

## 1. Identification

<b>Product identifier:</b>	Portland cement
<b>Other means of identification:</b>	Element GU, Element MS, Element GU-PER, Element HE, Element MH, Rehabsol, Probase, Trillium
<b>Recommended use:</b>	Main constituent in most concrete mixes
<b>Restrictions on use:</b>	For the construction industry
<b>Supplier:</b>	Ciment Québec Inc. 145 Boulevard du Centenaire Saint-Basile, Québec Canada, G0A 3G0
<b>Phone:</b>	418 329-2100
<b>Phone in case of emergency:</b>	418 329-2100
<b>Hours available:</b>	24/7

## 2. Hazard identification

**Signal word:** DANGER

**Product classification**



Serious eye damage - Category 1.  
Carcinogenicity - Category 1A.  
Specific target organ toxicity - repeated exposure - Category 1.  
Skin irritation - Category 2.  
Specific target organ toxicity - single exposure - Category 3 Respiratory tract irritation.

**Hazard statements**

H318 - Causes severe eye damage.  
H350 - May cause cancer.  
H372 - Risk of serious damage to organs (lungs) through repeated or prolonged exposure.  
H315 - Causes skin irritation.  
H335 - May cause respiratory tract irritation.

### Safety advice

**Prevention:** Obtain instructions before use. Do not handle until you have read and understood all safety precautions. Do not breathe dust. Wash hands thoroughly after handling and any other part of the body which may have been exposed to the product. Do not eat, drink, or smoke when handling this product. Use only outdoors or in a well-ventilated area. Wear protective gloves, clothing, and eye/face protection.

**Intervention:** IF exposed or concerned: Get medical advice. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN: Wash immediately with plenty of water for several minutes. If skin irritation occurs: Get medical advice. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse immediately cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a physician immediately. Call a POISON CENTER or physician if you feel unwell.

**Storage:** Keep container tightly closed. Store in a well-ventilated place. Keep under lock and key

# Safety data sheet

## Portland cement



**Disposal:** Dispose of contents/container in accordance with local, regional, national and/or international regulations.

**Other hazards:** No other effects shown. See toxicological information, section 11.

### 3. Composition / information on ingredients

No	CAS No :	Common names and synonyms	Concentration % (w/w)
1	65997-15-1	Portland cement	100
<b><u>The product may contain the following ingredients in different concentrations:*</u></b>			
2	12168-85-3	Silicon tricalcium pentaoxide. Tricalcium silicate	30.00 - 70.00
3	12068-35-8	Iron dicalcium aluminum pentaoxide	10.00 - 30.00
4	12042-78-3	Calcium aluminate (2:3). Dialuminium tricalcium hexaoxide	5.00 - 10.00
5	1317-65-3	Limestone	0.10 - 5.00
6	1305-78-8	Lime. Calcium oxide	0.10 - 2.00
7	14808-60-7	Crystalline silica. Crystalline silicon dioxide. Quartz	0.10 - 1.00
8	18450-29-9	Hexavalent chromium**	Trace

\* The actual concentration is presented as a range, as it is considered a trade secret.

\*\* Cr (VI) is included because of the skin sensitivity associated with this product.

### 4. First-aid measures

**In case of ingestion, irritation, any form of overexposure or symptoms of overexposure occurring during use or persisting after use, contact a POISON CENTER, EMERGENCY ROOM or PHYSICIAN immediately; make sure the product's Material Safety Data Sheet is available.**

**Eye contact:** Check whether the victim wears contact lenses and, if so, remove them. Rinse eyes IMMEDIATELY under running water for at least 15 minutes, keeping eyelids open. Seek medical attention as soon as possible.

**Skin contact:** Remove contaminated clothing immediately. Wash skin with soap and water. Wet contaminated clothing with plenty of water. If irritation persists, consult a physician.

**Inhalation:** Take exposed person to a well-ventilated area. Keep the person warm and lying down. Loosen tight clothing such as a collar, tie, or belt. If breathing is absent, irregular, or stopped, qualified personnel should administer artificial respiration or oxygen. Seek medical attention immediately.

