

## Safety Data Sheet



## Hardened Concrete (dry)

## Section 1. Identification

Product identifier: Hardened Concrete (dry)

Other means of identification: Dried Concrete

Chemical name: Calcium compounds, calcium silicate compounds, and other calcium compounds containing iron and aluminum make up the majority of this product.

Relevant Uses: Building materials, a basic structural component in construction.

Manufacturers Name: PAULSEN, INC. 308-784-3333

Address: 1116 East Hwy. 30  
Cozad, NE 69130

Emergency telephone number: CHEMTREC 1-800-424-9300

## Section 2. Hazards Identification

*As packaged, this material does not present significant health hazards. The hazards below apply to the product if aerosols or dusts are generated from cutting, grinding, or pulverizing.*

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Category Classification(s): SKIN CORROSION/IRRITATION - Category 1  
EYE DAMAGE - Category 1  
SKIN SENSITIZATION - Category 1  
CARCINOGENICITY/INHALATION - Category 1  
SINGLE TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3  
SINGLE TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

## GHS label elements:

Hazard pictograms:



GHS05



GHS07



GHS08

Signal word: Danger

Hazard statements: Causes severe skin burns and eye damage  
May cause an allergic skin reaction  
Causes serious eye damage  
May cause respiratory irritation  
May cause cancer (Dermal, Inhalation)  
May cause damage to organs (eye, lung/respiratory system, Skin) through prolonged or repeated exposure (Dermal, Inhalation)

# Safety Data Sheet

**Precautionary Statements:**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Do not breathe dust, spray, mist, fume  
 Avoid breathing dust, spray, mist, fume  
 Wash clothing, hands, forearms and face thoroughly after handling  
 Use only outdoors or in a well-ventilated area  
 Contaminated work clothing must not be allowed out of the workplace  
 Wear eye protection, protective clothing, protective gloves  
 If swallowed: rinse mouth. Do NOT induce vomiting  
 If on skin: Wash with plenty of soap and water  
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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  
 If exposed or concerned: Get medical advice/attention  
 Immediately call a POISON CENTER  
 Call a poison center if you feel unwell  
 Get medical advice/attention if you feel unwell  
 Specific treatment (see Section 4 on this label)  
 If skin irritation or rash occurs: Get medical advice/attention  
 Take off contaminated clothing and wash it before reuse  
 Wash contaminated clothing before reuse  
 Store in a well-ventilated place. Keep container tightly closed  
 Dispose of contents/container to comply with local/regional/national regulations

**Other Hazards:**

Trace amounts of naturally occurring chemicals might be detected during chemical analysis. Trace constituents may include up to 0.75% insoluble residue, some of which may be free Quartz (crystalline silica), calcium oxide (Also known as lime or quick lime), magnesium oxide, potassium sulfate, sodium sulfate, chromium compounds, and nickel compounds.

## Section 3. Composition / Information on Ingredients

**Substance/mixture:** Hardened Concrete (dry) - mixture

**Chemical name:** Calcium compounds; calcium silicates and calcium oxides make up the majority of this product – calcium compounds can contain small amounts of iron and aluminum.

Ingredient Name	% Content	CAS number
Portland Cement	10 - 30	65997-15-1
Limestone	25 - 65	1317-65-3
Calcium Oxide	<=20.85	1305-78-8
Amorphous Silica	<=6.55	61790-53-2
Quartz (crystalline silica)	0 - 1.8	14808-60-7
Hexavalent chromium*	*	18450-29-9

Any concentration shown as a range is to protect confidentiality or is due to process variation.

\*Hexavalent chromium is included due to dermal sensitivity associated with the component.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## Section 4. First-Aid Measures

*As packaged, this material does not present significant health hazards. The hazards below apply to the product if aerosols or dusts are generated from cutting, grinding, or pulverizing.*

