Argos Cement Kiln Dust



1. IDENTIFICATION

Product Identifier Cement Kiln Dust

Synonyms: Cement Kiln Dust (CKD), Kiln Dust, Flue Dust, Cement Lime, S-Sorb

Intended use of the Kiln dust is used in the manufacture of bricks, mortar, cement, concrete, plasters, paving

product: materials, and other construction applications

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Contact Information: CHEMTREC EMERGENCY TELEPHONE NUMBER (24 hrs): (800)424-9300

COMPANY CONTACT (business hours): (678)368-4300 (8 AM-4 PM EST)

2. HAZARD IDENTIFICATION

According to OSHA 29 CFR 1910.1200 HCS

Classification of the Substance or Mixture

Classification (GHS-US):

Skin Corrosion/Irritation	Category 1	H314
Skin Sensitization	Category 1	H317
Serious Eye Damage/Eye Irritation	Category 1	H318
STOT SE	Category 3	H335
Carcinogenicity	Category 1A	H350
STOT RE	Category 1	H372

Labeling Elements







Signal Word (GHS-US): Hazard Statements (GHS-US):

Danger

H314 - Causes severe skin burns and eye damage.

H317 – May cause an allergic skin reaction.

H318 – Causes serious eye damage.

H335 – May cause respiratory irritation.

H350 – May cause cancer.

H372 – Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements (GHS-US):

Prevention P201 - Obtain special instructions before use.

P202- Do not handle until all safety precautions have been read and understood

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264- Wash thoroughly after handling.

P270 – Do not eat, drink or smoke when using this product. P271- Use only outdoors or in a well-ventilated area.

P272- Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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Response P301+P330+P331- If swallowed: Rinse mouth. Do not induce vomiting.

P303+361+353 - If on skin (or hair): Take off immediately all contaminated clothing.

Rinse with water/shower.

P304+P340- If inhaled: Remove person to fresh air and keep comfortable for

breathing.

P305+P351+P338- If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses if present and easy to do – continue rinsing. P308+P313- If exposed or concerned: Get medical attention/advice.

P310-Immediately call a poison center or doctor

P333+P313- If skin irritation or a rash occurs: Get medical advice/attention.

P363- Wash contaminated clothing before reuse.

Storage P403+P233- Store in a well-ventilated place. Keep container tightly closed

Disposal P501- Dispose of contents/container in accordance with

local/regional/national/international regulations.

Hazards Not Otherwise Classified: None

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Composition Information

Name	Product Identifier (CAS#)	% (w/w)	Classification
Flue dust, Portland Cement	68475-76-3	50-90	Skin Irr. 1B (H314)
			Eye Irr. 1 (H318)
			Skin Sens. 1 (H317)
Limestone	1317-65-3	10-80	Not Classified
Calcium oxide	1305-78-8	5-50	Skin Irr. 1C (H314)
			Eye Irr. 1 (H318)
			STOT SE 3 (H335)
Quartz	14808-60-7	0-10	Carc. 1A (H350)
			STOT RE 1 (H372)
Magnesium oxide	1309-48-4	0-2	Not Classified

The exact percentage (concentration) of the composition has been withheld as proprietary.

Small amounts of naturally occurring, but potentially harmful, chemical compounds might be detected during chemical analysis. These trace compounds might include heavy metals such as arsenic, cadmium, chromium, nickel and lead.

4. FIRST AID MEASURES

Route	Measures
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Inhalation of large amounts of Portland cement requires immediate medical attention. Call a poison center or physician.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth with water and afterwards drink plenty of water. Get immediate medical attention.
Eye Contact	In case of contact get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 30 minutes. Chemical burns must be treated promptly by a

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physician.

Skin Contact Wash off with plenty of water. Remove contaminated clothing and shoes. Launder contaminated clothing

before reuse. If skin irritation or rash occurs: Get medical advice/attention.

Absorption As with skin contact, remove contaminated clothing and flush with copious amounts of water. Flush

affected area for at least 15 minutes to minimize potential for further absorption. Seek medical attention if

significant portions of skin have been exposed.

Most Important Symptoms

Product becomes alkaline when exposed to moisture and may cause skin burns. May cause serious eye damage. May cause allergic skin reaction. Carcinogen; breathing crystalline silica can cause lung disease, including silicosis and lung cancer. Crystalline silica has also been associated with scleroderma and kidney disease. Inhalation of dusts may cause respiratory irritation or burns.

Indication of any immediate medical attention and special treatment needed

Note to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. FIRE-FIGHTING MEASURES

Flammable Properties

This product is not flammable or combustible.