**Ingestion:** If swallowed, seek medical advice immediately and show this container or label. Keep person warm and lying down. Do not induce vomiting unless directed to do so by medical personnel.

**Symptoms:** This product is irritating to the skin and corrosive to the eyes, respiratory and digestive tracts. Symptoms may vary in severity depending on exposure conditions (duration of contact, product concentration, etc.).

**Acute and delayed effects:** May cause skin irritation. When mixed with water, may also become corrosive to skin. Possibility of permanent corneal damage. Contains crystalline silica. Prolonged exposure to respirable crystalline silica may aggravate diseases of the respiratory system and lungs, and cause silicosis. The effects of silicosis on a person's health can continue to worsen, even after exposure has ceased, and are irreversible. In addition, pulmonary fibrosis can develop into lung cancer.

**Note to attending physician:** No special treatment required. Symptomatic treatment required. Mucosal damage may probably contraindicate the use of gastric lavage. Danger: risk of gastric perforation.



## 5. Firefighting measures

**Suitable extinguishing agents:** Use CO<sub>2</sub> dry chemical powder, water spray (fog) or foam.

**Unsuitable extinguishing agents:** Water jets can spread the fire.

**Specific hazards of the hazardous product:** No specific hazards.

**Hazardous combustion products:** Calcium oxides.

**Special protective equipment and precautions for firefighters:** Firefighters must wear suitable protective equipment and self-contained breathing apparatus (SCBA) fitted with a positive-pressure face mask.

## 6. Accidental release measures

**Personal precautions:** Do not take any action involving personal risk or if you are not adequately trained and protected. Evacuate surrounding area. Do not touch or walk in spilled product. Close all sources of heat and ignition. Avoid breathing mist. Ensure adequate ventilation. Wear suitable respiratory equipment when ventilation is inadequate. Wear suitable personal protective equipment (see Section 8).

**Protective equipment and emergency procedures:** Avoid dispersal of spilled material, runoff and contact with soil, drains, sewers and waterways. Notify the appropriate authorities if spilled into the environment. Use inert absorbent or spill containment pads for large spills.

**Methods and equipment for containment and clean-up:** Stop leak if without risk. Move containers away from spill area. Contain leaks and collect with non-combustible absorbent materials such as sand, earth, or vermiculite. Then place in a container for disposal in accordance with local regulations. Dispose of through an authorized specialist company.

## 7. Handling and storage

**Handling safety precautions:** Wear suitable personal protective equipment (see Section 8). Do not eat, drink, or smoke where this product is handled, stored, or processed. Persons working with this product should wash hands and face before eating, drinking, or smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Avoid contact with eyes, skin, and clothing. Do not swallow. Avoid breathing mists. Use only in a well-ventilated environment. Wear suitable respiratory equipment when ventilation is inadequate. Do not enter storage areas or confined spaces unless there is adequate ventilation. Keep in original container or in a suitable alternative container of compatible material, tightly closed when not in use. Empty containers contain product residues and may present a hazard. Do not reuse this container.

**Safe storage conditions:** Store in accordance with local regulations, in a suitable, authorized area. Store in original container in a dry, cool, well-ventilated area, away from direct light, incompatible materials (see Section 10) and food. Keep container tightly closed when not in use. Open containers must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use a suitable container to avoid contamination of the surrounding environment.



