



Original date of issue: 15 December 2016  
Revised issue date:  
Revised by: Simonne Moses - HSNO Consultant SDS No: 1

## Safety Data Sheet Rapidcem Cement High Early Strength Portland Cement (Type HE)

Classified as: Hazardous according to the Hazardous Substances  
(Minimum Degrees of Hazard) Regulations 2011.

### SUPPLIER DETAILS

Holcim (NZ) Ltd  
1/1 Show Place  
Addington  
Christchurch 8024

Business Telephone: 03 339 7500

Emergency Contact 24 hrs:	0800 CHEMCALL	0800 243 622
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### Section 1: IDENTIFICATION OF THE MATERIAL

<b>Product Name:</b>	Rapidcem Cement - High Early Strength Portland Cement (Type HE)	<b>CAS No:</b>	Mixture
<b>Other names:</b>	Portland Cement		
<b>Recommended use:</b>	Used as the basic material for concrete, mortar and paste.		

### Section 2: HAZARDS IDENTIFICATION

Rapidcem Cement is not classified as a Dangerous Good for Transport.

Rapidcem Cement is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazards) Regulations 2001.

**Note: This product will be corrosive to skin and eyes on contact with water.**

Classified under the group standard - Construction Products (Subsidiary Hazard) Group Standard 2006

HSNO APPROVAL NUMBER: **HSR002544**

HSNO CLASSIFICATIONS:	6.3A	Skin irritant
	6.9B	Harmful to human target organs or systems (respiratory)
	8.3A	Eye corrosive

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H315 Causes skin irritation.

H318 Causes serious eye damage

H371 May cause damage to organs (respiratory)

H373 May cause damage to organs (respiratory) through prolonged or repeated exposure

GHS Classification:	Skin corrosion/irritation	Category 2
	Eye damage/irritation	Category 1
	Specific target organ toxicity (single exposure)	Category 2 (respiratory system)
	Specific target organ toxicity (repeated exposure)	Category 2 (respiratory system)

GHS Pictograms:



## **DANGER**

### **PREVENTION STATEMENTS:**

P260 Do not breathe dust.

P264 Wash hands and other areas of exposed skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

### **RESPONSE STATEMENTS**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before re-use.

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.

P309 + P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

### **STORAGE**

P405 Store locked up.

### **DISPOSAL**

P501 In accordance with the Hazardous Substances (Disposal) Regulations 2001. Refer to Section 13 of this SDS.

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### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Main Component	CAS Number	Concentration
Portland Cement Clinker	65997-15-1	Up to 95%
Calcium Sulphate	7778-18-9	Up to 5%
Calcium Oxide	1305-78-8	< 4%
Magnesium Oxide	1309-48-4	< 5%
Crystalline Silica	14808-60-7	< 0.1%

NOTE: Trace of chemicals may be detected during chemical analysis. Cement may contain trace of chromium compound (Cr VI), free crystalline silica, and other trace compounds.

### Section 4: FIRST AID MEASURES

<b>Workplace Facilities Required:</b>	Eye wash and safety shower facilities are recommended.
<b>If Inhaled:</b>	Remove to fresh air, away from dust. If coughing and other symptoms persist, seek medical attention.
<b>In Contact with Eye:</b>	Hold eyes open, flush with water for at least 15 minutes. If irritation or redness persists, seek medical attention. Continue rinsing. Note: If wet cement is splashed in the eye treat as above and seek immediate medical attention.
<b>In Contact with Skin:</b>	Immediately wash skin with plenty of soap and water, while removing contaminated clothing and shoes. Wash contaminated clothing before re-use. Seek medical advice if irritation persists.
<b>If Swallowed:</b>	DO NOT INDUCE VOMITING. Rinse mouth. Give large quantities of water. Never give anything by mouth to an unconscious person. Seek medical attention if symptoms persist. If vomiting occurs, keep head below hips to prevent aspiration to lungs.
<b>Personal Protective Equipment:</b>	It is recommended that the first aid responder wear gloves and eye protection to prevent exposure to wet cement.
<b>Advice to Doctor:</b>	Treat symptomatically. Wet cement is corrosive and exposure to skin or eye may cause caustic type burns. Ophthalmological opinion should be sought for burns to eyes.