Extinguishing Media

Use an extinguishing agent suitable for the surrounding fire.

Specific Hazards / Products of Combustion

No specific fire or explosion hazard.

Special Precautions and Protective Equipment for Firefighters

Move containers from fire area if this can be done without risk. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

See Section 9 for fire properties of this chemical including flash point, autoignition temperature, and explosive limits

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 for additional information.

Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if reportable thresholds have entered the environment, including waterways, soil or air. Materials can enter waterways through drainage systems.

Containment and Clean-Up Methods

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place dust in a closed, labeled waste container. Large spills to waterways may be hazardous due to alkalinity of the product. Dispose of waste material using a licensed waste disposal contractor

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7. HANDLING AND STORAGE

Handling Precautions

Avoid contact with eyes, skin, or clothing. This product contains quartz, which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure by obtaining and following special instructions before use. Do not handle until all safety precautions have been read and understood. Keep in the original container or an approved alternative made from a compatible material and keep the container tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

Keep container tightly closed in a dry and well-ventilated place. Avoid contact with water and moisture. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Calcium Oxide (CAS#1305-78-8)

USA ACGIH	ACGIH TWA (mg/m³)	2 mg/m ³ (respirable fraction)
USA OSHA Table Z-1 Limits for Air Contaminants	PEL (mg/m³)	5 mg/m ³
Canada. Alberta OELs	TWA (mg/m³)	2 mg/m ³
Canada. British Columbia OELs.	TWA (mg/m³)	2 mg/m ³
Canada. Ontario OELs	TWA (mg/m³)	2 mg/m ³
Canada. Quebec OELs	TWA (mg/m³)	2 mg/m ³
Mexico. Occupational Exposure Limit Values	TWA (mg/m³)	2 mg/m ³

Limestone (CAS#1317-65-3)

USA OSHA Table Z-1 Limits for Air Contaminants	PEL (mg/m³)	5 mg/m³ (respirable fraction) 15 mg/m³ (total dust)
Canada. Alberta OELs	TWA (mg/m³)	10 mg/m ³
Canada. British Columbia OELs.	STEL, (mg/m³)	20 mg/m³ (total dust)
	TWA (mg/m³)	3 mg/m³ (respirable fraction) 10 mg/m³ Total dust
Canada. Quebec OELs	TWA (mg/m³)	10 mg/m³ (total dust)
Mexico. Occupational Exposure Limit Values	STEL, (mg/m³) TWA (mg/m³)	20 mg/m ³ 10 mg/m ³

Magnesium oxide (CAS#1309-48-4)

USA ACGIH USA OSHA Table Z-1 Limits for Air Contaminants	ACGIH TWA (mg/m³) PEL (mg/m³)	10 mg/m³ (inhalable fraction) 15 mg/m³ (total particulate)
Canada. Alberta OELs	TWA (mg/m³)	10 mg/m³ (fume)

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Canada. British Columbia OELs. STEL, (mg/m³) 10 mg/m³ (respirable dust and/or

TWA (mg/m³) fume)

3 mg/m³ (respirable dust and/or fume)

10 mg/m³ (Inhalable fume)

30 mg/m³ (total dust) (%SiO₂ + 2)

Canada. Ontario OELs TWA (mg/m³) 10 mg/m³ (Inhalable fraction)

Canada. Quebec OELsTWA (mg/m³)10 mg/m³ (fume)Mexico. Occupational Exposure LimitTWA (mg/m³)10 mg/m³ (fume)

Values

Quartz (CAS#14808-60-7)

USA ACGIH ACGIH TWA (mg/m³) 0.025 mg/m³ (respirable fraction)

USA OSHA Table Z-1 Limits for Air PEL (mg/m³) 0.05 mg/m³ Ca.

Contaminants

USA OSHA Table Z-3 PEL (mg/m³) 10 mg/m³ (respirable fraction) (%SiO₂ +

2);

Canada. Alberta OELs TWA (mg/m³) 0.025 mg/m³ (respirable fraction)

Canada. British Columbia OELs. TWA (mg/m³) 0.025 mg/m³ (respirable fraction)

Canada. Ontario OELs TWA (mg/m³) 0.1 mg/m³ (Inhalable)

Canada. Quebec OELs TWA (mg/m³) 0.1 mg/m³ (respirable fraction)

Mexico. Occupational Exposure Limit
Values

TWA (mg/m³)

0.025 mg/m³

Particles Not Otherwise Regulated (RR-00072-6)