### 8. Exposure controls / Personal protection

#### Control parameters:

#### Occupational exposure limit values:

Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg / m <sup>3</sup> )	0.025 mg / m <sup>3</sup> (respirable particulate matter)
USA OSHA	OSHA PEL (TWA) (mg / m <sup>3</sup> )	50 µg / m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg / m <sup>3</sup> )	0.05 mg / m <sup>3</sup> (respirable dust)
United States IDLH	US IDLH (mg / m <sup>3</sup> )	50 mg / m <sup>3</sup> (respirable dust)
Alberta	OEL TWA (mg / m <sup>3</sup> )	0.025 mg / m <sup>3</sup> (respirable particle)
British Columbia	OEL TWA (mg / m <sup>3</sup> )	0.025 mg / m <sup>3</sup> (respirable)
Manitoba	OEL TWA (mg / m <sup>3</sup> )	0.025 mg / m <sup>3</sup> (respirable particulate matter)
New Brunswick	OEL TWA (mg / m <sup>3</sup> )	0.1 mg / m <sup>3</sup> (respirable fraction)
Newfoundland and Labrador	OEL TWA (mg / m <sup>3</sup> )	0.025 mg / m <sup>3</sup> (respirable particulate matter)
Nova Scotia	OEL TWA (mg / m <sup>3</sup> )	0.025 mg / m <sup>3</sup> (respirable particulate matter)
Nunavut	OEL TWA (mg / m <sup>3</sup> )	0.05 mg / m <sup>3</sup> (respirable fraction)
Northwest Territories	OEL TWA (mg / m <sup>3</sup> )	0.05 mg / m <sup>3</sup> (respirable fraction)
Ontario	OEL TWA (mg / m <sup>3</sup> )	0.1 mg / m <sup>3</sup> (controlled substance - respirable)
Prince Edward Island	OEL TWA (mg / m <sup>3</sup> )	0.025 mg / m <sup>3</sup> (respirable particulate matter)
Quebec	TWA (mg / m <sup>3</sup> )	0.1 mg / m <sup>3</sup> (respirable dust)
Saskatchewan	OEL TWA (mg / m <sup>3</sup> )	0.05 mg / m <sup>3</sup> (respirable fraction)
Yukon	OEL TWA (mg / m <sup>3</sup> )	300 particles / ml
Limestone (1317-65-3)		
USA OSHA	OSHA PEL (TWA) (mg / m <sup>3</sup> )	15 mg / m <sup>3</sup> (total dust) 5 mg / m <sup>3</sup> (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup> (total dust) 5 mg / m <sup>3</sup> (respirable dust)
Alberta	OEL TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup>
British Columbia	SEL OEL (mg / m <sup>3</sup> )	20 mg / m <sup>3</sup> (total dust)
British Columbia	OEL TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup> (total dust) 3 mg / m <sup>3</sup> (respirable fraction)
New Brunswick	OEL TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup> (particulate matter containing no asbestos and <1% crystalline silica)
Nunavut	SEL OEL (mg / m <sup>3</sup> )	20 mg / m <sup>3</sup>
Nunavut	OEL TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup>
Northwest Territories	SEL OEL (mg / m <sup>3</sup> )	20 mg / m <sup>3</sup>
Northwest Territories	OEL TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup>
Quebec	TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup> (Limestone containing no asbestos and less than 1% crystalline silica - total dust)
Saskatchewan	SEL OEL (mg / m <sup>3</sup> )	20 mg / m <sup>3</sup>
Saskatchewan	OEL TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup>
Yukon	SEL OEL (mg / m <sup>3</sup> )	20 mg / m <sup>3</sup>
Yukon	OEL TWA (mg / m <sup>3</sup> )	30 mppcf 10 mg/m <sup>3</sup>

