

## **SAFETY DATA SHEET (SDS)**

The persons who use cement or to whom you have supplied cement must be aware of the information in this datasheet before handling, using or disposing of the products.

### **1. Identification of Substance or mixture and of the supplier**

#### **Identification of Products:**

**GHS product identifier:** White Portland Cement

Other means of identification: White Clinker, White Cement, Decorative Cement

#### **1.1 Trade name**

SCG White Clinker for produce White Portland Cement

SCG WHITE PORTLAND CEMENT (ELO1)

MONTANIA WHITE PORTLAND CEMENT (ELO2)

SCG WHITE MIXED CEMENT F1

SCG WHITE MIXED CEMENT F2

Tiger Decor Easymix Marble Render

Tiger Decor Easymix Terrazzo

Tiger Decor Color Skim Coat

Tiger Decor Fine White Plaster

Tiger Decor Texture Render

Tiger Decor Loft Wall

#### **1.2 Relevant Identified Uses of The Substance or Mixture and Uses Advised**

##### **Against**

White Portland cement, White cement and Decorative cement are used in combination with natural and artificially aggregates, such as limestone, sand, gravel and pebble to produce decorative and architectural mortar, Terrazzo floor, Gravel washed floor, plaster, concrete and produce technical mortar. Up to appropriate of each product.

#### **1.3 Company Identification Manufacturers Name and Address**

Manufacturers: Siam Cement (Ta Luang) Co., Ltd.

Distributor: SCG INTERNATIONAL CORPORATION CO., LTD.

1 Siam Cement Road, Bang sue, Bangkok 10800 Thailand

#### **1.4 Emergency Telephone Number**

Tel: +662-586-2222

Email : scginternational@scg.com

www.scginternational.com

#### **1.5 Supplier: PR Ornaments**

Street Address: 4 Eric Paton Way, St Johns, Auckland 1072, New Zealand.

Telephone: +64 9 5274515

Email: ross@prornaments.co.nz

#### **1.6 Emergency Phone Number: New Zealand: 0800 POISON / 0800 764766**

## 2. Hazards Identification

### 2.1 Classification of The Substance or Mixture

White Portland cement, White cement and Decorative cement are mixture, white color-yellow shade (for some products, it's up to color series), no smell.

#### Classification of The Mixture

**Skin corrosion/irritation** – Category 1 corrosion





**Serious eye damage/ eye irritation** – Category 2A irritation

**Skin sensitization** – Category 1

**Respiratory sensitizer** - Category 1

### 2.2 Label element and Precautionary statements

Cement contacts with moisture in eyes or on skin, or when mixed with water will become highly caustic (pH>11) when exposure to skin will cause irritation or whom with allergies may cause dermatitis or burns. When exposure to eyes will cause irritation or serious eye damage. Airborne dust may cause respiratory irritation. The effect will increase according to the amount and duration of contact.

Effect to health	Signal	Signal word	Hazard statements
Skin corrosion/irritation		Danger	Causes severe skin burn
Serious eye damage/ eye irritation		Caution	Causes severe eye damage
Skin sensitizer		Caution	May cause an allergic skin reaction
Respiratory sensitizer		Danger	May cause respiratory irritation

#### Precautionary statements:

- This product is not a consumer product. Do not eat
- Should be kept away from children
- Read and follow instructions, safety precautions before use.
- Avoid direct contact with cement by wearing personal protective equipment while working s safety glass, long sleeved shirt and long pants, gloves, boots, respiratory protection

- **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor

- **If on skin:** Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.

- **If swallowed:** Rinse mouth. Do NOT induce vomiting. Immediately call a poison center/doctor

- **If inhaled:** Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor.

### 2.3 Other hazard

- Dust generation in closed area with spark may be risk of explode (Dust explosion hazard of powder)

- Cement may contain trace amount of Chromium(VI) when mix with water and exposure to skin may cause dermal sensitization. Avoid direct contact with cement by wearing personal protective equipment.