## Safety Data Sheet

### Description of necessary first aid measures:

General:	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Eye 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 15 minutes. Chemical burns must be treated promptly by a physician.
Inhalation:	Seek medical help if coughing or other symptoms persist. Inhalation of large amounts of Hardened Concrete (dry) dust requires immediate medical attention. Call a poison center or physician. 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.
Skin contact:	Get medical attention immediately. Heavy exposure to Hardened Concrete (dry) dust, wet concrete or associated water requires prompt attention. Quickly remove contaminated clothing, shoes, and leather goods such as watchbands and belts. Quickly and gently blot or brush away excess Hardened Concrete (dry) dust. Immediately wash thoroughly with lukewarm, gently flowing water and non-abrasive pH neutral soap. Seek medical attention for rashes, burns, irritation, dermatitis and prolonged unprotected exposures to wet cement, cement mixtures or liquids from wet cement. Burns should be treated as caustic burns.
Ingestion:	Get medical attention immediately. Call a poison center or physician. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING unless directed to do so by medical personnel. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Have victim drink 60 to 240 mL (2 to 8 oz.) of water. Stop giving water if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

### Potential symptoms and effects from acute exposures (delayed or immediate):

Eye contact:	Causes serious eye damage.
Inhalation:	May cause respiratory irritation.
Skin contact:	Causes severe burns. Discomfort or pain cannot be relied upon to alert a person to a serious injury. You may not feel pain or the severity of the burn until hours after the exposure. Chemical burns must be treated promptly by a physician. May cause an allergic skin reaction.
Ingestion:	Not expected to be a significant route of entry. May cause burns to mouth, throat and stomach.

### Potential symptoms and effects from over-exposures:

Eye contact:	Adverse symptoms may include the following: pain, watering and redness
Inhalation:	Adverse symptoms may include the following: respiratory tract irritation and coughing
Skin contact:	Adverse symptoms may include the following: pain or irritation, redness and blistering may occur, skin burns, ulceration and necrosis may occur
Ingestion:	Adverse symptoms may include the following: stomach pains

### Recommendations for immediate medical attention / treatment:

If large quantities have been Ingested or inhaled:	Seek medical attention and contact poison treatment specialist immediately.
--	---

# Safety Data Sheet

Notes to physician:	Treat symptomatically.
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

## Section 5. Fire-fighting Measures

### Extinguishing media

Suitable extinguishing media:	Non-flammable. Use an extinguishing agent suitable for the surrounding fire.
Specific hazards arising from the chemical:	No specific fire or explosion hazard.
Hazardous thermal decomposition products:	Decomposition products may include the following materials: carbon dioxide, carbon monoxide, sulfur oxides and metal oxide/oxides products:
Special protective actions for firefighters:	Evacuate area. Fight fire with normal precautions from a reasonable distance. Move containers from fire area if this can be done without risk.
Special protective equipment for fire-fighters:	Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

## Section 6. Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

*No action shall be taken involving any personal risk or without suitable training. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. For personal protective clothing requirements, please see Section 8.*

For non-emergency personnel:	Evacuate area, if necessary. Contact emergency personnel, if needed. Do not breathe dust. Stay upwind.
For emergency responders:	Evacuate surrounding areas if necessary. Keep unnecessary and unprotected personnel from entering. Do not breathe dust. Provide adequate ventilation.
Environmental precautions:	Avoid release to the environment. Contain the spill to avoid the discharge of spilled material into drains, surface waters and/or groundwater. If the spilled material enters any drainage systems, surface waters and/or groundwater, follow all applicable local, state and federal laws and regulations for additional clean-up and/or reporting requirements.

### Methods and materials for containment and cleaning up

Small and large spills:	Wear appropriate personal protective equipment as described in Section 8 for cleaning, containing and removing the spill. Minimize generation of dust. For small spills, clean with a vacuum with a filtration system sufficient to remove and prevent recirculation of cement dust (a vacuum equipped with a high-efficiency particulate air (HEPA) filter is recommended). For large spills, use control dust measures and carefully scoop or shovel into clean dry container for later reuse or disposal. <b>DO NOT USE COMPRESSED AIR TO CLEAN SPILLS.</b> Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
-------------------------	---

## Section 7. Handling and Storage

*As packaged, this material does not present significant health hazards. The hazards below apply to the product if aerosols or dusts are generated from cutting, grinding, or pulverizing.*

### Precautions for safe handling

## Safety Data Sheet

Protective measures:	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. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.
Advice on general occupational hygiene:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
Conditions for safe storage,	A key to using the product safely requires the user to recognize that Hardened Concrete (dry) reacts including any incompatibilities: chemically with water to produce calcium hydroxide which can cause severe chemical burns. Every attempt should be made to avoid skin and eye contact with cement. Do not get Hardened Concrete (dry) inside boots, shoes or gloves. Do not allow wet, saturated clothing to remain against the skin. Promptly remove clothing and shoes that are dusty or wet with cement mixtures. Launder/clean clothing and shoes before reuse.