# Safety data sheet

## Portland cement



<b>Portland cement (65997-15-1)***</b>		
<b>USA ACGIH</b>	ACGIH TWA (mg / m <sup>3</sup> )	1 mg / m <sup>3</sup> (particles containing no asbestos and <1% crystalline silica, respirable particle)
<b>USA OSHA</b>	OSHA PEL (TWA) (mg / m <sup>3</sup> )	15 mg / m <sup>3</sup> (total dust) 5 mg / m <sup>3</sup> (respirable fraction)
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup> (total dust) 5 mg / m <sup>3</sup> (respirable dust)
<b>United States DIV (IDLH)</b>	US IDLH (mg / m <sup>3</sup> )	5000 mg / m <sup>3</sup>
<b>Alberta</b>	OEL TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup>
<b>British Columbia</b>	OEL TWA (mg / m <sup>3</sup> )	1 mg / m <sup>3</sup> (particle containing no asbestos and less than 1% respirable crystalline silica)
<b>Manitoba</b>	OEL TWA (mg / m <sup>3</sup> )	1 mg / m <sup>3</sup> (particle containing no asbestos and less than 1% respirable crystalline silica particles)
<b>New Brunswick</b>	OEL TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup> (particulate matter containing no asbestos and <1% crystalline silica)
<b>Newfoundland and Labrador</b>	OEL TWA (mg / m <sup>3</sup> )	1 mg / m <sup>3</sup> (particle containing no asbestos and less than 1% respirable crystalline silica)
<b>Nova Scotia</b>	OEL TWA (mg / m <sup>3</sup> )	1 mg / m <sup>3</sup> (particle containing no asbestos and less than 1% respirable crystalline silica particles)
<b>Nunavut</b>	SEL OEL (mg / m <sup>3</sup> )	20 mg / m <sup>3</sup>
<b>Nunavut</b>	OEL TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup>
<b>Northwest Territories</b>	SEL OEL (mg / m <sup>3</sup> )	20 mg / m <sup>3</sup>
<b>Northwest Territories</b>	OEL TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup>
<b>Ontario</b>	OEL TWA (mg / m <sup>3</sup> )	1 mg / m <sup>3</sup> (containing no asbestos and <1% respirable crystalline silica)
<b>Prince Edward Island</b>	OEL TWA (mg / m <sup>3</sup> )	1 mg / m <sup>3</sup> (particle containing no asbestos and less than 1% respirable crystalline silica)
<b>Quebec</b>	TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup> (containing no asbestos and <1% crystalline silica - total dust) 5 mg / m <sup>3</sup> (containing no asbestos and less than 1% respirable crystalline silica dust)
<b>Saskatchewan</b>	SEL OEL (mg / m <sup>3</sup> )	20 mg / m <sup>3</sup>
<b>Saskatchewan</b>	OEL TWA (mg / m <sup>3</sup> )	10 mg / m <sup>3</sup>
<b>Yukon</b>	SEL OEL (mg / m <sup>3</sup> )	20 mg / m <sup>3</sup>
<b>Yukon</b>	OEL TWA (mg / m <sup>3</sup> )	30 mppcf 10 mg/m <sup>3</sup>
<b>Calcium oxide (1305-78-8)</b>		
<b>USA ACGIH</b>	ACGIH TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
<b>USA OSHA</b>	OSHA PEL (TWA) (mg / m <sup>3</sup> )	5 mg / m <sup>3</sup>
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
<b>United States IDLH</b>	US IDLH (mg / m <sup>3</sup> )	25 mg / m <sup>3</sup>
<b>Alberta</b>	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
<b>British Columbia</b>	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
<b>Manitoba</b>	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
<b>New Brunswick</b>	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
<b>Newfoundland and Labrador</b>	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
<b>Nova Scotia</b>	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
<b>Nunavut</b>	SEL OEL (mg / m <sup>3</sup> )	4 mg / m <sup>3</sup>
<b>Nunavut</b>	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
<b>Northwest Territories</b>	SEL OEL (mg / m <sup>3</sup> )	4 mg / m <sup>3</sup>
<b>Northwest Territories</b>	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>



## Safety data sheet

### Portland cement

Ontario	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
Prince Edward Island	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
Quebec	TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
Saskatchewan	SEL OEL (mg / m <sup>3</sup> )	4 mg / m <sup>3</sup>
Saskatchewan	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>
Yukon	SEL OEL (mg / m <sup>3</sup> )	4 mg / m <sup>3</sup>
Yukon	OEL TWA (mg / m <sup>3</sup> )	2 mg / m <sup>3</sup>

\*\*\*\* For exposure values of Portland cement components, please refer to the safety data sheet for this product.