## 3. Composition/Information on Ingredients

**Substance:** Mixture

**Chemical Identity:** Calcium Silicate Compound, Calcium Compound, Calcium Sulphate Compound, Silica Compound

### Chemical Name and Synonyms:

Ingredients	Content (%)*	CAS Number
1. White Portland Cement Clinker	A – B %	65997-15-1
2. Gypsum	C – D %	13397-24-5
3. Limestone	E – F %	1317-65-3
4. Calcium Oxide	G – H %	1305-78-8

- Content shown as a range is up to formula of any products and protect confidentiality. Other ingredient is not hazardous substance.
- White Portland cement may contain trace elements such as Crystalline Silica, Potassium and Sodium Compound and Heavy Metal (Chromium including Chromium (VI), Nickel, Lead and Cadmium)

## 4. First-Aid Measures

### 4.1 Description of First-Aid Measures

#### Eyes:

Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

**Skin:**

Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.

**Ingestion:**

Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

**Inhalation:**

Remove Person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of cement require immediate medical attention.

**4.2 Most important symptoms/effects, acute and delayed**

**Eyes:** Causes eye irritation. If contact with large amounts and long time of dry powder or with wet cement can cause serious eye damage.

**Skin:** May cause skin irritation. Whom with allergies may cause dermatitis or burns.

**Ingestion:** Causes burns or irritation to mouth, throat and gastrointestinal

**Inhalation:** May cause respiratory irritation. If contact with large amounts and long time of dry powder may cause respiratory disease

**4.3 Indication of immediate medical attention and special treatment needed**

If exposed and serious damage should see a doctor with this safety data sheet (SDS).

**5. Fire Fighting Measures**

Cement are non-combustible and non-explosive.

**5.1 Extinguishing media**

Use fire extinguishing media suitable for surrounding fire.

**5.2 Special Hazards Arising From The Substance Or Mixture**

Water used for fire extinguishing, wet cement may be corrosive and irritation from high pH

**5.3 Precautions for Fire-Fighters**

- Fire-fighters should wear appropriate protective equipment include respirator mask, safety glasses or goggle, abrasion and alkali resistant gloves, boots, long sleeved shirt, long pants or other protective clothing to avoid skin contact.
- Dust generation in closed area with spark may be risk of explode (Dust explosion hazard of powder)

## **6. Accidental Release Measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

- Avoid inhalation of dust with respirator mask. Avoid contact with eyes and skin contact safety glasses or goggles, abrasion and alkali resistant gloves, boots, long sleeved shirt, long pants or other protective clothing.
- Use work methods that minimize dust production.
- Evacuate unnecessary personnel.

### **6.2 Environmental precautions**

Use dry clean-up methods that do not disperse dust into the air or entry into water or sewer and should not be dumped in nature but collected and delivered according to agreement with the local authorities.

### **6.3 Methods and materials for containment and cleaning up**

Remove spillage with vacuum cleaner fitted with HEPA filter. If cannot, should collect spillage with shovel and place in closed container.

## **7. Handling and Storage**

### **7.1 Precautions for safe handling**

#### **Protective measures:**

Put on appropriate personal protective equipment (see Section 8.3).

Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure by obtaining and following special instructions before use. Do not handle until all safety precautions have been read and understood. Use only with adequate ventilation.

### **7.2 Conditions for safe storage, including any incompatibilities**

#### Keep dry until used:

Bag cement keep on pallet, Store in a dry and cool place which do not close to wall and floor. Should be stored separately by the date of receipt and first in, first out

Bulk cement should be stored in silos that are waterproof, dry.

#### Safe storage:

Bag cement: do not stack more than 2 pallet layer.

Bulk cement: do not enter a confined space that stores or contains portland cement unless appropriate procedures and protection are available. Portland cement in silo can build up or adhere to the walls of a confined space and then release or fall suddenly

Dust generation in closed area with spark may be risk of explode (Dust explosion hazard of powder).

Incompatibility:

Wet Portland cement is alkaline. Therefore, it is incompatible with acids, Oxidizers, ammonium salts and aluminum metal.