USA ACGIH ACGIH TWA (mg/m³) 10 mg/m³ (total particulate)

3 mg/m³ (respirable fraction)

USA OSHA Table Z-1 Limits for Air PEL (mg/m³) 15 mg/m³ (total particulate)

Contaminants 5 mg/m³ (respirable fraction)

Canada. Alberta OELs TWA (mg/m³) 10 mg/m³ (total dust)

10 mg/m³ (respirable dust)

Canada. British Columbia OELs. TWA (mg/m³) 10 mg/m³ (total dust)

Canada. Ontario OELs TWA (mg/m³) 10 mg/m³ (Inhalable fraction)

 Canada. Quebec OELs
 TWA (mg/m³)
 10 mg/m³ (fume)

 Mexico. Occupational Exposure Limit
 TWA (mg/m³)
 10 mg/m³ (fume)

Values

Engineering Controls

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep

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exposures below the recommended exposure limits.

Personal Protective Equipment

Exposure	Equipment
Eye / Face	To prevent eye contact, wear safety glasses with side shields, safety goggles or face shields when handling dust or wet cement. Wearing contact lenses when working with cement is not recommended.
Skin	Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact glove manufacturer for specific information. Use barrier creams to prevent skin contact.
Respiratory	Wear respirator with dust filter. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstances where air-purifying respirators may not provide adequate protection.
General Hygiene considerations	Provide eyewash station and safety shower. When using, do not eat, drink or smoke. Wash hands after handling. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value	Comments
Appearance	Gray, tan, or white powder.	
Physical State	Solid	
Odor	Odorless	
Odor Threshold	Not available	
рН	10-13 in water	
Melting / Freeze Point	Not available	
Boiling Point And Range	> 1832 °F (> 1000 °C)	
Flash Point	Not flammable. Not combustible.	
Evaporation Rate	Not available	
Flammability	Not available	
Flammability Limits	Not available	
Vapor Pressure	Not available	
Vapor Density	Not available	
Specific Gravity	2.6-2.8	
Solubility	Slightly soluble in water (2-20%)	
Partition Coefficient	Not available	
Autoignition Temperature	Not available	
Decomposition Temperature	Not available	
Viscosity	Not available	
Percent Volatiles	Not available	

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10. STABILITY AND REACTIVITY

Reactivity

Reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete.

Stability

The product is stable under normal conditions of use, storage and transport.

Reactions / Polymerization

Not expected to occur.

Conditions to Avoid

Contact with incompatible materials. Exposure to moisture may affect product quality.

Incompatible Materials

Wet material is alkaline and will react with acids, ammonium salts, aluminum and other reactive metals. Hardened material is attacked by hydrofluoric acid releasing toxic silicon tetrafluoride gas.

Hazardous Decomposition Products

None expected under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Acute Effects: Product becomes alkaline when exposed to moisture. Contact with wet concrete can burn skin and eyes. Dust from the dry material can cause irritation and possible burns to the eyes and respiratory tract. Symptoms can be delayed.

Acute Toxicity (Inhalation LC50)

Flue dust, Portland cement (CAS# 68475-76-3): LC50 > 6.04 mg/L air, (rats, 4 hr, Dust) Calcium oxide (CAS# 1305-78-8): > 160 mg/m3 4 hr (Similar substance) Limestone (CAS# 1317-65-3): LC50 > 3 mg/L (rat, 4 hr) (Similar substance) Magnesium oxide (CAS# 1309-48-4): No data available.

Quartz (CAS# 14808-60-7): No data available.

Acute Toxicity (Oral LC50)

Flue dust, Portland cement (CAS# 68475-76-3): LD50 > 1848 mg/kg, rats Calcium oxide (CAS# 1305-78-8): LD50> 2000 mg/kg (rat) Limestone (CAS# 1317-65-3): LD50 6450 mg/kg (rat) (similar substance) Magnesium oxide (CAS# 1309-48-4): LD50 3870 mg/kg (rat) Quartz (CAS# 14808-60-7): LD50 500 mg/kg (rat)

Acute Toxicity (Dermal LC50)

Flue dust, Portland cement (CAS# 68475-76-3): LD50 > 2000 mg/kg, rats Calcium oxide (CAS# 1305-78-8): LD50 > 5000 mg/kg (rabbit)(similar substance) Limestone (CAS# 1317-65-3): LD50 > 2000 mg/kg (Similar substance) Magnesium oxide (CAS# 1309-48-4): No data available. Quartz (CAS# 14808-60-7): No data available.

