

Safety Data Sheet

Steel Cement

Section 1: Material and Supplier Information

Product Name:	Steel cement
Applicable In:	Australia
Other Names:	Steel Cement, Blended cement, GB cement
Recommended Use:	Steel Cement may be used as a binder in structural concrete, concrete masonry, mortar and Grouts. It may also be used in the manufacture of fibre cement products, in soil stabilization, civil engineering construction and in mining applications.
Company Details:	Independent Cement & Lime Pty Ltd 750 Lorimer Street Port Melbourne, VIC 3207 ABN 49 005 829 550
Emergency Contact Number:	Contact Person: Technical Manager Telephone: Office hours-03 9676 0000 or Poisons information Centre 13 11 26
Phone:	VIC 03 9676 0000
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This Safety Data Sheet (SDS) is issued by Independent Cement & Lime Pty Ltd in accordance with the Code and guidelines from the Australian Safety and Compensation Council (ASCC). The information in it must not be altered, deleted or added to. Independent Cement & Lime Pty Ltd will not accept any responsibility for any changes made to its SDS by any other person or organization. Independent Cement & Lime Pty Ltd will issue a new SDS when there is a change in product specifications and/ or ASCC standards, guidelines or regulations.

Section 2: Hazards Identification

Statement of This product is classified as HAZARDOUS according to Safe Work Australia criteria. Not Classified as a dangerous good by the criteria of the ADG code, IMDG or IATA.

GHS Classifications

Skin Corrosion/ Irritation	Criteria 2
Serious Eye Damage/Eye Irritation:	Criteria 1
Specific Target Organ Systematic Toxicity (Repeated Exposure):	Category 2

SIGNAL WORD DANGER

Pictograms



**Independent
Cement**

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Hazard Statements

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H373	May cause damage to lungs and respiratory tract through prolonged or repeated exposure.

Prevention Statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection

Response Statements

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.
P333 + P313	If skin irritation or rash occurs get medical advice/attention.

Disposable Statements

P501	Dispose of contents/container in accordance with relevant regulations.
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UN No	None Allocated	Hazchem Code	None Allocated	Pkg Group	None Allocated
DG Class	None Allocated	Subsidiary Risk(s)	None Allocated	EPG	None Allocated

Section 3: Composition / Information on Ingredients

Ingredient	Formula	Proportion	CAS Number
Slag	15	15-25%	65996-69-2
Portland cement	Not available	50-80%	65997-15-1
Gypsum	CaSO ₄ 2H ₂ O	3-8%	10101-41-4



Crystalline silica (Quartz)	SiO ₂	<1%	14808-60-7
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Section 4: First Aid Measures

Eye:	If wet steel cement or steel cement powder is splashed in to the eyes, immediately flush thoroughly with flowing water for at least for 10 minutes and seek urgent medical attention.
Inhalation:	Remove from dusty area to fresh air. If symptoms persist, seek medical attention.
Skin:	Remove heavily contaminated clothing immediately. Wash off skin thoroughly with water. A shower may be required. Seek medical attention for persistent irritation or burning of the skin.
Ingestion:	Rinse mouth and lips with water. Do not induce vomiting. Give water to drink to dilute stomach contents. If symptoms persist, seek medical attention.
Advice to Doctor:	Treat symptomatically.

First Aid Facilities Eye wash station.

Additional Information Aggravated Medical Conditions

Inhalation	Over exposure resulting from prolonged and repeated inhalation of dust containing crystalline silica can cause bronchitis, silicosis (scarring of the lung). It may also increase the risk of scleroderma (a disease affecting the connective tissue of the skin. Joints, blood vessels and internal organs) and lung cancer. Epidemiological studies have shown that smoking increases the risk of bronchitis, silicosis (scarring of the lung) and lung cancer in persons exposed to crystalline silica.
Skin may	Prolonged and repeated skin contact with steel cement in wet concrete, mortars and slurries result in irritant dermatitis or alkaline burns.
Eye	Irritating to the eye. If wet cement is splashed in to the eye, alkaline burns can cause permanent damage.

Section 5: Fire Fighting

Flammability:	Not flammable. Does not support combustion of other materials.
Fire and Explosion:	No fire or explosion hazard exists.
Extinguishing:	Non-flammable; use suitable extinguishing agent for surrounding fire
Hazchem Code:	None Allocated



Section 6: Accidental Release Measures

Spillage: If spillage (bulk), contact emergency services if appropriate. Wear dust-proof goggles, PVC rubber gloves, a Class P2 respirator (where an inhalation risk exists), coveralls and rubber boots. Clear area of all unprotected personnel. Prevent spill entering drains or waterways. Collect and place in sealable containers for disposal or reuse. Avoid generating dust.

Emergency Procedures Follow safety requirements for personal protection under Section 8 Exposure Controls/Personal Protection.

Section 7: Handling and Storage

Handling: Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

Storage: Store off the floor in the original bags in a cool, dry, well ventilated area, removed from excessive moisture and heat. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use.

Property/Environmental Refer to Section 13.

Section 8: Exposure Controls / Personal Protection

Ventilation Do not inhale dust/powder. Use with adequate ventilation. Where a dust inhalation hazard exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

Exposure Standards

Slag (65996-69-2)
ES-TWA: 10 mg/m³ (Respirable Dust)

Gypsum (10101-41-4)
ES-TWA: 10 mg/m³ (Respirable Dust)

Portland Cement (65997-15-1)
ES-TWA: 10 mg/m³ (Respirable Dust)

Crystalline Silica (Quartz) (14808-60-7)
ES-TWA: 0.1 mg/m³ (Respirable Dust)

PPE Wear dust-proof goggles/safety glasses and rubber or PVC gloves. Where an inhalation risk exists, wear a clear P2 respirator. If there is potential for prolonged and/or excessive skin contact, wear long sleeve shirts and full-length trousers or similar clothing like overalls. At high dust levels, wear a Class P3 respirator or a Powered Air Purifying Respirator (PAPR) with class P3 filter. Check the site's specific risk assessment.





