

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION



### PRODUCT IDENTIFIER

Portland Cement (Type I, Type II, Type V)  
Brands: Republic, Rapidset



### CONTACT NUMBER

+63 2 885 4599  
+63 2 238 9881



### RECOMMENDED USE

Portland Cement is used as a binder in concrete, concrete masonry, mortar, and grouts.



### EMAIL

customerservice@republiccement.com



### SUPPLIER IDENTIFIER

Republic Cement Services Inc.  
Menarco Tower, 32nd St.  
Bonifacio Global City,  
Taguig City, Philippines



### EMERGENCY CONTACT

National Poison Management  
and Control Center (PGH)  
+63 2 524 1078

## SECTION 2 - HAZARDS IDENTIFICATION

### 2.1 CLASSIFICATION

SKIN CORROSION CAT. 1; H314

EYE DAMAGE CAT. 1; H318

SKIN SENSITIZATION CAT. 1; H317

SPECIFIC TARGET ORGAN TOXICITY, SINGLE EXPOSURE, CAT. 3; H335

CARCINOGENICITY (INHALATION) CAT. 1; H350

SPECIFIC TARGET ORGAN TOXICITY, REPEATED EXPOSURE (INHALATION), CAT. 1; H372

### 2.2 LABEL ELEMENTS



### 2.3 POTENTIAL HEALTH EFFECTS



#### INHALATION (ACUTE)

Breathing dust may cause nose, throat or lung irritation, and choking. The described effect depends on the degree of exposure.



#### INHALATION (CHRONIC)

Prolonged or repeated exposure may cause lung injury including silicosis. This product may contain crystalline silica. Crystalline silica has been classified by IARC as a known human carcinogen. Some human studies indicate potential for lung cancer from crystalline silica exposure. Risk of injury depends on duration and level of exposure. Long term exposures which result in silicosis may result in additional health effects.

**EYE CONTACT (ACUTE/CHRONIC)**

May cause eye irritation, severe burns, and damage to cornea.

**SKIN CONTACT (ACUTE/CHRONIC)**

May cause dry skin, redness, discomfort, irritation or severe burns. May produce allergic reaction potentially associated with Hexavalent Chromium. Thickening of the skin (scleroderma) may be associated with exposure to high levels of crystalline silica.

**INGESTION (ACUTE/CHRONIC)**

Ingestion of large amounts may cause intestinal distress.

**2.3 OTHER HAZARDS**

Dusts from this product, when combined with water or sweat, produce a corrosive alkaline solution. The potential exists for static build-up and static discharge when moving cement powders through a plastic, nonconductive or non-grounded pneumatic conveyance system. Static discharge may result in damage to equipment and injury to workers.

**SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

CHEMICAL NAME	COMMON NAME/ OTHER IDENTIFIERS	CAS NO.	WT. %	GHS CLASSIFICATION
PORTLAND CEMENT	CEMENT	65997-15-1	90 - 100	Skin Irrit. 2: H315 Eye Dam. 1; H318
CALCIUM OXIDE	LIME, QUICKLIME	1305-78-8	0.3 - 3.0	Skin Corr. 1: H314 Eye Dam. 1; H318
CALCIUM SULPHATE	GYPSUM	13397-24-5	0 - 5	Not classified
CRYSTALLINE SILICA, QUARTZ	SILICON DIOXIDE	14808-60-7	0.1 - 1.5	Carc. 1: H350 STOT RE1; H372
CHROMATE COMPOUNDS	Not available	Not available	Cr VI = 6.8 µg/g Trace Equivalent of 6.8ppm	Not available
NICKEL COMPOUNDS	Not available	Not available	Trace	Not available

**SECTION 4 - FIRST AID MEASURES****4.1 DESCRIPTION OF FIRST AID MEASURES****PRECAUTIONS**

First aid providers should avoid direct contact with this chemical. Wear chemical protective gloves, if necessary. Take precautions to ensure your own safety before attempting rescue, (e.g. wear appropriate protective equipment.)