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limits

REL: Recommended Exposure Limits ACGIH®: American Conference of Governmental Industrial Hygienists

TLV®: Threshold Limit Values SEL: Short Term Exposure

Limit

OEL: Occupational Exposure Limit

DIV (IDLH): Danger imminent pour la vie (Immediate Danger to Life or Health)

**Nota Bene: Section 3 ingredients not listed above have no exposure values or are below 1% concentration.**

**Appropriate engineering controls:** When a worker is exposed to a substance identified as having a proven or suspected carcinogenic, mutagenic and/or reprotoxic effect in humans, exposure must be minimized, even when it remains within the expected standards regardless of the duration of exposure. Recirculation must also be prohibited. Use only in a well-ventilated environment. Use closed enclosures, exhaust ventilation at source, or other built-in automatic control systems to keep contaminant exposure below specified levels.

**Personal protective equipment:** After handling chemicals, wash hands, forearms, and face thoroughly before eating, smoking, using the toilet and after work. Use appropriate techniques to remove contaminated clothing. Wash contaminated clothing before reuse. Ensure that eyewash stations and decontamination showers are installed near workstations.

**Eyes:** DO NOT WEAR EYE LENSES. Wear splash-proof safety goggles.

**Hands:** When handling chemicals, always wear waterproof, chemical-resistant gloves complying with an approved standard. Considering the parameters indicated by the glove manufacturer, check that gloves always retain their protective properties during use. In the case of mixtures of several substances, the duration of glove protection cannot be accurately assessed.

**Respiratory:** Workers exposed to contaminants must wear a respirator appropriate to the type of hazard and expected or known exposure levels, considering the safe use limits of the respirator selected. Use a properly fitted self-contained breathing apparatus or air-purifying respirator conforming to an approved standard, if recommended by a risk assessment.

**Other:** Always wear appropriate long-sleeved protective clothing and safety shoes.

## 9. Physical and chemical properties

**Physical state:** Powder.

**Colour:** Gray.

**Odour:** Odorless.

**Melting/freezing point:** > 1000°C (1832°F).

**Initial boiling point/boiling range:** Not applicable

**Flammability:** Not applicable.

**Lower flammable or explosive limits:** Not applicable.

**Upper flammable or explosive limits:** Not applicable.

**Flash point:** Not applicable.

**Auto-ignition temperature:** Not applicable.

**Decomposition temperature:** Not available.

**pH:** 12.0 - 13.0 1% solution.

**Alkaline reserve:** 1.00.

**Kinematic viscosity:** Not applicable.

**Solubility (in water):** Insoluble.

**Partition coefficient n-octanol/water (Log<sub>Kow</sub>):** Not applicable.

# Safety data sheet

## Portland cement



**Vapour pressure:** Not applicable.

**Density and relative density:** 3.200 kg/L at 20°C (water = 1).

**Relative vapour density:** Not applicable.

**Particle size:** < 75 microns.

## 10. Stability and reactivity

**Reactivity:** Stable under recommended storage and handling conditions.

**Chemical stability:** The product is chemically stable under normal conditions of use.

**Risk of hazardous reactions:** No polymerization or hazardous reactions occur under normal conditions of use.

**Conditions to avoid:** Keep away from incompatible products (see below). Avoid operations producing a cloud of inorganic powders or dusts. In areas where the formation of powders or dusts cannot be avoided, prevent their accumulation, ground all equipment and use non-sparking tools.

**Incompatible materials:** None known at room temperature.

**Incompatibilities:** Strong oxidizing agents. Acids.

**Hazardous decomposition products:** Calcium oxides.

## 11. Toxicological information

	Oral	Cutaneous	Inhalation gas	Inhalation vapors	Inhalation dust/mist
ETProduct	15527.95 mg/kg	> 5000 mg/kg	N/A	N/A	> 5 mg/l