Section 9: Physical and Chemical Properties

Appearance	Fine grey powder	Solubility (water)	Slight, hardens when mixing with water.
Odor	Odorless	Specific Gravity	2.9 to 3.2
pH (in water)	11-13	% Volatiles	Not Available
Vapor Pressure	Not Available	Flammability	Non-Flammable
Vapor Density	Not Available	Flash Point	Not Relevant
Boiling Point	Not Available	Upper Explosion Limit	Not Relevant
Melting Point	> 1200°C	Lower Explosion Limit	Not Relevant
Evaporation Rate	Not Available	Autoignition Temperature	Not Available
Bulk Density	1100-1550 kg/m ³		
Particle Size	20 – 40% of particles are <7 µm (Respirable Range)		

Section 10: Stability and Reactivity

Chemical Stability:	Chemically Stable
Conditions to Avoid:	Keep free of moisture
Incompatible Materials	Incompatible with acids, ammonium salts and aluminum metal. Slag dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Water contact may increase the temperature of the product (2-3°C). Water reacts with slag and form silicate and calcium hydroxide.
Decomposition Products:	Hydrogen sulfide may be released from moist slag when heated. Unlikely to evolve toxic gases when heated to decomposition.
Hazardous Reactions:	None

Section 11: Toxicological Information

Acute Toxicity	No known toxicity data for this product.
Eyes	Irritant upon contact with powder/dust. Over exposure may result in pain, redness, corneal burns and ulceration with possible permanent damage.



Inhalation	Slightly corrosive. Irritating to the respiratory system, causing coughing and sneezing. Over exposure may result in severe mucous membrane irritation and bronchitis. 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.
Skin	Irritating to the skin. Prolonged and repeated contact with powder or wetted form may result in skin rash, dermatitis and sensitisation.
Ingestion	Slightly corrosive. 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.
Mutagenicity	Insufficient data available for this product to classify as a mutagen.
Carcinogenicity	Crystalline silica is classified as carcinogenic to humans (IARC Group 1), however due to low levels present and product application, the criteria for classification is not met.

Section 12: Ecological Information

Toxicity	Product forms an alkaline slurry when mixed with water. This product is nontoxic to aquatic life forms when present in cured solid form.
Persistence and Degradability	Product is persistent and would have a low degradability.
Mobility in Soil	A low mobility would be expected in a landfill situation.

Section 13: Disposal Considerations

Waste Disposal	Reuse or recycle where possible. Alternatively, ensure product is covered with moist soil to prevent dust generation and dispose of to an approved landfill site. Contact the manufacturer for additional information.
Legislation	Dispose of in accordance with relevant local legislation. Keep out of sewer stormwater drains.

Section 14: Transport Information

Not classified as a dangerous good by the criteria of the ADG code.
 Transport is by rail or road in bulk or bag form.
 Drivers of trucks transporting bagged products should ensure that the bags are properly restrained.

Shipping Name	None Allocated				
UN No	None Allocated	Hazchem Code	None Allocated	Pkg Group	None Allocated



DG Class None Allocated **Subsidiary Risk(s)** None Allocated **EPG** None Allocated

Section 15: **Regulatory Information**

Poison Schedule AICS A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP). All chemicals listed on the Australian Inventory of Chemical Standards (AICS).

Section 16: **Other Information**

Additional Information CEMENT CONTACT DERMATITIS: Individuals using wet cement, mortar, grout or concrete could be at risk of developing cement dermatitis. Symptoms of exposure include itchy, tender, swollen, hot, cracked or blistering skin with the potential for sensitization. The dermatitis is due to the presence of soluble (hexavalent) chromium.

IARC – GROUP 1 – PROVEN HUMAN CARCINOGEN. This product contains an ingredient for which there is sufficient evidence to have been classified by the International Agency for Research into Cancer as a human carcinogen. The use of products known to be human carcinogens should be strictly monitored and controlled.

RESPIRATORS: In general, the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The Recommendation for protective equipment contained within this SDS report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare an SDS report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

ABBREVIATIONS:

mg/m³ – Milligrams per cubic metre

ppm – Parts Per Million

ES-TWA – Exposure Standard - Time Weighted Average

CNS – Central Nervous System

NOS – Not Otherwise Specified



pH – relates to hydrogen ion concentration – this value will relate to a scale of 0 – 14, where 0 is highly acidic and 14 is highly alkaline.

CAS# - Chemical Abstract Service Number – used to uniquely identify chemical compounds.

IARC – International Agency for Research on Cancer.

Report Status

This document has been compiled by Independent Cement & Lime Pty Ltd the manufacturer of the product and serves as the manufacturer's Safety Data Sheet.

While the information in this Safety Data Sheet has been prepared in good faith, Independent Cement & Lime Pty Ltd does not warrant that the information is accurate, complete or up to date.

Contact Point

For further information on this product contact:

Telephone: 03 9676 0000

Facsimile: 03 9646 4954

Web site: <http://www.independentcement.com.au>

Advice Note

The information in this document is believed to be accurate. Please check the currency of this MSDS by contacting:

03 9676 0000

Or

<http://www.independentcement.com.au>

Each user of any information, or any product referred to, in this Safety Data Sheet must:

- determine whether the information or product is suitable for their purpose;
- assess and control any risks associated with the information or product; and
- obtain professional advice in relation to the use of the information or product.

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