#### **INHALATION**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical help if coughing or other symptoms persist. Inhalation of large amounts of Portland Cement requires immediate medical attention. Call a poison center or doctor. If the individual is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.



#### **EYE CONTACT**

Immediately rinse eyes cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or Doctor. Take care not to rinse contaminated water into the unaffected eye or onto face.



#### **SKIN CONTACT**

Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention immediately. Heavy exposure to Portland Cement dust, wet concrete or associated water requires prompt attention. Quickly remove contaminated clothing, shoes and leather goods such as watchbands and belts. Quickly and gently blot or brush away excess Portland Cement. Immediately wash thoroughly with lukewarm, gently flowing water and non-abrasive pH neutral soap. Seek medical attention for rashes, burns, irritation, dermatitis and prolonged unprotected exposures to wet cement, cement mixtures or liquids from wet cement. Burns should be treated promptly by a doctor.



#### **INGESTION**

Rinse mouth. Do NOT induce vomiting. Obtain medical attention immediately or transport victim to an emergency treatment center.

## **4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED**



#### **INHALATION**

High concentrations of airborne dusts are severely irritating to the upper respiratory tract with symptoms such as coughing, sneezing, and shortness of breath. Long-term inhalation exposure to dusts containing respirable size crystalline silica can cause silicosis and lung cancer.



#### **EYE CONTACT**

Severely irritating in contact with eyes. Causes eye damage which may be permanent and may cause blindness. Solid particles react with moisture in the eye to form clumps of moist compound which may be difficult to remove.



#### **SKIN CONTACT**

Dusts from this product, when combined with water or sweat, produce a severely irritating alkaline solution and burning of the skin. Wet Portland cement can cause caustic burns, sometimes referred to as cement burns. Cement burns may result in blisters, dead or hardened skin, or black or green skin. In severe cases, these burns may extend to the bone and cause disfiguring scars or disability.

Workers cannot rely on pain or discomfort to alert them to cement burns because cement burns may not cause immediate pain or discomfort. By the time the worker becomes aware of a cement burn, much damage has already been done. Cement burns can get worse even after skin contact with cement has ended. Any person experiencing a cement burn is advised to see a health care professional immediately.

May cause an allergic skin reaction from trace amounts of sensitizing metals in cement. Symptoms of an allergy range from mild rashes to severe skin ulcers.



### INGESTION

Severely irritating to the mouth, throat and gastrointestinal system if swallowed. Symptoms may include severe pain and burning of the mouth, throat, esophagus and gastrointestinal tract with nausea, vomiting and diarrhea. If aspiration into the lungs occurs during vomiting, severe lung damage may result.

## 4.3 IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Corrosive material; get immediate medical attention if inhaled, if swallowed or if in eyes.

## SECTION 5 – FIREFIGHTING MEASURES

FLASHPOINT AND METHOD	NONE
FLAMMABLE LIMITS	NOT COMBUSTIBLE
AUTOIGNITION TEMPERATURE	NONE
FIREFIGHTING INSTRUCTIONS	TREAT ADJACENT MATERIAL
FIREFIGHTING EQUIPMENT	THIS PRODUCT IS NOT A FIRE HAZARD. SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED TO LIMIT EXPOSURES TO SMOKE FROM ANY COMBUSTION SOURCE
HAZARDOUS COMBUSTION PRODUCTS	NONE

### 5.1 EXTINGUISHING MEDIA

Use extinguishing media appropriate to the surrounding fire conditions. Use flooding quantities of water as a spray.

**UNSUITABLE EXTINGUISHING MEDIA:** Use caution when using water. Do not get water inside closed containers; contact with water will generate heat. Water jet may cause spattering of the corrosive solution. Use caution when using CO<sub>2</sub>; it may scatter the dry powder.

### 5.2 SPECIFIC HAZARDS ARISING FROM THE PRODUCT

Product is not flammable or combustible.

Bulk powder of this product may heat spontaneously when damp with water.

Corrosive; reacts with water releasing heat and forming an alkaline solution.

