

### Section 1 Identification of the Material and the Supplier

**Product Name:** Cement Type; GB and CG

**Other Names:** General Builders (GB), Ciment General (CG)

**Product Use:** Used in commercial, industrial and residential construction including structural concrete, mortars, renders, grouts and cement based products, and can also be used as a general binder for applications such as soil stabilisation.

**Restriction of Use:** Refer to Section 15

**New Zealand Supplier:** Golden Bay Cement

**Address:** Portland Road  
Whangarei, 0178

**Telephone:** 09 432 2656 (7.30am – 4 pm, Mon – Fri)

**Emergency Telephone 24 hour:** **0800 764 766 (NZ Poisons Centre)**  
**0800 243 622 (0800 CHEMCALL)**

**Date of SDS Preparation:** 6 November 2017

**Prepared by:** Technical Compliance Consultants (NZ) Ltd

### Section 2 Hazards Identification

This substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001*

**EPA Approval No: Construction Products (Toxic [6.7]) - HSR002545**

#### Pictograms



Irritant

Chronic

Corrosive

**Signal Word: Danger**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1E(Resp)	H335	May cause respiratory irritation.	Category 3
6.3A	H315	Causes skin irritation.	Category 2
6.5B	H317	May cause an allergic skin reaction.	Category 1
6.7A	H350	May cause cancer.	Category 1A
8.3A	H318	Causes serious eye damage.	Category 1

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust.
P264	Wash hands thoroughly after handling.



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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 clothing.
P281	Use personal protective equipment as required.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P362	Take off contaminated clothing and wash before re-use.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove 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.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Storage Code	Storage Statement
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

#### Other Hazards:

Highly corrosive to skin when wet or in slurry. Causes severe skin burns and eye damage.  
Can become highly corrosive by sweat or moisture on skin/eyes.

### Section 3 Composition/Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Portland cement clinker	75-85	65997-15-1
Fly Ash	10-20	68131-74-8
Gypsum	4-6	13397-24-5
<i>Product includes:</i>		
<i>Iron oxide</i>	<10	1309-37-1
<i>Magnesium oxide</i>	<5	1309-48-4
<i>Lime</i>	< 5	1305-78-8
<i>Respirable quartz</i>	0.15	14808-60-7
<i>Hexavalent chromium</i>	<0.002	18540-29-9

### Section 4 First Aid Measures (for construction uses)

Recommended on site emergency facilities: Eye washing facility required and safety shower recommended.

Routes of Exposure:

If in Eyes Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so after the first 5 minutes. Continue rinsing for at least 15 minutes ensuring all particles are removed from under eyelids. Immediately call the Poisons Centre or a doctor for advice.

If on Skin Remove contaminated clothing. Flush skin with plenty of water followed by washing with soap and wash. Get medical advice if skin irritation or rash develops. Launder contaminated clothing separate from household laundry, before reuse.



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If Swallowed	Rinse mouth. Do NOT induce vomiting. Give water to drink. Immediately call the Poisons Centre or a doctor for advice.
If Inhaled	Remove to fresh air. If breathing is difficult, keep person at rest in a position comfortable for breathing. If breathing is difficult, administer oxygen and get immediate medical assistance. If experiencing respiratory symptoms, e.g. coughing does not subside, or if feeling unwell, immediately call the Poisons Centre or a doctor.

#### Most important symptoms and effects, both acute and delayed

Refer to Section 11.

#### Section 5 Fire Fighting Measures

<b>Hazard Type</b>	Non-flammable or combustible solid
<b>Hazards from combustion products</b>	Toxic gases (not specified).
<b>Suitable Extinguishing media</b>	Extinguish fires based on surrounding material.
<b>Precautions for firefighters and special protective clothing</b>	Firefighters should wear full protective clothing and self-contained breathing apparatus
<b>HAZCHEM CODE</b>	None allocated

#### Section 6 Accidental Release Measures

##### Methods and materials for containment and clean up:

Wear PPE as detailed in Section 8. Evacuate all unnecessary personnel.

Collect preferably in dry state, and place in sealable containers for disposal. Avoid generating dust.

Place waste material in plastic or metal drums with tightly sealed lids for disposal.

#### Section 7 Handling and Storage

##### HANDLING:

- Keep out of reach of children.
- Read label before use.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Avoid breathing dust.
- Wash hands 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 clothing.
- Use personal protective equipment as required.

##### STORAGE:

- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.
- Store away from incompatibilities listed in Section 10.

#### Section 8 Exposure Controls/Personal Protection

##### WORKPLACE EXPOSURE STANDARDS NZ WorkSafe New Zealand (provided for guidance only)



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Substance	TWA	
	ppm	mg/m <sup>3</sup>
Cement (Portland cement) [65997-15-1]		10
Iron oxide dust and fume (Fe <sub>2</sub> O <sub>3</sub> ), as Fe [1309-37-1]	5(w)	
Calcium oxide [1305-78-8]		2

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.*

### ENGINEERING CONTROLS:

Where possible ventilation should be used (with a suitable dust trap or filter) to maintain the environment below the Workplace Exposure Standard.