### Section 5: FIRE FIGHTING MEASURES

<b>Fire/Explosion Hazard:</b>	Rapidcem Cement is not flammable or combustible.
<b>Suitable Extinguishing Media:</b>	Use extinguishing media appropriate to the surrounding environment.
<b>Precautions in Connection with Fire:</b>	None required

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## Section 6: ACCIDENTAL RELEASE MEASURES

<b>Precautions:</b>	Clear area of all unprotected personnel. Keep unnecessary and unprotected personnel from entering area. Avoid release to the environment.
<b>Suitable Protective Equipment:</b>	Emergency responders must use personal protective equipment, including gloves, safety goggles and overalls and dust masks.
<b>Spill or Leak Procedures:</b>	Contain and recover product where possible. Sweep or vacuum up dry substance and collect in an appropriate container. Avoid contact with water as this will cause the cement to set. Do not flush to sewer. After the majority of the dry cement has been cleaned up, the water may be used to clean up residual material, ensuring that the cleaning water is recovered and neutralised before disposal.
<b>Water Spill:</b>	If a spill occurs into a waterway, notify the Regional Council.
<b>Waste Disposal Methods:</b>	Dispose of as per Section 13.
<b>Emergency preparation:</b>	Ensure there is appropriate and adequate personal protective equipment, trained personnel and clean up materials for management of accidental release.

## Section 7: HANDLING AND STORAGE

<b>Precautions for Safe Handling:</b>	Do not breathe dust. Wear protective clothing, including gloves, eye protection, dust mask.
<b>Safe Handling:</b>	Ensure correct manual handling procedures are observed when handling bags. Avoid skin and eye contact. Do not eat, drink or smoke when using this product. Keep away from food, foodstuffs, drinks or clothing. After use wash exposed skin thoroughly. As this product is alkaline, avoid contact with acidic products.
<b>Approved handler:</b>	An approved handler is not required for this substance.
<b>Storage:</b>	Storage areas need to offer suitable protection from moisture to prevent the cement from setting. Ensure packages are sealed and protected from physical damage. Ensure all labelling on packaging remains intact and legible. Storage areas should be well-ventilated and locked when not in use.
<b>Site Storage Requirements:</b>	Site Signage will be required when quantities exceed 1000kg.

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## Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**It is an offence to exceed the HSNO exposure standard, including the workplace exposure standards, unless provided as a guidance only under section 77B.**

### Workplace Exposure Standards:

Ingredient	TWA mg/m <sup>3</sup>
Portland Cement	10
Calcium Oxide	2
Chromium (VI)	0.05
Magnesium Oxide	10
Silica - Crystalline (Quartz)	0.1

### Engineering Controls:

Dust minimisation measures must be taken to reduce exposure. Use local mechanical ventilation or extraction in areas where dust generation is unavoidable. When handling large amounts, a dust collection system should be considered. Clean work areas regularly.

### Personal Protective Equipment:

Avoid contact with the skin, eyes and avoid breathing dust.

Avoid extended contact of skin with wet cement and never kneel in wet cement. Wear personal protective equipment such as overalls, impervious footwear, and gloves such as PVC. Refer to Australian and New Zealand Standards AS/NZS 4501 for occupational protective clothing and AS/NZS 2161 for protective gloves.

Remove any contaminated clothing to avoid prolonged contact with the skin. Wash work clothes regularly.

Use safety glasses with side shields or safety goggles to protect eyes. When handling large quantities consider using a face shield. Refer to AS/NZS 1336 for suitable eye and face protection.

Where dust exposure is unable to be fully controlled by engineering controls, wear a suitable P1 or P2 dust mask. When handling large quantities where a lot of dust is generated a half face or full face particulate respirator should be considered. Ensure all personnel using dust masks or respirators have been trained on their proper use and maintenance. Refer to AS/NZS 1715 and AS/NZS 1716 for suitable respiratory protection.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Description:	Fine off-white to grey powder	Melting Point (°C):	> 1200°C
Odour:	Odourless		
Vapour Pressure:	Not applicable	Solubility:	Slightly soluble in water. Reacts to form an alkaline solution
pH:	12-13 after contact with water	Specific Gravity:	2.5 to 3.0



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**Other:** Not explosive. Product is hydraulic in that it hardens on contact with water.

## Section 10: STABILITY AND REACTIVITY

**Stability:** Reacts with water and becomes a stable solid. Wet cement is caustic prior to setting. When stored correctly in sealed packages, away from moisture, product is stable.

**Conditions to Avoid:** Unintended contact with water.

**Incompatibility:** Avoid contact with acidic products as exothermic reactions may occur. Incompatible with oxidising agents, ethanol, and interhalogens.