### 5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

As for any fire, evacuate the area and fight the fire from a safe distance. Firefighters must wear full protective equipment including self-contained breathing apparatus with chemical protection clothing when firefighters are exposed to decomposition products from this material.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

Wear adequate personal protective equipment, including an appropriate respirator as indicated in Section 8. Isolate spill area, preventing entry by unauthorized persons. Do not touch spilled material. Do not breathe dusts.

### 6.2 ENVIRONMENTAL PRECAUTIONS

Avoid releases to the environment and prevent material from entering sewers, natural waterways or storm water management systems.

### 6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Move containers from spill area. Avoid dust generation and prevent wind dispersal. Do not dry sweep or blow with compressed air. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labelled waste container. Small spills may be picked up with a damp mop.

### 6.4 ADDITIONAL INFORMATION

See Section 8 for information on selection of personal protective equipment.  
See Section 13 for information on disposal of spilled product and contaminated absorbents.

## SECTION 7 – HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

Before handling, it is important that engineering controls are operating, protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dusts.

Wash hands and exposed skin thoroughly after handling. Wash with plenty of water and pH neutral soap; do not use waterless hand cleaners such as alcohol-based gels. Clean nail beds and creases between fingers. Dry hands thoroughly with a clean towel before putting on gloves.

Avoid wearing watches and rings at work; wet cement can collect next to the skin and cause burns.

Use only outdoors or in a well-ventilated area.

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

Prevent eye contact: Wear protective gloves, protective clothing and eye protection or face protection.

Follow good practices for safe glove removal.

Static Hazard: Properly ground all pneumatic conveyance systems. Static discharge may result in damage to equipment and injury to workers.

Do not enter a confined space that stores or contains Portland cement unless appropriate procedures and protections are in place. Portland cement can build up or adhere to the walls of a confined space and then release or fall suddenly (engulfment).

## 7.2 CONDITIONS FOR SAFE STORAGE

Store in a dry, well-ventilated area, away from incompatible materials. Keep containers closed. Protect from moisture/humidity.

Store in a place accessible by authorized persons only.

Store away from food and animal feed.

Keep out of reach of children.

# SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

## 8.1 CONTROL PARAMETERS

**OCCUPATIONAL EXPOSURE LIMITS:** Consult local authorities for acceptable exposure limits.

INGREDIENT	ACGIH® TLV®	U.S. OSHA PEL	ONTARIO (CANADA) TWA
<b>PORTLAND CEMENT</b> (respirable)*	1 mg/m <sup>3</sup>	15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable)	Refer to ACGIH® TLV®
<b>CALCIUM OXIDE</b>	2 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	Refer to ACGIH® TLV®
<b>CALCIUM SULPHATE</b>	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable)	Refer to ACGIH® TLV®
<b>CRYSTALLINE SILICA</b> (Quartz)	0.025 mg/m <sup>3</sup> (respirable)	quartz(total dust) 30 mg/m <sup>3</sup> / (%SiO <sub>2</sub> + 2) quartz(respirable) 10 mg/m <sup>3</sup> / (%SiO <sub>2</sub> + 2)	15 mg/m <sup>3</sup> (respirable) Designated Substance

\*value for particulate matter containing no asbestos and less than 1% crystalline silica.

Other Exposure Limits:

NIOSH REL for Portland Cement = 10 mg/m<sup>3</sup> IDLH (Immediately Dangerous to Life or Health) = 5 000 mg/m<sup>3</sup>

NIOSH REL for Calcium oxide = 2 mg/m<sup>3</sup> IDLH = 25 mg/m<sup>3</sup>

## 8.2 EXPOSURE CONTROLS



### ENGINEERING CONTROLS

Handle product in closed system or area provided with appropriate exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Ensure regular cleaning of equipment, work area and clothing.

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection. Have equipment available for use in emergencies such as spills or fire.

## 8.3 INDIVIDUAL PROTECTION MEASURES



### EYE/FACE PROTECTION

Wear approved safety glasses with side-shields or chemical safety goggles. Wear a face-shield or full-face respirator when needed to prevent exposure to airborne dusts. Contact lenses should not be worn.



