# SAFETY DATA SHEET



## 1. Identification

Product identifier	Blended Cement		
Other means of identification			
Synonyms	API Class L well cement; Blended Cement (ASTM C595 & AASHTO M240) Types IP, IS, IT and IL; Blended Hydraulic Cement; ENVIROBASETM; ENVIROCORE®; ENVIROSET®; FortiCemTM; FortiMaxTM; FortiPave®; Hydraulic Cement (ASTM C1157) Types GU, HE, MS, HS, MH, LH; LowDenseTM Lightweight Well Cement Types IS, IP, IT, IL, GUb, HEb, MSb, HSb, MHb, LHb, GULb, MSLb, MHLb, HELb, HSLb; MaxCem®; NewCem® Plus; NewCem® Slag Cement; OneCem®; SFTM Cement; Silica Fume Cement; TerCem 3000®; TerraCemTM; TerraFlowTM; POZZMOD PLUS® EcoPlanet		
Recommended use	Construction.		
Recommended restrictions	Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations. Uses other than the recommended use.		
Manufacturer/Importer/Supplier/	/Distributor information		
Company name	Amrize Inc.		
Address	6509 Airport Road		
	Mississauga, Ontario L4V 157		
Telephone	Eastern Canada: (905) 738-7070		
	Western Canada: (403) 225-5400		
Website	www.amrize.com		
E-mail	sdsinfo@amrize.com		
Emergency telephone number	CHEMTREC within USA and Canada: 1-800-424-9300		
	CHEMTREC outside USA and Canada: +1 703-527-3887 (collect calls accepted)		
2. Hazard identification			
Physical hazards	Not classified.		
Health hazards	Skin corrosion/irritation	Category 1	
	Serious eye damage/eye irritation	Category 1	
	Sensitization, skin	Category 1	
	Carcinogenicity (inhalation)	Category 1A	
	Specific target organ toxicity - repeated exposure (inhalation)	Category 2 (Lungs)	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3	
Label elements			
Signal word	Danger		
Hazard statement	Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause cancer by inhalation. May cause damage to organs (Lungs) through prolonged or repeated exposure by inhalation. Harmful to aquatic life.		

#### **Precautionary statement** Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response	IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Supplemental information	None.
Other hazards	None known.

## 3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%	
Portland Cement		65997-15-1	80 - 100	
Flue dust, portland cement		68475-76-3	5 - 10	
Quartz		14808-60-7	5 - 10	
Composition comments	All concentrations are in percent by weight. C below reportable limits. Any concentration sho batch variation.			
4. First-aid measures				
Inhalation	Move to fresh air. If not breathing, give artifician or persist.	al respiration. Call a physiciar	if symptoms develop	
Skin contact	Remove contaminated clothing immediately a or poison control centre immediately. Chemic contaminated clothing before reuse.			
Eye contact	Immediately flush eyes with plenty of water fo present and easy to do. Continue rinsing. Cal			
Ingestion	Call a physician or poison control centre imme vomiting occurs, keep head low so that stoma			
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Prolonged exposure may cause chronic effects.			
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat immediately. While flushing, remove clothes v ambulance. Continue flushing during transpor Symptoms may be delayed.	vhich do not adhere to affecte	d area. Call an	
General information	IF exposed or concerned: Get medical advice (show the label where possible). Ensure that i involved, and take precautions to protect then	medical personnel are aware	of the material(s)	
5. Fire-fighting measures				
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carb	on dioxide (CO2).		
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as th	is will spread the fire.		
Specific hazards arising from the chemical	During fire, gases hazardous to health may be oxides. Iron oxides. Silicon oxides. Sulphur ox		ts may include: Calcium	
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full pr	rotective clothing must be wor	n in case of fire.	
Fire fighting equipment/instructions	Use water spray to cool unopened containers	. Water runoff can cause envi	ronmental damage.	
Specific methods	Use standard firefighting procedures and cons	sider the hazards of other invo	olved materials.	
General fire hazards	Will burn if involved in a fire.			

