flammability: Non-flammable

Extinguishing media: Use an extinguishing agent suitable for the surrounding fire. Prevent contamination of drains or water ways.

Hazardous Combustion products: May evolve toxic gases if strongly heated. Carbon and nitrogen oxides may be formed in any fire.

Instructions to firefighters: Treat as per requirements for surrounding fires. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use water fog to cool intact containers and nearby storage areas.

6. Accidental Release Measures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Contact emergency services where appropriate

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. Avoid inhalation of dust and contact with skin.

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 Regional Council.

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7. Handling & Storage

Safe Handling

For dry concrete: The cutting, drilling or use of powered tools (e.g. saw or angle grinder) on dry concrete can cause dust to be generated which may be respirable and contain crystalline silica. For wet concrete: Prolonged contact with wet concrete has been known to cause severe "alkali burns". Control methods to prevent both "alkali burns" and inhalation of dusts and fibres are contained in Section 8.

Certified Handler: Not required.

Storage

Store locked up.
Store in a well-ventilated area. Keep container / package tightly closed. Keep dry and store off the ground.

8. Exposure Controls & Personal Protection

Exposure Standards

Workplace Exposure Standards (WES):

Ingredient	CAS Number	TWA	STEL
CRYSTALLINE SILICA	-	0.025(r) mg/m ³	-
HEXAVALENT CHROMIUM	18540-29-9	0.00002 mg/m ³	0.0005mg/m ³

Data source: *Workplace Exposure Standards and Biological Indices (14th Edition, Nov 2023, WorkSafe)*

Biological Exposure Indices (BEI):

EXPOSURE	DETERMINANT	SAMPLING TIME	BEI
HEXAVALENT CHROMIUM	Total chromium in urine	End of shift at end of work week	25 g/litre
HEXAVALENT CHROMIUM	Total chromium in urine	End of 8-hour exposure	Increase of 10g/litre

Data source: *Workplace Exposure Standards and Biological Indices (14th Edition, Nov 2023, WorkSafe)*

Engineering Controls

Ventilation: Use only outdoors or in a well-ventilated area. All work should be carried out in such a way as to minimise dust generation and reduce inhalation to as low as reasonably practicable. "Uncontrolled" dry cutting or processing such as grinding should be avoided. Utilise water to suppress dust or on- tool extraction to collect dust where power tools are used to cut, grind and drill cured concrete. Use wet methods or Class M or H vacuums for cleaning equipment surfaces where dust may have accumulated from use of power tools. Maintain ambient levels of Respirable Dust and Respirable Crystalline Silica levels below the recommended exposure standards (see above).

Personal Protection (PPE)

Precautions must be taken. Cement 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.

Respiratory protection: Personal respiratory protection may be required where dust is airborne. The type of respiratory protection required depends primarily on the concentration of the inhalable and respirable dust in the air, and the frequency and length of exposure time. A suitable P2 particulate respirator chosen and used in accordance with AS/NZS 1715 and AS/NZS 1716 may be sufficient for many situations, but where high levels of dust are encountered, more efficient cartridge-type or powered respirators or supplied-air helmets or suits may be necessary. Use only respirators that bear the Australian Standards mark and are fitted and maintained correctly. Dust control measures providing respiratory protection against Respirable Crystalline Silica dust will also minimise and control potential exposure to fibrous minerals and dusty environments where engineering controls are inadequate to minimize dust exposure, the use of an approved Class P1 or 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.

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9. Physical & Chemical Properties

Appearance: Grey or off-white powder.
Odour: Ammonia odour
pH: Alkaline, 12 - 13
Boiling point: Not applicable
Melting point: >1,200°C
Specific gravity (H₂O=1): No data available
Solubility (water): No data available
Flash point: Not applicable

Autoignition Temp: Not applicable
Lower Flammability Limit (LEL): Not applicable
Upper Flammability Limit (UEL): Not applicable
Evaporation rate: Not applicable.
Vapour pressure: Not applicable
Viscosity (dynamic): Not applicable
Partition coefficient (n-octanol/water): No data available.