Skin Corrosion/Irritation:

Causes skin irritation. Causes serious burns in the presence of moisture.

Serious Eye Damage/Irritation:

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

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Respiratory or Skin Sensitization:

May cause respiratory tract irritation.

Germ Cell Mutagenicity:

No data available.

Carcinogenicity:

Cement may contain trace amounts of respirable crystalline silica and hexavalent chromium which are classified by NTP and IARC as known human carcinogens.

ACGIH Carcinogens

Magnesium oxide (CAS 1309-48-4): A4 Not classifiable as a human carcinogen.

Quartz (CAS 14808-60-7): A2 Suspected human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Quartz (CAS 14808-60-7): 1 Carcinogenic to humans.

US NTP Report on Carcinogens: Known carcinogen

Quartz (CAS 14808-60-7): Known To Be Human Carcinogen.

US OSHA Specifically Regulated Substances: Cancer hazard

No data available.

Teratogenicity: No data available

Specific Target Organ Toxicity (Repeated Exposure): Quartz (CAS #14808-60-7): Category 1, route of exposure: inhalation, target organs: respiratory tract and organs.

Specific Target Organ Toxicity (Single Exposure): Calcium oxide, Magnesium oxide; Category 3, route of exposure: inhalation and skin contact, target organs: Respiratory tract irritation, skin irritation.

Aspiration Hazard: No data available.

Potential Health Effects: Causes serious eye damage. May cause respiratory irritation. Causes severe burns. May cause an allergic skin reaction. Ingestion: May cause burns to mouth, throat and stomach. May cause nausea, stomach pain and vomiting.

Chronic effects:

Cement may contain trace amounts of respirable crystalline silica and hexavalent chromium which are classified by NTP and IARC as known human carcinogens. This product has the potential for generation of respirable dust during handling and use. Dust may contain respirable crystalline silica. Overexposure to dust may result in pneumoconiosis, a respiratory disease caused by inhalation of mineral dust, which can lead to fibrotic changes to the lung tissue, or silicosis, a respiratory disease caused by inhalation of silica dust, which can lead to inflammation and fibrosis of the lung tissue. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. May cause delayed lung injury.

12. ECOLOGICAL INFORMATION

Toxicity:

Data for Component: Flue dust, Portland cement (CAS# 68475-76-3)

Aquatic Toxicity-Acute activated sludge 3 h EC50 = 596 mg/L

Daphnia magna 48 h EC50 > 100 mg/L Danio rerio 96 h LC50 > 11.1 mg/L

Aquatic Toxicity- Daphnia magna 21 d NOEL = 50 mg/L

Chronic Desmodesmus subspicatus 72h NOEL = 6.25 mg/L

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ARGOS

Data for Component: Calcium oxide (CAS#1305-78-8) Aquatic Toxicity-Acute Cyprinus carpio 96 hr LC50 = 1070 mg/L

Aquatic Toxicity- Tilapia nilotica 46 days NOEC = 100 mg/L

Chronic

Persistence and Degradation: No data available. Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

Other Information: No data available.

13. DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Untreated waste should not be released to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe manner. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff, and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

US DOT

UN Identification Number	Not regulated
Proper Shipping Name	Not available
Hazard Class and Packing Group	Not available
Shipping Label	Not available
Placard / Bulk Package	Not available
Emergency Response Guidebook Guide Number	Not available

IATA Cargo

UN Identification Number	Not regulated
Shipping Name / Description	Not available
Hazard Class and Packing Group	Not available
ICAO Label	Not available
Packing Instructions Cargo	Not available
Max Quantity Per Package Cargo	Not available

IATA Passenger

UN Identification Number	Not regulated
Shipping Name / Description	Not available
Hazard Class and Packing Group	Not available
ICAO Label	Not available
Packing Instructions Passenger	Not available
Max Quantity Per Package	Not available

IMDG

UN Identification Number	Not regulated
Shipping Name / Description	Not available
Hazard Class and Packing Group	Not available
IMDG Label	Not available
EmS Number	Not available
Marine Pollutant	Not available

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15. REGULATORY INFORMATION

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. Federal, State, and Local Regulatory Information

U.S. Toxic Substances Control Act

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

This product is not listed as a CERCLA substance.

SARA Section 313- Supplier Notification

This product contains the following chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372:

Component name	Component ID	Typical level, %	De minimis % Limit*
Mercury	7439-97-6	0.00003	There are no de minimis
Lead	7439-92-1	0.0008	levels for chemicals of
			special concern

^{*}This product may contain trace amounts of naturally occurring toxic chemicals eligible for the de minimis reporting requirements including: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Manganese, Nickel, Selenium, Silver, Thallium, Zinc.