#### 6. Accidental release measures

0. Accidental release mea	50165
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for	Prevent product from entering drains.
containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Following product recovery, flush area with water.
	Small Spills: Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. Put material in suitable, covered, labelled containers. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. Persons susceptible to allergic reactions should not handle this product.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

## 8. Exposure controls/personal protection

US. ACGIH Threshold Limit Values (TL\ Components	/) Туре	Value	Form
Portland Cement (CAS 65997-15-1)	TWA	1 mg/m3	Respirable fraction.
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Canada. Alberta OELs (Occupational H	ealth & Safety Code, Sch	nedule 1, Table 2), as amended	
Components	Туре	Value	Form
Portland Cement (CAS 65997-15-1)	TWA	10 mg/m3	
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable particles
Portland Cement (CAS 65997-15-1)	TWA	1 mg/m3	Respirable.
Safety Regulation 296/97, as amended) Components	Туре	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction
Canada. Manitoba OELs (Reg. 217/2006	, The Workplace Safety	And Health Act), as amended	
	, The Workplace Safety Type	And Health Act), as amended Value	Form
Canada. Manitoba OELs (Reg. 217/2006 Components Portland Cement (CAS 65997-15-1)			
Components Portland Cement (CAS	Туре	Value	Form Respirable fraction. Respirable fraction.
Components Portland Cement (CAS 65997-15-1)	Type TWA TWA DId Limit Values (TLVs) I	Value 1 mg/m3 0.025 mg/m3	Respirable fraction.
Components Portland Cement (CAS 65997-15-1) Quartz (CAS 14808-60-7) Canada. New Brunswick OELs: Thresho	Type TWA TWA DId Limit Values (TLVs) I	Value 1 mg/m3 0.025 mg/m3	Respirable fraction.

Components	Туре	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Canada. Ontario OELs. (Co Components	ntrol of Exposure to Biological or Che Type	emical Agents), as amended Value	Form
Portland Cement (CAS 65997-15-1)	TWA	1 mg/m3	Respirable fraction.
Quartz (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable fraction.
Canada. Quebec OELs. (Mi Components	nistry of Labor - Regulation respecting Type	g occupational health and sa Value	ifety) Form
Portland Cement (CAS 65997-15-1)	TWA	5 mg/m3	Respirable dust.
		10 mg/m3	Total dust.
Quartz (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
Canada. Saskatchewan OE Components	Ls (Occupational Health and Safety R Type	egulations, 1996, Table 21), a Value	as amended Form
Portland Cement (CAS 65997-15-1)	15 minute	20 mg/m3	
	8 hour	10 mg/m3	
Quartz (CAS 14808-60-7)	8 hour	0.05 mg/m3	Respirable fraction.
logical limit values	No biological exposure limits noted fo	r the ingredient(s).	
oosure guidelines	Occupational exposure to nuisance du should be monitored and controlled.	ust (total and respirable) and re	espirable crystalline silica
propriate engineering trols	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.		
vidual protection measures	, such as personal protective equipme		
Eye/face protection	Wear safety glasses with side shields	(or goggles) and a face shield	
Skin protection Hand protection	Wear appropriate chemical resistant g supplier.	loves. Suitable gloves can be	recommended by the glove
Other	Wear appropriate chemical resistant o	lothing. Use of an impervious	apron is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Selection and use of respiratory protective equipment should be in accordance with CSA Standard Z94.4.		
Thermal hazards	Wear appropriate thermal protective of	lothing, when necessary.	
neral hygiene siderations	Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.		

## 9. Physical and chemical properties

Physical state	Solid.
Form	Powder.
Colour	Gray to white.
Odour	Odourless.
Odour threshold	Not applicable.
Melting point/freezing point	Property has not been measured.
Boiling point or initial boiling point and boiling range	> 1000 °C (> 1832 °F)