### SKIN PROTECTION

Wear waterproof, snug-fitting alkali-resistant gloves, boots, knee and elbow pads to prevent skin exposure. Wear protective clothing with long sleeves and long pants. Protective clothing can be taped inside gloves and boots. Evaluate resistance under conditions of use and maintain protective clothing carefully. Contact safety supplier for specifications.



### RESPIRATORY PROTECTION

Approved respiratory protective equipment (RPE) is required. An approved respirator, N95 rating or higher, must be available in case of accidental releases. Consult with respirator manufacturer to determine respirator selection, use and limitations.

A respiratory protection program that meets the regulatory requirement, such as OSHA's 29 CFR 1910.134, ANSI Z88.2 or Canadian Standards Association (CSA) Standard Z94.4, must be followed whenever workplace conditions warrant a respirator's use.



### OTHER PROTECTION

Have adequate washing facilities and eyewash fountain readily available in the work area for immediate emergency use.

Every attempt should be made to avoid skin and eye contact with cement. Do not get powder inside boots, shoes, or gloves. Do not allow wet, saturated clothing to remain against the skin. Promptly remove clothing and shoes that are dusty or wet with cement mixtures. Wash clothing and shoes thoroughly before reuse.

Do not enter a confined space that stores or contains Portland cement unless appropriate procedures and protections are in place. Portland cement can build up or adhere to the walls of a confined space and then release or fall suddenly (engulfment).

Do not eat, drink, or smoke where this material is handled, stored and processed. Wash hands thoroughly before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas.



### ENVIRONMENTAL EXPOSURE CONTROLS

Emissions from ventilation or work process equipment should be monitored to ensure they comply with the requirements of environmental protection legislation.

# OSHA GUIDANCE FOR PORTLAND CEMENT

## GOOD PRACTICES FOR GLOVE SELECTION AND USE

- Provide the proper gloves for employees who may come into contact with wet Portland Cement. Consult the glove supplier or the cement manufacturer's MSDS for help in choosing the proper gloves. Butyl or nitrile gloves (rather than cotton or leather gloves) are frequently recommended for caustic materials such as Portland Cement.
- Use only well-fitting gloves. Loose-fitting gloves let cement in. Often the use of gloves and clothing makes exposure worse when cement gets inside or soaks through the garment. Use glove liners for added comfort.
- Wash your hands before putting on gloves. Wash your hands every time that you remove your gloves.
- Dry your hands with a clean cloth or paper towel before putting on gloves.
- Protect your arms and hands by wearing a long-sleeved shirt with the sleeves duct-taped to your gloves to prevent wet cement from getting inside the gloves. Cement trapped against the skin inside a glove or boot can cause a cement burn.
- Follow proper procedures for removing gloves, whether reusing or disposing them.
- Clean reusable gloves after use. Before removing gloves, clean the outside by rinsing or wiping off any wet cement. Follow the manufacturer's instructions for glove cleaning. Place clean and dry gloves in a plastic storage bag and store them in a cool, dry place away from tools.
- Throw out grossly contaminated or worn-out gloves.
- Keep the inside of gloves clean and dry.
- Do not use barrier creams or "invisible gloves." These products are not effective in protecting the skin from Portland Cement hazards.

## GOOD PRACTICES FOR USE OF BOOTS AND OTHER PROTECTIVE CLOTHING AND EQUIPMENT

- Wear waterproof boots when necessary to prevent wet cement from coming into contact with your skin. It is as important to protect your legs, ankles, and feet from skin contact with wet cement as it is to protect your hands.
- Boots need to be high enough to prevent wet cement from getting inside. Tuck pants inside and wrap duct tape around the top of the boots to prevent wet cement from entering.
- Select boots that are sturdy, strong enough to resist punctures and tears, and slip resistant.
- Change protective boots if they become ineffective or contaminated on the inside with wet cement while in use.
- Change out of any work clothes that become contaminated with wet cement and keep contaminated work clothes separate from your street clothes.
- When kneeling on wet cement use waterproof kneepads or dry kneeboards to prevent the knees from coming into contact with the cement.
- Wear proper eye protection when working with Portland cement.



## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	SOLID; GREY OR WHITE POWDER
ODOR	ODORLESS
ODOR THRESHOLD	NOT APPLICABLE
pH	> 12
MELTING POINT / FREEZING POINT	NOT APPLICABLE
INITIAL BOILING POINT AND BOILING RANGE	NOT APPLICABLE
FLASH POINT	NOT APPLICABLE
EVAPORATION RATE	NOT APPLICABLE
FLAMMABILITY	NOT FLAMMABLE OR COMBUSTIBLE
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	NOT APPLICABLE
VAPOR PRESSURE	NOT APPLICABLE
VAPOR DENSITY	NOT APPLICABLE
RELATIVE DENSITY	3.1 - 3.2 (WATER = 1)
SOLUBILITY (IES)	SLIGHT SOLUBLE IN WATER (0.1 - 1%)
PARTITION COEFFICIENT (N-OCTANOL/WATER)	NOT APPLICABLE
AUTOIGNITION TEMPERATURE	NOT APPLICABLE
DECOMPOSITION TEMPERATURE	NOT APPLICABLE
VISCOSITY	NOT APPLICABLE

## SECTION 10 – STABILITY AND REACTIVITY



### 10.1 REACTIVITY

Reacts with water, forming polymerized silicates, and calcium oxide



### 10.2 CHEMICAL STABILITY

Stable



### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

None



### 10.4 CONDITIONS TO AVOID

Must be kept dry



### 10.5 INCOMPATIBLE MATERIALS

Dissolves in hydrofluoric acid producing corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, chlorine trifluoride and oxygen difluoride.



### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None

## SECTION 11 – TOXICOLOGICAL INFORMATION

Portland Cements are stable substances, compatible with most other building materials, will not decompose into hazardous by-products and do not polymerise.

### SHORT TERM (ACUTE) EXPOSURE



#### SWALLOWED

Unlikely under normal industrial use. Mildly abrasive and corrosive to mouth and throat if swallowed. May cause nausea, stomach cramps, and constipation.



#### EYES

Irritating and corrosive to the eyes and may cause alkaline burns. Cement dust is irritating to the eyes. Exposure to dust may aggravate existing eye irritations.



#### SKIN

Dust is irritating and drying to the skin. Direct contact with wet cement may cause serious skin burns. Within 12 to 48 hours from milling, possible first, second or third degree burns may occur. There may be no obvious pain at the time of exposure. Chronic skin disorders may be aggravated by exposure to dust or contact with wet cement.



#### INHALED

Cement dust is irritating to the nose, throat and respiratory tract causing coughing and sneezing. Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated.

### LONG TERM (CHRONIC) EXPOSURE



#### EYES

Dust may cause irritation and inflammation of the cornea.



#### SKIN

Repeated contact causes irritation and drying of the skin and can result in skin reddening and skin rash (dermatitis). Over time this may become chronic and can also become infected. Persons who are allergic to chromium may develop an allergic dermatitis which aggravates the irritant effects and this combination can lead to chronic cement dermatitis and serious disability particularly affecting the hands.



#### INHALED

Repeated exposure to the dust may result in increased nasal and respiratory secretions and coughing. Inflammation of lining tissue of the respiratory system may follow repeated exposure to high levels of dust, with increased risk of bronchitis and pneumonia.

Repeated and prolonged exposure to dust levels which exceed the exposure limit for crystalline silica may cause bronchitis and silicosis (scarring of the lung). Long term overexposure to respirable crystalline silica dust may increase the risk of other irreversible and serious disorders, including scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels, and internal organs.)

Portland Cement is not classified as a carcinogen by NOHSC. Of the ingredients, Hexavalent Chromium (Cr VI) is classified as a carcinogen by NOHSC. There is debate in some medical literature concerning whether there is any risk of lung cancer arising from long term high overexposure to respirable crystalline silica. Risk of lung cancer has not been identified from using Portland Cements containing silica. The International Agency for Research on Cancer (IARC) has classified crystalline silica, inhaled in the form of quartz or cristobalite from occupational sources, as carcinogenic to humans (Group 1). NOHSC has not classified crystalline silica as a carcinogen.