No	CAS No:	Common names and synonyms	LD <sub>50</sub> oral mg/kg	DL <sub>50</sub> dermal mg/kg	LC <sub>50</sub> ppm V for 4h - gas	LC <sub>50</sub> mg/l for 4h - vapor	LC <sub>50</sub> mg/l for 4h - dust mist
1	12168-85-3	Silicon tricalcium pentaoxide. Silicate	> 5000	> 5000	N/A	N/A	> 5.00
2	12068-35-8	Iron dicalcium aluminum pentaoxide	> 5000	> 5000	N/A	N/A	> 5.00
3	12042-78-3	Calcium aluminate (2:3). Dialuminium tricalcium hexaoxide	> 5000	> 5000	N/A	N/A	> 5.00
4	14808-60-7	Crystalline silica. Crystalline silicon dioxide. Quartz	> 5000	> 5000	N/A	N/A	> 5.00

**Probable routes of exposure:** This product is absorbed through the respiratory and digestive tracts.

**Symptoms:** This product is irritating to the skin and corrosive to the eyes, respiratory and digestive tracts. Symptoms may vary in severity depending on exposure conditions (duration of contact, product concentration, etc.).

**Delayed, immediate and chronic effects of short-term and long-term exposure:** May cause skin irritation. When mixed with water, may also become corrosive to skin. Possibility of permanent corneal damage. Contains crystalline silica. Prolonged exposure to respirable crystalline silica may aggravate diseases of the respiratory system and lungs, and cause silicosis. The effects of silicosis on a person's health can continue to worsen, even after exposure has ceased, and are irreversible. In addition, pulmonary fibrosis can develop into lung cancer.

# Safety data sheet

## Portland cement



Aspiration hazard	N/A
Skin corrosion - Skin irritation	Yes
Serious eye damage - Eye irritation	Yes
Skin sensitization	N/A
Respiratory sensitization	N/A
Specific target organ toxicity - single exposure	N/A
Specific target organ toxicity - single exposure Category 3 Narcotic effects	N/A
Specific target organ toxicity - single exposure Category 3 Respiratory tract irritation	Yes
Specific target organ toxicity - repeated exposure	Yes

No	CAS No :	Common names and synonyms	IARC	ACGIH	Mutagenicity	Effect on reproduction
1	12168-85-3	Silicon tricalcium pentaoxide. Tricalcium silicate	Not listed	Not listed	No effect demonstrated.	No effect demonstrated.
2	12068-35-8	Iron dicalcium aluminum pentaoxide	Not listed	Not listed	No effect demonstrated.	No effect demonstrated.
3	12042-78-3	Calcium aluminat (2:3). Dialuminium tricalcium hexaoxide	Not listed	Not listed	No effect demonstrated.	No effect demonstrated.
4	14808-60-7	Crystalline silica. Crystalline silicon dioxide. Quartz	1	A1	No effect demonstrated.	No effect demonstrated.

### Classification of carcinogenicity according to IARC (International Agency for Research on Cancer)

Group 1: carcinogenic agent (sometimes called proven carcinogen or definite carcinogen).

Group 2A: probably carcinogenic agent.

Group 2B: agent may be carcinogenic (sometimes called a possible carcinogen).

Group 3: agent unclassifiable as to carcinogenicity.

Group 4: agent probably not carcinogenic.

### Carcinogenicity classification according to ACGIH (American Conference of Governmental Industrial Hygienists)

Group A1: confirmed human carcinogen.

Group A2: suspected human carcinogen.

Group A3: confirmed animal carcinogen with unknown relevance to humans.

Group A4: not classifiable as a human carcinogen.

Group A5: not presumed to be carcinogenic to humans.

## 12. Ecological information

### Ecotoxicity

No	CAS No:	Common names and synonyms	Ecotoxicity aquatic short-term	Ecotoxicity aquatic long term	Ecotoxicity terrestrial
1	12168-85-3	Silicon tricalcium pentaoxide. Tricalcium silicate	No effect known harmful on the aquatic organisms.	No effect known harmful on the aquatic organisms.	No effect known harmful on the environment.
2	12068-35-8	Iron dicalcium aluminum pentaoxide	No effect known harmful on the aquatic organisms.	No effect known harmful on the aquatic organisms.	No effect known harmful on the environment.