Flammability	Will burn if involved in a fire.
Upper/lower flammability or exp	
Explosive limit - lower ( %)	Not applicable, material is a solid.
Explosive limit – upper (%)	Not applicable, material is a solid.
Flash point	Not applicable, material is a solid.
Auto-ignition temperature	Not applicable, material is a solid.
Decomposition temperature	Property has not been measured.
рН	12 - 13
pH concentration	Property has not been measured.
Kinematic viscosity	Not applicable, material is a solid.
Solubility	
Solubility (water)	Slightly soluble
Partition coefficient (n-octanol/water) (log value)	Not applicable for inorganic substances.
Vapour pressure	Not applicable, material is a solid.
Density and/or relative density	
Density	Property has not been measured.
Relative density	Property has not been measured.
Relative density temperature	Property has not been measured.
Vapour density	Not applicable, material is a solid.
Particle characteristics	
Particle size	Property has not been measured.
Other information	
Evaporation rate	Not applicable, material is a solid.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
Viscosity	Not applicable, material is a solid.
10. Stability and reactivity	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Acids. Powerful oxidizers. Aluminium. Chlorine. Fluorine. Phosphorus. Ammonium salts. Aluminum metal. Hydrofluoric acid. Boron trifluoride. Chlorine trifluoride. Manganese trioxide. Oxygen diffuoride.

Hazardous decomposition products

## 11. Toxicological information

#### Information on likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause cancer by inhalation. May cause irritation to the respiratory system.	
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.	
Eye contact	Causes serious eye damage.	
Ingestion	Causes digestive tract burns.	
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Prolonged exposure may cause chronic effects.	

No hazardous decomposition products are known. In the event of fire: See Section 5.

#### Information on toxicological effects

difluoride.