### Section 8. Exposure Controls / Personal Protection

#### Occupational Exposure Limits

Ingredient name	Exposure limits
Portland Cement	ACGIH TLV (United States, 3/2012). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: Respirable  NIOSH REL (United States, 6/2009). TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Respirable TWA: 10 mg/m <sup>3</sup> 10 hours. Form: Total  OSHA PEL (United States, 6/2010). TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total
Quartz (crystalline silica)	ACGIH TLV (United States, 3/2012). TWA: 0.025 mg/m <sup>3</sup> 8 hours. Form: Respirable  NIOSH REL (United States, 6/2009). TWA: 0.05 mg/m <sup>3</sup> 8 hours. Form: Respirable  OSHA PEL Z-3 (United States, 9/2005). TWA: 10mg/m <sup>3</sup> divided by %SiO <sub>2</sub> + 2: Respirable TWA: 30mg/m <sup>3</sup> divided by %SiO <sub>2</sub> + 2: Total
Limestone	ACGIH TLV (United States, 3/2012). TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total  NIOSH REL (United States, 6/2009). TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Respirable TWA: 10 mg/m <sup>3</sup> 10 hours. Form: Total Dust  OSHA PEL (United States, 6/2010). TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust
Calcium Oxide	ACGIH TLV (United States, 3/2012) TWA: 2 mg/m <sup>3</sup> 8 hours.  NIOSH REL (United States, 6/2009) TWA 2 mg/m <sup>3</sup> 8 hours.  OSHA PEL Z-1 (United States, 2/2006) TWA 5 mg/m <sup>3</sup> 8 hours.
Amorphous Silica	ACGIH TLV (United States, 3/2012) Not Established  NIOSH REL (United States, 6/2009) 6 mg/m <sup>3</sup> TWA; Appendix C - Supplementary Exposure Limits

## Safety Data Sheet

	(Mineral Dusts). OSHA PEL Z-1 (United States, 2/2006) 20 mppcf, 80 mg/m <sup>3</sup> /%SiO <sub>2</sub> TWA (PEL listed under Silica, Amorphous, including natural diatomaceous earth) (3) See Table Z-3.
Particulates Not Otherwise Regulated (Total Dust)	ACGIH TLV (United States, 3/2012) TWA: 3 mg/m <sup>3</sup> 8 hours. Form: Respirable TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total dust  OSHA PEL (United States, 6/2010). TWA: 5mg/m <sup>3</sup> 8 hours. Form: Respirable TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust

### Controls

- Appropriate engineering controls:** Use only with adequate ventilation. If user operations generate dust, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### Hygiene

- Wash** Clean water should always be readily available for skin and (emergency) eye washing. Periodically wash areas contacted by Hardened Concrete (dry) with a pH neutral soap and clean, uncontaminated water. If clothing becomes saturated with Hardened Concrete (dry), garments should be removed and replaced with clean, dry clothing.

Remove protective equipment and saturated clothing before entering eating areas.

### PPE

- Eye/face protection:** To prevent eye contact, wear safety glasses with side shields, safety goggles or face shields when handling dust or wet Hardened Concrete (dry). Wearing contact lenses when working with Hardened Concrete (dry) is not recommended.
- Hand protection:** If dust is generated: Use impervious, waterproof, and alkali-resistant gloves. Do not rely on barrier creams in place of impervious gloves. Do not get Hardened Concrete (dry) inside gloves. Recommended material: Nitrile®
- Body protection:** If dust is generated: Use impervious, waterproof, abrasion and alkali-resistant boots and protective long-sleeved and long-legged clothing to protect the skin from contact with wet Hardened Concrete (dry). To reduce foot and ankle exposure, wear impervious boots that are high enough to prevent Hardened Concrete (dry) from getting inside them. Do not get Hardened Concrete (dry) inside boots, shoes, or gloves. Remove clothing and protective equipment that becomes saturated with Hardened Concrete (dry) and immediately wash exposed areas of the body.
- Other skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved. Footwear and other gear to protect the skin should be approved by a specialist before handling this product.
- Respiratory protection:** If dust is generated: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. (See OSHA Respiratory Protection Standard 29 CFR 1910.134)