Clean Air Act Section 602: Class I Substances — Not listed Clean Air Act Section 602: Class II Substances — Not listed DEA List I Chemicals: (Precursor Chemicals) — Not listed DEA List II Chemicals: (Essential Chemicals) — Not listed

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate Hazard (Acute) - Yes Delayed Hazard (Chronic) - Yes Fire Hazard - No Pressure Hazard - No

Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CRF 355, Appendix A)-No

State regulations WARNING: This product contains chemical(s) known to the State of California to cause cancer.

US - California Hazardous Substances (Director's):

Calcium oxide (CAS 1305-78-8) Magnesium oxide (CAS 1309-48-4)

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT):

Quartz (CAS 14808-60-7)

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Quartz (CAS 14808-60-7) Listed: October 1, 1988 Carcinogenic.

US - Massachusetts RTK - Substance: Listed substance

Calcium oxide (CAS 1305-78-8) Limestone (CAS 1317-65-3) Listed. Magnesium oxide (CAS 1309-48-4) Quartz (CAS 14808-60-7)

US - New Jersey RTK - Substances: Listed substance

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Calcium oxide (CAS 1305-78-8) Limestone (CAS 1317-65-3)

Magnesium oxide (CAS 1309-48-4)

Quartz (CAS 14808-60-7)

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Calcium oxide (CAS 1305-78-8) Limestone (CAS 1317-65-3) Listed. Magnesium oxide (CAS 1309-48-4) Quartz (CAS 14808-60-7)

Canadian Regulatory Information

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status

Controlled

WHMIS classification

D2A - Other Toxic Effects-VERY TOXIC

E – Corrosive

WHMIS labeling





Inventory status	Country(s) or region Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical	No
	Substances (AICS)	
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical	No
	Substances in China (IECSC)	
Europe	European Inventory of Existing	Yes
	Commercial Chemical Substances	
	(EINECS)	
Europe	European List of Notified Chemical	No
	Substances (ELINCS)	
Japan	Inventory of Existing and New Chemical	No
	Substances (ENCS)	
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and	No
	Chemical Substances (PICCS)	
United States & Puerto Rico	ed States & Puerto Rico Toxic Substances Control Act (TSCA)	
	Inventory	

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. OTHER INFORMATION

Further information A HMIS® Health rating including an * indicates a chronic hazard HMIS® ratings

Health: 3* Flammability: 0 Physical hazard: 1

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ARGO

NFPA ratings

Health: 3

Flammability: 0 Instability: 1

 Version:
 08/18/2021

 Issue Date
 01/20/2016

 Prior Issue Date
 06/15/2020

Description of Revisions

Revised Section 1 with new contact name.

Revised Section 3 with addition of statement regarding naturally occurring trace compounds.

Revised format of Section 8.

Revised Section 15.

Notice to reader

While the information provided in this safety data sheet is believed to provide a useful summary of the hazards of Portland cement as it is commonly used, the sheet 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. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with Portland cement to produce Portland cement products. Users should review other relevant material safety data sheets before working with this Portland cement or working on Portland cement products, for example, Portland cement concrete.

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Abbreviations

 ${\sf ACGIH-American\ Conference\ of\ Governmental\ Industrial\ Hygienists}$

CAS#— Chemical Abstract Service

 ${\sf CERCLA-Comprehensive\ Emergency\ Response\ and\ Comprehensive\ Liability\ Act}$

CFR — Code of Federal Regulations

DOT — Department of Transportation

GHS — Globally Harmonized System

HEPA — High Efficiency Particulate Air

IATA — International Air Transport Association

IARC — International Agency for Research on Cancer

IMDG — International Maritime Dangerous Goods

NIOSH — National Institute of Occupational Safety and Health

 ${\sf NOEC-No}$ Observed Effect Concentration

NTP — National Toxicology Program

OSHA — Occupational Safety and Health Administration

PEL — Permissible Exposure Limit

REL — Recommended Exposure Limit

RQ — Reportable Quantity

SARA — Superfund Amendments and Reauthorization Act

SDS — Safety Data Sheet

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TLV — Threshold Limit Value

TPQ — Threshold Planning Quantity

 ${\sf TSCA-Toxic\ Substances\ Control\ Act}$

TWA — Time-Weighted Average

UN — United Nation

Disclaimer Statement

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** End of Safety Data Sheet **

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