Flue dust, portland cement (CAS 68475-76-3)           Acute         Dermal           LD50         Rat         > 2000 mg/kg, 24 Hours           Inhalation         Dust         LC50         Rat         > 6.04 mg/l, 4 Hours           Portland Cement (CAS 65997-15-1)         Acute         > 6.04 mg/l, 4 Hours         >           Acute         Dermal         > 2000 mg/kg         Inhalation         >           LD50         Rat         > 2000 mg/kg         Note: State         >           Dermal         LD50         Rat         > 2000 mg/kg         Note: State         >           LD50         Rat         > 2000 mg/kg         Note: State         >         Note: State         >         Note: State         <	Acute toxicity	Not expected to be acutely toxic.		
Actual       > 2000 mg/kg. 24 Hours         Inblaitation	Components	Species	Test Results	
Demail       > 2000 mg/kg. 24 Hours         LD50       Rat       > 6.04 mg/t, 4 Hours         Dust       > 6.04 mg/t, 4 Hours         Dermail       > 2000 mg/kg. 24 Hours         Portland Coment (CAS 65097-15-)       > 2000 mg/kg.         Dermail       > 2000 mg/kg.         Dermail       > 2000 mg/kg.         Dermail       > 2000 mg/kg.         Dermail       > 2000 mg/kg.         dustmist       > 6.04 mg/t, 4 Hours         DS0       Rat       > 6.04 mg/t, 4 Hours         Orai       > 2000 mg/kg.         DS0       Rat       > 1848 mg/kg.         Ouartz (CAS 14808-60-7)       Email       0.0563 mg/m3.         Stin corrosion/irritation       Causes severo skin burs.       Serious severo skin burs.         Stric corrosion/irritation       Causes severo skin burs.       Serious severo skin burs.         Respiratory or skin sensitisation       Not a respiratory sensitisation       Not a respiratory sensitisation         Skin somsitisation       May cause an allergic skin reaction.       Carcel and available to incleate product and y cause an allergic skin reaction.         Gardia Olimeiline sitica or on second pacing line sitica are on accerro in humas. However in making the oreal sublect Concluster and available to incleate product and organic thar unintaling the oreal sublect concluster and avai	Flue dust, portland cement (CAS	68475-76-3)		
LD50       Rat       > 2000 mg/kg. 24 Hours         Inihiation       Just       Just       Just         LC50       Rat       > 6.04 mg/t, 4 Hours         Portland Cement (CAS 68997-15       Just       > 2000 mg/kg         Inihiation       Just       > 2000 mg/kg         ID50       Rat       > 2000 mg/kg         Inihiation       Just       > 2000 mg/kg         ID50       Rat       > 2000 mg/kg         Orai       Just       > 6.04 mg/t, 4 Hours         Orai       Just       > 1848 mg/kg         Quartz (CAS 14808-60-7)       Citronic       Just         Inihiation       Just       Stringer         LOEC       Human       0.0563 mg/m3         Skin corrosion/irritation       Causes servers skin burns.       Stringer         Stringer       Causes servers skin burns.       Stringer         Stringer       Causes an allergic skin reaction.       Stringer         Garada - Alberta OELs: Irritari       Territari       Stringer         Stringer       No data variable to indicate product and organic fibre server on Cancel ) concluded that crystelline silice inhaled form occapational sources con cause in allergic skin reaction.         Garada - Alberta OELs: Irritari       Territari       Stringer<	Acute			
inhalation       Dust         LC50       Rat       > 6.04 mg/l, 4 Hours         Portland Cement (CAS 66597-15-1)       Acute       > 2000 mg/kg         Inhalation	Dermal			
Dust       C50       Rat       > 6.04 mg/l, 4 Hours         Portland Cement (CAS 66997-15-1)       -	LD50	Rat	> 2000 mg/kg, 24 Hours	
LC50 Rat >6.04 mg/l, 4 Hours Portland Cement (CAS 65997-15-1)  Acute Acute Dermai LD50 Rat Dermai LD50 Rat Down Rat Rat Down Rat	Inhalation			
Pertland Cement (CAS 85997-15-1)  Actuic  Actuic  Dermai  LD50 Rat - 2000 mg/kg inhalation  dust/mist LC50 Rat - 2000 mg/kg - 2000 mg/kg Rat - 2000 mg/kg	Dust			
Acute Dermal LD50       Rat       > 2000 mg/kg         Inhalation dustmist LC50       Rat       > 2000 mg/kg         Inhalation dustmist LC50       Rat       > 6.04 mg/l, 4 Hours         Oral LD50       Rat       > 1848 mg/kg         Quartz (CAS 14808-60-7) Chronic Inhalation LOEC       Human       0.0583 mg/m3         Skin corrosion/irritation Causes series key damage.       Causes series key damage.         Irritation Canada - Alberta OELS (ST)       Causes series key damage.         Irritation Respiratory or skin sensitisation Skin sensitisation       Not a respiratory sensitisation Not a respiratory sensitisation Not a respiratory sensitisation         Garada - Alberta OELS (T)       Not data svaliable to indicate product or any components present at greater than 0.1% are mutagenice or genotoxic inhaled from occupational sources can cause lung cancer in numans. However in making the overall evaluation. IARC noted that carcinogenicity was not detected on inherent of charcalistics of the crystalline silica or on external factors affecting its biological activity or fistica of the crystalline silica dut and respiratory panic fibres. 1997, Vol. 68, IARC, Low, France Ji nume 2003, SCOEL (the EU Scientific Committee on Occupational serves affecting its biological activity or fistica of the crystalline silica dut and respiratory due the externel in garse in the carset is silicosis. There is sufficient information to conclude that the respirate response time is source in carcinogenic in the carset is silicosis. There is sufficient information to conclude that the respirate respirate or systalline silica dut in quarities and in the carset in dutsin the cars	LC50	Rat	> 6.04 mg/l, 4 Hours	