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

Occupational Exposure Limits: OSHA PEL- Portland Cement

TWA: 5mg/m<sup>3</sup>. 8 hours. Form: Reparable fraction

TWA: 10 mg/m<sup>3</sup>. 8 hours. Form: Total dust

### 8.2 Appropriate engineering controls

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust by using vacuum cleaner fitted with HEPA filter

### 8.3 Individual protection measures

**Eye Protection:** Wear safety glasses with side shields or goggles to keep away from contact with the eyes. In extremely dusty or unpredictable environments, wear tight-fitting invented or indirectly vented goggles to avoid eye irritation or injury. Whilst handling cement do not wear contact lenses.



Eye Protection

**Skin Protection:** Wear abrasion and alkali resistant gloves, boots, long sleeved shirt, long pants or other protective clothing to avoid skin contact. Promptly remove cement-contaminated clothing and launder before reuse. If contact occurs, wash contacted areas by material with pH neutral soap and water. Heat-resistant gloves, clothing, footwear required.



Waterproof Gloves



Waterproof Boots

**Respiratory Protection:** Avoid actions that cause dust to become airborne. Use local exhaust or general dilution ventilation to control dusts levels below applicable exposure limits. If ventilation is insufficient to control dust levels below applicable exposure limits or when dust causes irritation or discomfort, use HSE approved respirators.



### Respiratory Protection

#### Information on general occupational hygiene:

Eating, drinking and smoking in work areas of cement handled, stored used is prohibited. After contact to cement, worker should clean hands, face and clothing before eating, drinking and smoking.

## 9. Physical and Chemical Properties

### 9.1 Physical properties:

Physical properties (Cement powder)	
State	Solid state (Powder)
Particle Size	5 – 30 micron
Odor	N/A
pH	N/A (mix with water pH >11)
Viscosity	N/A
Freezing point	N/A
Boiling point	N/A
Melting point	>1,000 °C
Flash point	None
Explosion	N/A
True Density	2,800 – 3,200 kg/m <sup>3</sup>
Dry Bulk Density	1,100 – 1,600 kg/m <sup>3</sup>
Water solubility	N/A

### 9.2 Chemical properties:

Main Composition:

- 3CaO – SiO<sub>2</sub> - Tricalcium silicate
- 2CaO – SiO<sub>2</sub> - Dicalcium silicate
- 3CaO – Al<sub>2</sub>O<sub>3</sub> - Tricalcium aluminate
- 4CaO – Al<sub>2</sub>O<sub>3</sub> - Fe<sub>2</sub>O<sub>3</sub> - Tetracalcium aluminoferrite
- CaSO<sub>4</sub>·2H<sub>2</sub>O - Calcium sulphate dehydrate
- CaCO<sub>3</sub> - Calcium carbonate
- CaO - Calcium oxide

## **10. Stability and Reactivity**

**10.1. Reactivity:** Reacts with water forming hydrated compounds, releasing heat and producing a strong alkaline solution pH>11 until reaction is complete.

**10.2. Chemical Stability:** Product is stable. Keep dry until used. (see section 7)

**10.3. Possibility of Hazardous Reactions:** Under normal conditions of storage and use, cement will not occur hazardous reactions.

**10.4. Conditions to Avoid:** Humid conditions during storage may cause lump formation and loss of product quality.

**10.5. Incompatible Materials:** Acids. Oxidizers. Ammonium salts. Aluminum powder in wet cement should be avoided.

**10.6. Hazardous Decomposition Products:** Under normal conditions of storage and use, cement will not decompose into any hazardous products.

## **11. Toxicological Information**

### **Information on toxicological effects:**

**Acute toxicity:** Cement LD50/LC50 = Not available

### **Irritation/Corrosion:**

**Skin:** May cause skin irritation and serious burns in the presence of moisture.

**Eyes:** Causes serious eye damage. May cause burns in the presence of moisture.

**Respiratory:** May cause respiratory tract irritation.

**Sensitization:** May cause sensitization due to the potential presence of trace amounts of hexavalent chromium.

**Mutagenicity:** There are no data available

**Carcinogenicity:** The epidemiological literature does not support the designation of cement as a suspected human carcinogen  
cement is not classifiable as a human carcinogen. Based on available data, the classification criteria are not met.

### **Information on the likely routes of exposure**

**Eyes:** Causes eye irritation. If contact with large amounts and long time of dry powder or with wet cement can cause serious eye damage.

