Portland Cement – Type IL

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.
Issue date: 12/19/2013 Revision date: 6/22/2021 Supersedes: 11/15/2017 Version: 3.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Portland Cement – Type IL

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Mortar mixes for construction use.

1.3. Supplier

Manufacturer
Sakrete of North America
625 Griffith Rd., Ste 100
Charlotte, NC 28217
T 866-725-7383

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute Tox. 4 (Oral)	Harmful if swallowed
Skin Corr. 1	Causes severe skin burns and eye damage
Eye Dam. 1	Causes serious eye damage
Skin Sens. 1B	May cause an allergic skin reaction
Carc. 1A	May cause cancer
STOT SE 3	May cause respiratory irritation

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger
Hazard statements (GHS US) : Harmful if swallowed
Causes severe skin burns and eye damage
May cause an allergic skin reaction
May cause respiratory irritation
May cause cancer
Precautionary statements (GHS US) : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash hands, forearms and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.

If exposed or concerned: Get medical advice/attention.
If swallowed: rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
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 center or doctor.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Supplemental Information : Read and follow all precautions listed in the Safety Data Sheet, which is available on request. Additional information on the selection and use of respirators can be found in the NIOSH Respirator Selection Logic (DHHS [NIOSH] Publication No. 2005-100) and the NIOSH Guide to Industrial Respiratory Protection (DHHS [NIOSH] Publication No. 87-116) available at http://www.cdc.gov/niosh/docs/87-116/.

This product contains greater than 0.1% crystalline silica. Crystalline silica has been linked to cancer, silicosis, and other lung problems in conditions of prolonged airborne over-exposure.

Keep product dry until use. Avoid contact with bleed water from wet product. Clothing saturated with wet product can result in delayed, serious alkali skin burns.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

91.25 % of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Cement, portland, chemicals	CAS-No.: 65997-15-1	77 – 95
Gypsum (Ca(SO4).2H2O)	CAS-No.: 13397-24-5	4 – 8
Magnesium oxide (MgO)	CAS-No.: 1309-48-4	0.5 – 7
Limestone	CAS-No.: 1317-65-3	0 – 15
Calcium oxide	CAS-No.: 1305-78-8	≤ 3.5
Flue dust, Portland Cement	CAS-No.: 68475-76-3	≤ 2.75
Quartz	CAS-No.: 14808-60-7	0.02 – 0.21
Nickel	CAS-No.: 7440-02-0	10 – 130 ppm
Chromium, ion (Cr 6+)	CAS-No.: 18540-29-9	0 – 120 ppm

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.

First-aid measures after skin contact : If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.

First-aid measures after eye contact : 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 center or doctor/physician.

First-aid measures after ingestion : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause burns to the respiratory tract.

Symptoms/effects after skin contact : Causes severe skin burns. Symptoms may include redness, pain, blisters. May cause an allergic skin reaction. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.

Symptoms/effects after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Symptoms/effects after ingestion : Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic symptoms : May cause cancer.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

Fire hazard : Product does not burn; however its packaging may. Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Vacuum or sweep material and place in a disposal container. Minimize generation of dust. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Do not swallow. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Handle and open container with care.

Hygiene measures : Take off immediately all contaminated clothing and wash it before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a well-ventilated place. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Do not store in an area equipped with emergency water sprinklers. Clean up spilled material promptly.

Storage area : Store away from heat.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Portland Cement – Type IL
No additional information available

Cement, portland, chemicals (65997-15-1)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Portland Cement – Type IL
ACGIH OEL TWA	1 mg/m³ (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulm func; resp symptoms; asthma. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2020

Cement, portland, chemicals (65997-15-1)	
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
USA - IDLH - Occupational Exposure Limits	
IDLH	5000 mg/m³
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	10 mg/m³ (total dust) 5 mg/m³ (respirable dust)

Gypsum (Ca(SO4).2H2O) (13397-24-5)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 mg/m³ (inhalable particulate matter (Calcium sulfate)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	10 mg/m³ (total dust) 5 mg/m³ (respirable dust)

Magnesium oxide (MgO) (1309-48-4)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 mg/m³ (inhalable particulate matter)
ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m³ (fume, total particulate)
USA - IDLH - Occupational Exposure Limits	
IDLH	750 mg/m³ (fume)

Flue dust, Portland Cement (68475-76-3)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TLV	10 mg/m³ (as inhalable fraction, PNOS) 3 mg/m³ (as respirable fraction, PNOS)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL	15 mg/m³ (as total dust, PNOR) 5 mg/m³ (as respirable fraction, PNOR)

Calcium oxide (1305-78-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Calcium oxide
ACGIH OEL TWA	2 mg/m³
Remark (ACGIH)	TLV® Basis: URT irr
Regulatory reference	ACGIH 2020

Calcium oxide (1305-78-8)	
USA - OSHA - Occupational Exposure Limits	
Local name	Calcium oxide
OSHA PEL (TWA) [1]	5 mg/m³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	25 mg/m³
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	2 mg/m³

Quartz (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.025 mg/m³ (respirable particulate matter)
ACGIH chemical category	Suspected Human Carcinogen
USA - OSHA - Occupational Exposure Limits	
Local name	Quartz (Total Dust) (Silica: Crystalline)
OSHA PEL (TWA) [1]	50 µg/m³ (Respirable crystalline silica)
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA) use formula: (30 mg/m3 / (%SiO2+2)) for mg/m3. CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts
USA - IDLH - Occupational Exposure Limits	
IDLH	50 mg/m³ (respirable dust)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	0.05 mg/m³ (respirable dust)

Limestone (1317-65-3)	
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	10 mg/m³ (total dust) 5 mg/m³ (respirable dust)

8.2. Appropriate engineering controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:
Wear suitable gloves resistant to chemical penetration

Eye protection:
Wear eye/face protection

Skin and body protection:
Wear suitable clothing common to do-it-yourself projects.