Dermal LDS0       Rat       > 2000 mg/kg         Inhelation dust/mist LCS0       Rat       > 6.04 mg/l, 4 Hours         Case       > 6.04 mg/l, 4 Hours         Oral       > 1848 mg/kg         Case       Ause       > 0.0563 mg/m3         Skin corrosion/irritation       Causes serious eye damage.       > 1848 mg/kg         Respiratory or skin sensitisator       Causes serious eye damage.       > 1848 mg/kg         Canada - Alberta OELs: irritart       Tritant       > 1848 mg/kg         Respiratory or skin sensitisator       Not at available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.         Garm call mutagonicity       Not at available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.         Carcinogonicity       In 1997. IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from accupational acures and cause in genore in humans. However in making the orrestalle existing of carcinogenicity was not detected in all industrial crystalline silica is on external factors affecting was not detected in all industrial crystalline silica is on external f	Portland Cement (CAS 65997-15	5-1)		
LD50 Rat > 2000 mg/kg Inhelation dustimist LC50 Rat > 6.04 mg/l, 4 Hours Oral LC50 Rat > 1848 mg/kg Quartz (CAS 14808-60-7) Chronic inhalation LOEC Human 0.0563 mg/m3 Skin corrosion/irritation LOEC Human 0.0563 mg/m3 Skin corrosion/irritation LOEC Human 0.0563 mg/m3 Skin corrosion/irritation LOEC Human 0.0563 mg/m3 Skin sonsitisation Causes serious eye damage. irritation Respiratory or skin sensitisation Canada - Alborta OELs: Irritant Porland Cement (CAS ES997-15-1) Irritant Respiratory sensitisation Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Carcinogenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Carcinogenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Carcinogenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Carcinogenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Carcinogenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Carcinogenicity and the carcinogenicity may be dependent on inherent characteristics of the crystaline silica or on exclude that the relative risk of lung cancer in humans of the carcinogenic fists of chemicals to humans. Silica, silica exist and organic fibres. 1997. Vol. 86, IARC, Lyon, France. In Jume 2003, SCOEL, LyM Doc 94-final, Jume 2003, ScOEL, Not No 104, 41 Not classifiable as a human carcinogen. ACGH Carcinogene Porland Cement (CAS ES997.15.1) At Not classifiable as a human carcinogen. Caracta - Manitoba OELs: carcinogen category is Quartz (CAS 14808.60-7) X2 Suspected human carcinogen. Caracta - Manitoba OELs: carcinogen Caracity is suspected human carcinogen. Caracta - Manitoba OELs: carcinog	Acute			
Inhalation dustrmist LCS0       Rat       > 6.04 mg/l, 4 Hours         Oral LDS0       Rat       > 1848 mg/kg         Quartz (CAS 14808-60-7) Chronic Inhalation LOEC       Human       0.0563 mg/m3         Skin corrosion/irritation LOEC       Human       0.0563 mg/m3         Skin corrosion/irritation LOEC       Gauses severe skin burns.       0.0563 mg/m3         Serious eye damage/eye Inthalation LOEC       Human       0.0563 mg/m3         Respiratory or skin sensitisation Corrada - Alberta OELs: Irritant       Trattant         Portland Cement (CAS 656997-15-1)       Initiant         Respiratory sensitisation Gorm cell mutagenic or genotoxic.       Not a respiratory sensitisation mutagenic or genotoxic.         Skin sensitisation Gorm cell mutagenic or genotoxic.       No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.         Carcinogenicity       In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detecteristics of the crystalline silica or on external factors affecting its biological activity of distribution of its polymorphy. (IARC Monegraphs on the evaluation of the carcinogenic risks of chemical is polymorphy.         Carcinogenicity       In 1997, IARC (bell-find Long 2003) According the system of the exting of the arth worker profeetion against silicosis can be consistently assur	Dermal			
dust/mist       CC50       Rat       > 6.04 mgl, 4 Hours         Coni	LD50	Rat	> 2000 mg/kg	
LC50       Rat       > 6.04 mg/l, 4 Hours         Orai LD50       Rat       > 1848 mg/kg         Quartz (CAS 14808-60-7)       State       > 1848 mg/kg         Quartz (CAS 14808-60-7)       Chronic Inhalation       0.0563 mg/m3         Skin corrosion/irritation       Causes severe skin burns.       0.0563 mg/m3         Serious eye damageleye       Causes severe skin burns.       Serious eye damageleye         Respiratory or skin sensitisation       Causes serious eye damage.       Feastratory sensitisation         Respiratory or skin sensitisation       Not a respiratory sensitisation       May cause an allergic skin reaction.         Respiratory sensitisation       Not data available to indicate product or any components present at greater than 0.1% are muttagenicity         Respiratory sensitisation       Not data available to indicate product or any components present at greater than 0.1% are muttagenicity or was not detected in all industrial corrus and inheled from occupational sources can cause tung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial corrus affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinopsenic its sallocais. There is sufficient information to conclude that the relative risk of tung cancer is increased in persons with sufficient information to conclude that the relative risk of tung cancer is increased in persons with sufficient information to conclude that the relative risk of tung cancer is increased in persons with suffic	Inhalation			
Oral LD50       Rat       > 1848 mg/kg         Quartz (CAS 14808-60-7)	dust/mist			