# Safety data sheet

## Portland cement



3	12042-78-3	Calcium aluminate (2:3). Dialuminium tricalcium hexaoxide	No effect known harmful on the aquatic organisms.	No effect known harmful on the aquatic organisms.	No effect known harmful on the environment.
4	14808-60-7	Crystalline silica. Crystalline silicon dioxide. Quartz	No effect known harmful on the aquatic organisms.	No effect known harmful on the aquatic organisms.	No effect known harmful on the environment.

### Persistence, Bioaccumulative Potential and other adverse effects

No	CAS No:	Common names and synonyms	Persistent	Bio-accumulation	Toxicity
1	12168-85-3	Silicon tricalcium pentaoxide. Tricalcium silicate	Yes	No	No
2	12068-35-8	Iron dicalcium aluminum pentaoxide	N.D.	N.D.	N.D.
3	12042-78-3	Calcium aluminate (2:3). Dialuminium tricalcium hexaoxide	Yes	No	Yes
4	14808-60-7	Crystalline silica. Crystalline silicon dioxide. Quartz	Yes	No	No

**Degradation:** N.D.

**Mobility in soil:** N.D.

## 13. Disposal considerations

**Disposal method:** It is important to minimize, if not avoid, the generation of waste. Dispose of according to federal, provincial, and municipal regulations. Dispose of surplus and non-recyclable products through an authorized specialist company. Care should be taken when handling empty containers that have not been cleaned or rinsed.

## 14. Transport information

	TMD	DOT	IMDG	IATA
UN number				
Proper shipping name	Not regulated	Not regulated	Not regulated	Not regulated
Transport hazard class(es)				
Packaging group				

### Canada - PIU

Not applicable

### United States - Reportable quantity (RQ)

Not applicable

# Safety data sheet

## Portland cement



**Carriage in bulk** (as defined in Annex II of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78 Convention) and in the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)): N/A

**Marine pollutant:** No

**Limited quantity exemptions:** Not applicable

**Other exemptions:** Not applicable

**Special precautions:** Not applicable

## 15. Regulatory information

### Canada

No	CAS No:	Common names and synonyms	LIS	LES	NPRI
1	12168-85-3	Silicon tricalcium pentaoxide. Tricalcium silicate	X		
2	12068-35-8	Iron dicalcium aluminum pentaoxide		X	
3	12042-78-3	Calcium aluminate (2:3). Dialuminium tricalcium hexaoxide	X		
4	14808-60-7	Crystalline silica. Crystalline silicon dioxide. Quartz	X		

### United States

No	CAS No:	Common names and synonyms	TSCA	PROP-65	RTK
1	12168-85-3	Silicon tricalcium pentaoxide. Tricalcium silicate	X		
2	12068-35-8	Iron dicalcium aluminum pentaoxide	X		
3	12042-78-3	Calcium aluminate (2:3). Dialuminium tricalcium hexaoxide	X		
4	14808-60-7	Crystalline silica. Crystalline silicon dioxide. Quartz	X	X	X
5	18450-29-9	Chromium (VI)	X	X	X

*The product classification and SDS have been prepared in accordance with the GDPR and HazCom 2012.*

This product may contain traces of Chromium (VI) compounds.

## 16. Other information

**Date:** 2024-06-17

**Version:** 1

**Notice to the reader:** The manufacturer declares that the information contained in this data sheet has been prepared from data, information and warnings obtained from government sites and/or raw material suppliers. The manufacturer has no control over the content of this information and reports in full all information it possesses on the product's components at the time of manufacture. The manufacturer assumes no responsibility for the accuracy of the information provided. Although certain warnings are contained in this data sheet, we do not guarantee that these are the only hazards that may exist and caution the user accordingly. It is the user's responsibility to ensure that the product used is suitable for the intended use. The manufacturer assumes no responsibility for any damage, loss or injury to persons, property or of any nature whatsoever which may arise or result from the improper, negligent, inappropriate, or abusive use or handling of the product, or from failure to take due note of the information contained in this data sheet.