### PERSONAL PROTECTIVE EQUIPMENT:

<b>Eyes</b>	Wear dust-proof goggles.
<b>Hands and Skin</b>	Wear PVC gloves. When using large quantities or where heavy contamination is likely, wear overalls. Contaminated work clothing should not be allowed out of the workplace.
<b>Respiratory</b>	At high dust levels, wear a class P3 (particulate) respirator or a powered air purifying respirator (PAPR) with class P3 (particulate) filter. Where an inhalation risk exists, wear a class P1 (particulate) respirator.
<b>General</b>	Wash hands before eating, drinking, smoking, using the toilet and at the end of the shift.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Fine white to dark grey powder.
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not applicable
<b>pH</b>	11 to 13 (in sol.)
<b>Boiling Point</b>	Not applicable
<b>Melting Point</b>	>1200°C
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not applicable
<b>Flammability</b>	Not flammable
<b>Upper and Lower Explosive Limits</b>	Not applicable
<b>Vapour Pressure</b>	Not applicable
<b>Specific gravity</b>	2.9 – 3.2
<b>Bulk Density</b>	Not applicable
<b>Solubility in water</b>	<10 g/L
<b>Partition Coefficient:</b>	Not applicable
<b>Auto-ignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not applicable
<b>% Volatiles</b>	Not applicable
<b>Evaporation Rate</b>	Not applicable
<b>Respirable dust fraction</b>	0.2 mg/m <sup>3</sup> crystalline silica quartz (respirable)

## Section 10 Stability and Reactivity

<b>Chemical Stability:</b>	Stable under normal storage and use conditions.
<b>Conditions to Avoid:</b>	Water contact may increase product temperature 2-3°C.
<b>Incompatibility:</b>	Wet cement dust is very alkaline. Product is incompatible with oxidising agents (e.g. hypochlorites), ethanol, acids (e.g. hydrofluoric acid) and interhalogens (e.g. chlorine trifluoride). Contact with aluminium.



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Hazardous Decomposition: Products	May evolve toxic gases if heated to decomposition.
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#### Section 11 Toxicological Information

##### Acute Effects:

<b>Swallowed</b>	Ingestion may result in burns to the mouth and throat, with vomiting and abdominal pain. Due to product form, ingestion is not considered a likely exposure route.
<b>Dermal</b>	Not applicable.
<b>Inhalation/Respiratory</b>	May cause respiratory irritation. Over exposure may result in severe mucous membrane irritation & bronchitis. Pre-existing respiratory conditions may be aggravated. Hexavalent chromium is reported to cause respiratory sensitisation, however due to the trace amount present, a hazard is not anticipated under normal conditions of use. Chronic inhalation exposure to free crystalline silica may cause delayed lung injury including silicosis, a serious and potentially fatal disease, and cause or aggravate other lung conditions or diseases.
<b>Eye</b>	Causes serious eye damage. Exposure to larger amounts or wet product may result in symptoms ranging from moderate irritation such as pain or redness, through to corneal burns and ulceration with possible permanent damage.
<b>Skin</b>	Causes skin irritation. May cause an allergic skin reaction. Corrosive when wet.

Not a primary skin irritant, various severities of irritations are possible on prolonged, repeated or occluded contact. Ingredients may also irritate or cause burning sensation to eyes, nose and throat and may cause abdominal discomfort.

##### Chronic Effects:

<b>Carcinogenicity</b>	May cause cancer.
<b>Reproductive Toxicity</b>	Not applicable.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	Not applicable.
<b>Aspiration</b>	Not applicable.

Crystalline silica can cause silicosis (lung disease) with chronic over exposure, however due to low levels present and product application, adverse health effects are not anticipated.

Crystalline silica and hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1).

#### Section 12 Eco Toxicological Information

The product is an inorganic material and once used for the intended purpose and hardened presents no toxicity, persistence or bio accumulative risks. Product is highly alkaline (pH 11 -13) and any spillage into an aquatic environment would potentially have a negative impact on aquatic life.

Product is identified as a being harmful to aquatic life.

<b>Persistence/Degradeability:</b>	No data available
<b>Mobility in Soil:</b>	No data available
<b>Bioaccumulative potential:</b>	No data available
<b>Other Adverse effects:</b>	No data available

#### Section 13 Disposal Considerations

Reuse or recycle dry uncontaminated product where possible. Alternatively, either allow slurries to harden then dispose of as concrete (non-hazardous waste), or ensure product is covered with moist soil to prevent dust generation and dispose of to an approved landfill site. Do not dispose of into sewerage systems or surface waters.



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Dispose of empty packaging by incineration or to landfill according to requirements of local regulations.

### Section 14 Transport Information

This substance is not classified as a dangerous good in New Zealand according to NZS5433: 2012

### Section 15 Regulatory Information

EPA Approval No: Construction Products (Toxic [6.7]) - HSR002545

HSNO Classification: 6.1E(Resp), 6.3A, 6.5B, 6.7A, 8.3A

HSWA Controls:

Trigger quantities for this substance:

	Trigger Quantity
Certified Handler	Not required as per Group Standard
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000kg (8.3A)
Emergency Response Plan	1000kg (6.7A)
Secondary Containment	1000kg (6.7A)
Restriction of Use	Only use for the intended purpose.

### Section 16 Other Information

#### Glossary

EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

1. EPA Hazardous Substances (Safety Data Sheets) Notice – September 2017.

#### Disclaimer

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# **SAFETY DATA SHEET**

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