LD50 Rat >1848 mg/kg Quartz (CAS 14808-60-7) Chronic Chronic LOEC Human 0.0563 mg/m3 Skin corrosion/irritation LOEC Auwan Causes severe skin burns. Sorious eyo damago/eyo Causes serious eye damage. LOEC Causes severe skin burns. Sorious eyo damago/eyo Causes serious eye damage. Tritation Respiratory or skin sensitisation Canada - Alberta OELs: Irritart Portand Cement (CAS 6599-715-1) Irritant Gorm coll mutagonicity No 1 are available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Carcinogenicity No 1 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Carcinogenicity No 1 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity was not detected in all industrial circumstances studied. Carc	LC50	Rat	> 6.04 mg/l, 4 Hours	
Quartz (CAS 14808-60-7)       Chronic Inhalation LOEC       Human       0.0563 mg/m3         Skin corrosion/irritation       Causes severe skin burns.       Serious eye damage/eye       Causes sevine skin burns.         Serious eye damage/eye       Causes sevine skin burns.       Serious eye damage/eye       Causes sevine skin burns.         Respiratory or skin sensitisation       Canada - Alberta OELs: Irritant       Irritant         Portland Cement (CAS 65997-15-1)       Irritant         Respiratory sensitisation       Mot a respiratory sensitiser.         Skin sensitisation       May cause an allergic skin reaction.         Germ cell mutagenicity       No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.         Carcinogenicity       In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica or orceut evaluation, IARC noted that cracinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or external factors affecting its biological activity or distribution of its polymorphs." (ARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans. Silice, silicates dust and organic fibres. 1997. Van Jersene. Jun June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that reparative risks of the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer by inhalation. Occupationa	Oral			
Chronic inhalation inhalation LOEC       Human       0.0563 mg/m3         Skin corrosion/irritation       Causes severe skin burns.       Eases causes serious eye damage/eye       Causes serious eye damage.         Serious eye damage/eye       Causes serious eye damage.       Causes irritation       Causes serious eye damage.         Respiratory or skin sensitisation       Causes serious eye damage.       For the series of the seris of the series of the series of the series of the se	LD50	Rat	> 1848 mg/kg	
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Portland Cement (CAS 65997-15-1)       Irritant         Respiratory sensitisation       Not a respiratory sensitiser.         Skin sensitisation       May cause an allergic skin reaction.         Germ cell mutagenicity       No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.         Carcinogenicity       In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France, In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silicosis with a silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer by inhalation. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.         ACGH Carcinogens       A4 Not classifiable as a human carcinogen.         Action Carcinogenet (CAS 65997-15-1)       A4 Not classifiable as a human carcinogen.         Canada - Manitoba OELs: carci	Respiratory or skin sensitisation	on		
Respiratory sensitisation       Not a respiratory sensitiser.         Skin sensitisation       May cause an allergic skin reaction.         Germ cell mutagenicity       No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.         Carcinogenicity       In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silicosi, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.         ACGIH Carcinogens       A4 Not classifiable as a human carcinogen.         Portland Cement (CAS 65997-15-1)       A4 Not classifiable as a human carcinogen.      <	Canada - Alberta OELs: Irr	itant		
Skin sensitisation       May cause an allergic skin reaction.         Germ cell mutagenicity       No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.         Carcinogenicity       In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk" (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer by inhalation. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.         ACGIH Carcinogens       A4 Not classifiable as a human carcinogen.         Quartz (CAS 14808-60-7)	Portland Cement (CAS	65997-15-1)	Irritant	
Germ cell mutagenicity       No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.         Carcinogenicity       In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in guarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk" (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer by inhalation. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.         ACGIH Carcinogens       A4 Not classifiable as a human carcinogen.         Quartz (CAS 14808-60-7)       A2 Suspected human carcinogen.         Canada - Alberta OELs: carcinogen catego	Respiratory sensitisation	Not a respiratory sensitis	ser.	
mutagenic or genotoxic.         Carcinogenicity         In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis will also reduce the cancer risk" (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer by inhalation. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.         ACGIH Carcinogens       A4 Not classifiable as a human carcinogen.         Quartz (CAS 14808-60-7)       A4 Not classifiable as a human carcinogen.         Quartz (CAS 14808-60-7)       Suspected human carcinogen.         Quartz (CAS 14808-60-7)       Suspected human carcinogen.         Quartz (CAS 14808-60-7)       Suspe	Skin sensitisation	May cause an allergic sk	in reaction.	
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Riended Cement SDS Canada	Portland Cement (CAS	65997-15-1)		
Che Panada	Plandad Comant			