## SECTION 12 – ECOLOGICAL INFORMATION

Classified as an aquatic ecotoxic under the Hazardous Substances and New Organisms Act.  
Classified as non-toxic in soils or to terrestrial vertebrates / invertebrates.



### ECOTOXICITY

Product forms an alkaline slurry when mixed with water.



### PERSISTENCE AND DEGRADABILITY

Product is persistent and would have a low degradability.



### MOBILITY

A low mobility would be expected in a landfill situation.

## SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose in landfill in accordance with all applicable regulations. Any disposal practice must be in compliance with local, provincial, state and federal laws and regulations. Contact local environmental agency for specific rules. Prevent material from entering sewers, drains, ditches or waterways.

## SECTION 14 – TRANSPORT INFORMATION

### TRANSPORTATION IS DONE IN BULK OR BAG FORM BY SHIP, RAIL AND ROAD.

#### 14.1 UN NUMBER

Cement is not covered by international transport regulations (IMDG, UN Model Regulations.)

#### 4.2 UN PROPER SHIPPING NAME

Not applicable

#### 14.3 TRANSPORT HAZARD CLASS(ES)

Not applicable

#### 14.4 PACKING GROUP

Not applicable

#### 14.5 ENVIRONMENTAL HAZARDS

Not available

#### 14.6 SPECIAL PRECAUTIONS FOR USER

Not available

#### 14.7 U.S. HAZARDOUS MATERIALS REGULATION (DOT 49CFR):

Not regulated except for transport by aircraft.

## 14.8 CANADA TRANSPORTATION OF DANGEROUS GOODS (TDG) REGULATIONS:

Not regulated except for transport by aircraft.

# SECTION 15 – REGULATORY INFORMATION

## 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

### USA

#### TSCA STATUS:

Substances are listed on the TSCA inventory or are exempt.

### CANADA

#### NSNR STATUS:

Substances are listed on the DSL or are exempt.

## INTERNATIONAL INVENTORIES:

### AUSTRALIA:

Substances are listed on the Inventory of Chemical Substances (AICS).

### CHINA:

Substances are listed on the Inventory. Portland cement IECSC 25714.

### EUROPEAN UNION:

Portland Cement EC # 266-043-4. All other substances are listed on EINECS.

### JAPAN:

Not available.

### KOREA:

Substances are listed on the inventory. Portland cement KE-29067

### MEXICO:

Substances are listed on the inventory (INSQ) or are exempt.

### NEW ZEALAND:

Substances are listed on the Inventory.

### PHILIPPINES:

Substances are listed on the Inventory of Chemicals and Chemical Substances (PICCS).

## SECTION 16 – OTHER INFORMATION

### REVISION DATE:

November 5, 2019

### REFERENCES AND SOURCES FOR DATA:

CCOHS, Cheminfo  
RTECS, Registry of Toxic Effects of Chemical Substances  
NIOSH, Pocket Guide to Chemical Hazards  
Portland Cement Association

### METHODS FOR CLASSIFICATION OF MIXTURES:

USA: Haz Com Standard 29 CFR 1910.1200 (2012)  
Canada: Controlled Products Regulations  
UNECE, Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

### LEGEND TO ABBREVIATIONS:

**ACGIH** - American Conference of Governmental Industrial Hygienists  
**GHS** - Globally Harmonized System for Classification and Labeling  
**OEL** - Occupational exposure limit  
**OSHA** - Occupational Safety and Health Administration  
**TWA** - Time weighted average  
**TLV** - Threshold Limit Value  
**WHMIS** - Canada Workplace Hazardous Materials Information System

### ADDITIONAL INFORMATION:

While the information provided in this document is believed to provide a useful summary of the hazards of Portland cement, the information in this document cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product. The data furnished in this document do not address hazards that may be posed by other materials when mixed with Portland cement. Users should review other relevant safety data sheets before working with this product. The information presented in the Safety Data Sheet is based on current knowledge and publications and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not be interpreted as guaranteeing any specific property of the product.

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