# Safety Data Sheet

## Section 9. Physical and Chemical Properties

Physical State:	Solid.	Lower and upper explosive (flammable) limits:	Not applicable.
Color:	Gray or white.	Vapor pressure:	Not applicable.
Odor:	Odorless.	Vapor density:	Not applicable.
Odor threshold:	Not available.	Relative density:	Unknown.
pH (in water):	12 - 13	Solubility:	Not applicable.
Melting point:	Not available.	Solubility in water:	Not applicable.
Boiling point:	>1000°C (>1832°F)	Partition coefficient: n-octanol/water:	Not applicable.
Flash point:	Not flammable. Not combustible.	Auto-ignition temperature:	Not applicable.
Burning time:	Not available.	Decomposition temperature:	Not available.
Burning rate:	Not available.	SADT:	Not available.
Evaporation rate:	Not applicable.	Viscosity:	Not applicable.
Flammability (solid, gas):	Not applicable.		

## Section 10. Stability and Reactivity

Reactivity:	Not reactive under normal conditions of storage and use.
Chemical stability:	The product is stable.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	No specific data.
Incompatible materials:	Reactive or incompatible with the following materials: oxidizing materials, acids, aluminum and ammonium salt. Hardened Concrete (dry) is highly alkaline and will react with acids to produce a violent, heat-generating reaction. Toxic gases or vapors may be given off depending on the acid involved. Reacts with acids, aluminum metals and ammonium salts. Aluminum powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas. Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silicates dissolve readily in hydrofluoric acid producing a corrosive gas — silicon tetrafluoride.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological Information

### Toxicological Effects

Acute toxicity:	Hardened Concrete (dry) LD50/LC50 = Not available
Irritation/Corrosion:	Skin: Dust may cause skin irritation. Eyes: Dust may cause eye irritation. Respiratory: Dust may cause respiratory tract irritation when cutting or grinding.
Sensitization:	Dust may cause sensitization due to the potential presence of trace amounts of hexavalent chromium.

# Safety Data Sheet

Mutagenicity: Not classified.

Reproductive toxicity: Not classified.

Teratogenicity: Not classified.

Aspiration hazard: Not classified.

Carcinogenicity Classification:

Ingredient	OSHA	IARC	ACGIH	NTP
Portland Cement	–	–	A 4	–
Quartz (crystalline silica)	–	1	A 2	Known to be a human carcinogen.

Specific target organ toxicity (single exposure):

Ingredient	Category	Route of Exposure	Target Organs
Quartz (crystalline silica)	Category 3	Inhalation and skin contact	Respiratory tract irritation; skin irritation
Calcium Oxide	Category 3	Inhalation and skin contact	Eyes, skin, respiratory system
Amorphous Silica	Category 3	Inhalation	Respiratory tract and kidneys

Specific target organ toxicity (repeated exposure):

Ingredient	Category	Route of Exposure	Target Organs
Quartz (crystalline silica)	Category 2	Inhalation	Respiratory tract and kidneys
Amorphous Silica	Category 2	Inhalation	Respiratory tract and kidneys

## Routes of exposure - Dermal contact, Eye contact, Inhalation, and Ingestion.

### Potential acute health effects:

**Eye contact:** Dust may cause eye irritation.  
**Inhalation:** Dust may cause respiratory irritation.  
**Skin contact:** Dust may cause skin irritation. May cause an allergic skin reaction.  
**Ingestion:** Dust may cause irritation.

### Symptoms related to the physical, chemical and toxicological characteristics:

**Eye contact:** Adverse symptoms may include the following: pain, watering, redness  
**Inhalation:** Adverse symptoms may include the following: respiratory tract irritation, coughing  
**Skin contact:** Adverse symptoms may include the following: pain or irritation, redness,  
**Ingestion:** Adverse symptoms may include the following: stomach pains

### Delayed and immediate effects and also chronic effects from short and long term exposure:

**Short term exposure**  
 Potential immediate effects: No known significant effects or critical hazards.  
 Potential delayed effects: No known significant effects or critical hazards.

**Long term exposure**  
 Potential immediate effects: No known significant effects or critical hazards.  
 Potential delayed effects: No known significant effects or critical hazards.