Respiratory protection:
A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

Other information:

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Powder.
Color	:	Gray
Odor	:	odorless
Odor threshold	:	No data available
pH	:	12 – 13 (Highly alkaline when wet.)
Melting point	:	No data available
Freezing point	:	Not applicable
Boiling point	:	No data available
Flash point	:	Not applicable
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	Non flammable.
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	2.8 – 3.1
Solubility	:	Slight. Water: 0.1 - 1 %
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	No data available
Explosion limits	:	Not applicable
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use. An alkali reaction from components of Portland Cement – Type IL will corrode aluminum.

10.2. Chemical stability

Stable under normal storage conditions. Keep dry in storage.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Do not mix with other chemcals.

10.4. Conditions to avoid

Moisture – product must be kept dry until ready to use. Heat. Incompatible materials.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Portland Cement – Type IL	
ATE US (oral)	500 mg/kg body weight

Magnesium oxide (MgO) (1309-48-4)	
LD50 oral rat	3870 mg/kg

Flue dust, Portland Cement (68475-76-3)	
LD50 oral rat	> 1848 mg/kg body weight Animal: rat, Guideline: other:OECD 422
LD50 dermal rat	≥ 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 inhalation rat	> 6.04 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)

Calcium oxide (1305-78-8)	
LD50 dermal rabbit	> 5000 mg/kg body weight Animal: rabbit, Guideline: other:US Federal Register 38: 187, Part 1500, Section 41, 1973.

Skin corrosion/irritation : Causes severe skin burns.
pH: 12 – 13 (in water)
Serious eye damage/irritation : Causes serious eye damage.
pH: 12 – 13 (in water)
Respiratory or skin sensitization : May cause an allergic skin reaction.

Product may contain trace concentrations of Chromate and Nickel compounds that can cause an allergic skin reaction, allergic contact dermatitis, or ACD. Once sensitized, brief skin contact with very small amounts of Cr 6+ may result in inflammation, rash, itching or severe skin ulcers. ACD is long-lasting and employees can remain sensitized to Cr 6+ for many years.
Germ cell mutagenicity : Not classified
Carcinogenicity : May cause cancer.

Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans

Quartz (14808-60-7)	
National Toxicology Program (NTP) Status	Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list	Yes

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

Cement, portland, chemicals (65997-15-1)	
STOT-single exposure	May cause respiratory irritation.

Flue dust, Portland Cement (68475-76-3)	
STOT-single exposure	May cause respiratory irritation.

Calcium oxide (1305-78-8)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Calcium oxide (1305-78-8)	
LOAEL (oral,rat,90 days)	300 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEC (inhalation,rat,dust/mist/fume,90 days)	0.413 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

Quartz (14808-60-7)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Viscosity, kinematic : Not applicable

Potential Adverse human health effects and symptoms : No data available.

Symptoms/effects after inhalation : May cause burns to the respiratory tract.

Symptoms/effects after skin contact : Causes severe skin burns. Symptoms may include redness, pain, blisters. May cause an allergic skin reaction. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.

Symptoms/effects after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Symptoms/effects after ingestion : Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic symptoms : May cause cancer.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No ecological consideration when used according to directions. Normal dilution of this product to drains, sewers, septic systems and treatment plants is not considered environmentally harmful. Do not flush to sewer or allow to enter waterways.

Calcium oxide (1305-78-8)	
LC50 - Fish [1]	1070 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])
NOEC chronic fish	100 mg/l Test organisms (species): other:Tilapia nilotica Duration: '46 d'

12.2. Persistence and degradability

Portland Cement – Type IL	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Portland Cement – Type IL	
Bioaccumulative potential	Not established.

Calcium oxide (1305-78-8)	
BCF - Fish [1]	(no bioaccumulation)

12.4. Mobility in soil

Portland Cement – Type IL	
Ecology - soil	No data available.

12.5. Other adverse effects

Other adverse effects : No data available.

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

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

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed as Active, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory	
Gypsum (Ca(SO4).2H2O)	CAS-No. 13397-24-5

15.2. International regulations

No additional information available

15.3. US State regulations

⚠ **WARNING:** This product can expose you to Silica, crystalline (airborne particles of respirable size), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Issue date : 12/19/2013

Revision date : 06/22/2021

Other information : None.

Prepared by : Nexreg Compliance Inc.
www.Nexreg.com

Full text of H-phrases	
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1	Skin corrosion/irritation Category 1
Skin Sens. 1B	Skin sensitization, category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet (SDS), USA