10. Stability & Reactivity

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

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

Incompatible / Materials to avoid: Incompatible with oxidising agents (e.g. hypochlorites), ethanol, acids (e.g.

hydrofluoric acid) and interhalogens (e.g. chlorine trifluoride). Water contact may increase product temperature 2°C to 3°C.

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: Irritating to the skin. Contact with powder or wetted form may result in irritation, rash and dermatitis.

Eyes: Contact with moisture in the eyes may result in irritation, lacrimation, pain, redness, conjunctivitis and possible alkaline burns aided by mechanical irritation and abrasion.

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

Aspiration hazard: This product is a solid and aspiration hazards are not expected to occur.

Chronic Exposure (long term)

Respiratory or Skin sensitisation: Not classified as causing respiratory sensitisation. However, some individuals may exhibit an allergic skin response upon exposure to cement, possibly due to trace amounts of chromium.

Mutagenicity: Not classified as a mutagen

Carcinogenicity: Product is not classified as a carcinogen
Note: This product may contain trace amounts of 'respirable' crystalline silica and hexavalent chromium compounds which are classified as carcinogenic to humans (IARC Group 1). However, there is sufficient information to conclude that the

relative risk of lung cancer from exposure to crystalline silica is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk.

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

Specific Target Organ Toxicity (STOT): Not classified as causing organ damage from repeated exposure. Repeated exposure to crystalline silica may cause lung fibrosis (silicosis), however due to the low levels of respirable crystalline silica in this product, adverse health effects are not anticipated with normal use.

In some cases the aggregate in this product may contain traces of fibrous actinolite material, which is a form of asbestos (asbestiform fibres). Excessive long term exposures to asbestiform fibres can lead to mesothelioma, lung cancer and asbestosis. However, according to a statement from Department of Mines, Industry Regulation and Safety (14 November 2013): "Exposure monitoring results gathered during air monitoring programs at quarries and mine sites show that the levels of exposure from airborne mineral fibres are below the national occupational exposure standard and therefore present a low health risk."

Other effects: Cement may contain trace [less than 0.0001%] 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

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Toxicological Data

No toxicological data available for the product or its ingredients.

Biological Exposure Indices

No biological exposure indices allocated.

12. Ecological Information

Avoid release to the environment. Do not allow to enter drains or waterways.

Persistence in environment: No data available

Mobility: No data available.

Biodegradability: 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. No data available for this product or its ingredients.

13. Disposal Considerations

Dust from product is hazardous. Small amounts of material can be disposed of as common waste or returned to the container for later use if it is not contaminated. Large amounts 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. Containers / packaging may only be recycled if clean and free of residue as to be non-hazardous.

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 2017 – HSR002544

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 0.0001%; however, it should be assumed that silica content is sufficient to create a silica hazard in work conditions where fine, respirable dust becomes airborne.

Health and Safety at Work (Hazardous Substances) Regulations

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 Corrosion/Irritation: Category 2

Skin Sensitisation: Category 1

Serious Eye Damage / Eye Irritation: Category 1

Specific Target Organ Toxicity (Single Exposure): Category 3 (Respiratory Irritation)

(Previous HSNO classes for reference only)

6.3A

6.5B

8.3A

6.1E

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Abbreviations / Terminology:

AS/NZS	Joint Australian New Zealand Standard
AS/NZS 1337	Personal eye-protection
AS/NZS 1715	Selection, use and maintenance of respiratory protective equipment
AS/NZS 1716	Respiratory protective devices
CAS#	Chemical Abstract Service number (a unique identifier for chemicals)
HSNO	(New Zealand) Hazardous Substances and New Organisms Act
IARC	International Agency for Research on Cancer
NZIoC	New Zealand Inventory of Chemicals
NZS 5433	Transport of Dangerous Goods on Land
TWA	Time Weighted Average
BEI	Biological Exposure Indices
STEL	Short Term Exposure Limit
WES	Workplace Exposure Standard
6.7A	Substances that are known or presumed human carcinogens

Prepared with reference to: *Hazardous Substances (Safety Data Sheets) Notice 2017* published by Environmental Protection Authority, New Zealand.

Current Version: 23 May 2023

Revision Information:

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

This revision: Updated existing SDS to meet NZ requirements and Workplace Exposure Standards.

Previous revision dated: -

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.

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