## Section 11: TOXICOLOGICAL INFORMATION

### Acute Exposure

**Acute Toxicity:** Rapidcem Cement is not an acutely toxic substance via oral, skin, or inhalation exposure routes.

**Inhalation:** Inhalation of dust is irritating to the nose, throat and respiratory tract causing sneezing and coughing. Inhalation of dust may aggravate pre-existing conditions such as asthma.

**Ingestion:** This product may be slightly abrasive and corrosive to the mouth and throat if swallowed although this route of exposure is unlikely under normal industrial handling.

**Skin Contact:** Causes irritation. Dust irritates and dries the skin. Wet cement is strongly alkaline and may cause serious skin burns without obvious pain at the time of exposure.

**Eye Contact:** May cause caustic burns to the eyes. Dust is also a mechanical irritant.

### Chronic Exposure:

**Mutagen/Reproductive Toxicant** There is no data to indicate that Rapidcem Cement is mutagenic or a reproductive toxicant.

**Carcinogen:** Rapidcem Cement contains trace amounts of crystalline silica and hexavalent chromium which are both classified as carcinogenic to humans. However, the quantities present in the product are below the criteria for classification as a carcinogen.

**Specific Target Organ Systemic Toxicity:** Rapidcem Cement causes respiratory irritation on single exposure and may harm the respiratory system over prolonged or repeated exposure with an increased risk of bronchitis or pneumonia.

**Other Chronic Health Effects:** Rapidcem Cement contains trace amounts of Chromium which may cause allergic dermatitis in individuals who are allergic to Chromium.

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## Section 12: ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	<p>There is no information to indicate that Rapidcem Cement is toxic to the environment.</p> <p>The product forms an alkaline slurry when mixed with water which may affect the pH of aquatic systems if exposed to large quantities. For this reason, the product should be kept clear of waterways.</p>
<b>Persistence/degradability:</b>	Product is persistent and has low degradability.
<b>Bio-accumulation:</b>	Product is not expected to bio-accumulate.
<b>Mobility:</b>	Product is not expected to be mobile in a landfill situation.

## Section 13: DISPOSAL CONSIDERATIONS

<b>Disposal:</b>	<p>Rapidcem Cement can be taken to a landfill site for disposal. Avoid dust generation during disposal. Keep out of drains and waterways.</p> <p>Cleaning water from spills can be disposed of via a licenced waste disposal contractor. The cleaning water may need to be neutralised prior to disposal.</p>
<b>Disposal of Packaging:</b>	Packaging can be taken to a landfill site for disposal.

## Section 14: TRANSPORT INFORMATION

Rapidcem Cement is not classified as a Dangerous Good for transport in accordance with NZS5433:2012.

UN Number:	None allocated
Proper Shipping Name:	None allocated
Class and Subsidiary Risk:	None allocated
Packing Group:	None allocated
Hazchem Code:	None allocated

Transport with a method that does not cause dust.  
Ensure transportation methods prevent torn bags, leakage from packages and collapsing loads.  
Take precautions to prevent moisture contamination.

In case of emergency call 0800 CHEMCALL (0800 243 622).

## Section 15: REGULATORY INFORMATION

<b>Group Standard Allocation:</b>	Construction Products (Subsidiary Hazard) Group Standard 2006
<b>HSNO Approval Code:</b>	HSR002554



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**HSNO Classifications:**  
6.3A - Skin irritant  
6.9B - Harmful to target organs or systems (respiratory)  
8.3A - Eye corrosive

This substance does not trigger Location Test Certificate, Approved Handler or Tracking requirements.

## Section 16: OTHER INFORMATION

The information provided in this Safety Data Sheet relates only to the specific material designated herein. This Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products.

This substance is approved under HSNO for use as a construction product. All reasonable care has been taken to ensure that the information and advice contained herein are from sources believed to be reliable and to represent the most up-to-date knowledge available at the date given in Section 16. Holcim (NZ) Ltd assumes no liability for any damages related to the use or misuse of this substance.

All chemical materials may present unknown hazards as people have varying degrees of sensitivity to chemicals. Therefore, this product should be used with caution. The information herein is given in good faith, but no warranty, express or implied is made.

SDS Created: 15 December 2016

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References:

EPA NZ Chemical Classification and Information Database  
Supplier SDS: Portland Cement, Siam City Cement Public Company Limited,

**END OF SAFETY DATA SHEET**