Canada - Quebec OELs: Ca	rcinogen category
Quartz (CAS 14808-60-7	) Suspected carcinogenic effect in humans.
IARC Monographs. Overall	Evaluation of Carcinogenicity
Quartz (CAS 14808-60-7	) 1 Carcinogenic to humans.
US. National Toxicology Pro	ogram (NTP) Report on Carcinogens
Quartz (CAS 14808-60-7	) Known To Be Human Carcinogen.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	May cause damage to organs (Lungs) through prolonged or repeated exposure by inhalation.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects.

## 12. Ecological information

Ecotoxicity	Harmful to aquatic life.		
Components		Species	Test Results
Flue dust, portland cement (	CAS 68475-76-	3)	
Aquatic			
Acute			
Crustacea	EL50	Daphnia magna	> 100 mg/l, 48 Hours
Fish	NOEC	Danio rerio	11.1 mg/l, 96 Hours
Chronic			
Crustacea	NOELR	Daphnia magna	50 mg/l
Portland Cement (CAS 6599	97-15-1)		
Aquatic			
Acute	5050		
Algae	EC50	Desmodesmus subspicatus	28.2 mg/l, 72 Hours
	NOEC	Desmodesmus subspicatus	6.25 mg/l, 72 Hours
Crustacea	EC50	Daphnia magna	> 100 mg/l, 48 Hours
Chronic			
Crustacea	NOEC	Daphnia magna	50 mg/l, 21 days
Terrestrial			
Acute	5050		740 // 0.11
Other	EC50	Other bacteria soil microorganisms	743 mg/l, 3 Hours
Persistence and degradability	-	t contains inorganic compounds which are	not biodegradable.
Bioaccumulative potential	No data ava		
Mobility in soil	The product is slightly soluble in water. Not expected to be mobile in soil.		
Other adverse effects	No data available.		
13. Disposal consideration	ons		
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.		
Local disposal regulations	Dispose in accordance with all applicable regulations.		
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.		
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.		
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.		

### 14. Transport information

TDG

TDG	
UN number	UN3262
UN proper shipping name	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Portland Cement)
Transport hazard class(es)	
Class	8
Subsidiary hazard	-
Packing group	I
Environmental hazards	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ΙΑΤΑ	
UN number	UN3262
UN proper shipping name	Corrosive solid, basic, inorganic, n.o.s. (Portland cement)
Transport hazard class(es)	
Class	8
Subsidiary hazard	-
Packing group	II
Environmental hazards	No.
ERG Code	8L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
IMDG	
UN number	UN3262
UN proper shipping name	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Portland cement)
Transport hazard class(es)	
Class	8
Subsidiary hazard	-
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not applicable.
Annex II of MARPOL 73/78 and	
the IBC Code	
15. Regulatory information	
Canadian regulations	This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated. Export Control List (CEPA 1999, Schedule 3) Not listed. **Greenhouse Gases** Not listed. **Precursor Control Regulations** Not regulated. International regulations **Stockholm Convention** Not applicable. **Rotterdam Convention** Not applicable. **Kyoto Protocol** Not applicable. **Montreal Protocol** Not applicable. **Basel Convention** Not applicable.

#### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

#### 16. Other information

Issue date	28-May-2025
Revision date	-
Version No.	01
Disclaimer	Amrize Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.