**Skin:** May cause skin irritation. Whom with allergies may cause dermatitis or burns.

**Ingestion:** Causes burns or irritation to mouth, throat and gastrointestinal

**Inhalation:** May cause respiratory irritation. If contact with large amounts and long time of dry powder may cause respiratory disease

### **Delayed and immediate effects and also chronic effects from short and long term exposure:**

Potential immediate effects: No known significant effects or critical hazards.



Potential delayed effects: No known significant effects or critical hazards.

**Numerical measures of toxicity:**

Reacts with water producing a strong alkaline solution pH11-13

**12. Ecological Information**

**12.1 Toxicity-ecology**

The product is not hazardous to the environment.

**12.2 Persistence and Degradability**

Not relevant. After hardening, cement presents no toxicity risks.

**12.3 Bioaccumulative Potential**

Not relevant. After hardening, cement presents no toxicity risks.

**12.4 Mobility in Soil**

Not relevant. After hardening, cement presents no toxicity risks.

**12.5 Other Adverse**

Not relevant.

**13. Disposal Considerations**

**Waste treatment methods**

Comply with all applicable local, state and federal regulations for disposal of unusable or contaminated materials. Dispose of packaging/containers according to local, state and federal regulations.

**Product - unused residue or dry spillage**

Pick up dry unused residue or dry spillage as is and place in closed container. Possibly reuse depending upon contamination and shelf life considerations and the requirement to avoid dust exposure. In case of disposal, harden with water and dispose according to “Product - after addition of water, hardened”

**Product - slurries** Wait to harden and dispose of as explained below under “Product - after addition of water, hardened”. Do not dispose into sewage and drainage systems or water resource

**Product - after addition of water, hardened** Dispose of according to the local legislation. Avoid entry into the sewage water system. Dispose of the hardened product as concrete waste. Concrete waste is not a dangerous waste.

**Packaging** Completely empty the packaging and process it according to local legislation.

#### 14. Transport Information

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

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**Proper Shipping Name:** Not applicable

**UN Number** Not applicable

**DG Class:** Not applicable

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**Packing Group:** Not applicable

#### 15. Regulatory Information

HSNO Approval

**HSNO Group Standard**

White Portland cement      Construction Products (Corrosive) Group Standard 2020 - HSR002542

- **Hazard Category under SARA (Title III), Sections 311 and 312 :**

Portland cement qualifies as a hazardous substance with delayed healthy effects.

- **Status under SARA (Title III), Section 313 :**

Not subject to reporting requirements under Section 313.

- **Status under TSCA (as of May 1997) :**

Some substances in cement are on the TSCA inventor list.

- **Status under the Federal Hazardous Substances Act:** Portland cement is a hazardous substance subject to statutes promulgated under the subject act.

- **Status under California Proposition 65 : (Required if product sold into California)**

This product contains crystalline silica, a substance known to the State of California to cause cancer. This product also many contain trace amounts of heavy metals known to the state of California to cause cancer, birth defects or other reproductive harm.

- **Status under Canadian Environmental Protection ACT. : (Required only if product sold into Canada)** Not listed.

- **Status under Canadian WHMIS : (Required only if product sold into Canada)**

Portland cement is considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations (Class DZA, E-Corrosive Material) and subject to the requirements of WHMIS.

#### 16. Others Information

- This SDS provides information on various types of cement products. A particular product's compositions may vary from sample to sample.

- The information provided herein is believed by SCG Cement and Building Material Company Limited to be accurate at the time of preparation or prepared from sources believed to be reliable.
- Health and safety precautions in this data sheet may not be adequate for all individuals or situations.
- Users have the responsibility to comply with all laws and procedures applicable to the safe handling and use of the product, to determine the suitability of the product for its intended use, and to understand possible hazards associated with mixing cement with other materials
- In the case that the product is supplied to other persons, the responsibility of informing consumers about the information in this datasheet before handling, using or disposing of the products shall fall upon your party.
- Seller makes no warranty, express or implied, concerning the product or the merchantability or fitness thereof for any purpose or concerning the accuracy of any information provided by SCG Cement and Building Material Company Limited.

### **Revision**

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