### Potential chronic health effects:

**General:** Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. If sensitized to hexavalent chromium, a severe allergic dermal reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity:** Quartz (crystalline silica) is considered a hazard by inhalation. IARC has classified Quartz (crystalline silica) as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiology studies that were considered sufficient for carcinogenicity. Excessive exposure to Quartz (crystalline silica) can cause silicosis, a non-cancerous lung disease.

**Mutagenicity:** No known significant effects or critical hazards.



# Safety Data Sheet

**Teratogenicity:** No known significant effects or critical hazards.

**Developmental effects:** No known significant effects or critical hazards.

**Fertility effects:** No known significant effects or critical hazards.

**Numerical measures of toxicity:** There are no data available - acute toxicity estimates.

## Section 12. Ecological

### Toxicity

Persistence and degradability: There are no data available.

Bioaccumulation potential: There are no data available.

Mobility in soil: Soil/water partition coefficient (Koc): Not available.

Other adverse effects: No known significant effects or critical hazards.

Ecotoxicity: No recognized unusual toxicity to plants or animals

## Section 13. Disposal Considerations

Disposal methods: Salvage spilled Hardened Concrete (dry) material where possible. Uncontaminated Hardened Concrete (dry) material may be reused. Dispose of waste material in accordance with local, state and federal laws and regulations.

## Section 14. Transport Information

Special precautions for user: Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/ 78 and the IBC Code: Not Regulated.

Transport Parameters	DOT Classification	IMDG	IATA
UN Number	Not Regulated	Not Regulated	Not Regulated
UN Proper Shipping Name	-	-	-
Transport Hazard Class	-	-	-
Packing Group	-	-	-
Environmental Hazard	None	None	None
Additional Information	-	-	-

## Section 15. Regulatory Information

Status under USDOL-OSHA Hazard Communication Rule, 29 CFR 1910.1200

This product is considered a "hazardous chemical" under this regulation, and should be part of any hazard communication program.

# Safety Data Sheet

Status under CERCLA/SUPERFUND 40 CFR 117 and 302  
Not listed.

Hazard Category under SARA(Title III), Sections 311 and 312  
This product qualifies as a "hazardous substance" with delayed health effects.

Status under SARA (Title III), Section 313  
This product does not contain Emergency Planning and Community Right to Know (EPCRA") Section 313 chemicals in excess of the applicable de minimis concentration specified in EPCRA Section 313 Section 372.38(a). Trace amounts of naturally occurring chemicals might be detected during chemical analysis.

Status under TSCA (as of May 1997)  
The ingredients of this product are listed on the TSCA inventory or are exempt.

Status under the Federal Hazardous Substances Act  
This product is a "hazardous substance" subject to statutes promulgated under the subject act.

Status under California Proposition 65  
This product contains up to 0.05 percent of chemicals (trace elements) known to the State of California to cause cancer, birth defects or other reproductive harm. California law requires the manufacturer to give the above warning in the absence of definitive testing to prove that the defined risks do not exist.

State Right to Know:  
*Portland Cement (65997-15-1)*  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Washington - Permissible Exposure Limits - TWAs

*Quartz (crystalline silica) (14808-60-7)*  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Washington - Permissible Exposure Limits - TWAs

*Limestone (1317-65-3)*  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Washington - Permissible Exposure Limits - TWAs

*Calcium Oxide (1305-78-8)*  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

*Amorphous Silica (61790-53-2)*  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Washington - Permissible Exposure Limits - TWAs

## Section 16. Other Information

### Approval or Revision History

Date of issue (mm/dd/yyyy):	July 1998
Revision:	April 2011 (Michael Tilton)
Revision:	May 2015 - Revised Section(s) per HCS-GHS

### Notice to reader

While the information provided in this safety data sheet is believed to provide a useful summary of the hazards of Portland Hardened Concrete (dry) 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 Hardened Concrete (dry) to produce Portland Hardened Concrete (dry) products. Users should review other relevant material safety data sheets before working with this Portland Hardened Concrete (dry) or working on Portland Hardened Concrete (dry) products, for example, Portland Hardened Concrete (dry) concrete.

# Safety Data Sheet

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY CEMEX, Inc. except that the product shall conform to contracted specifications. The information provided herein was believed by CEMEX to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or for non-delivery of product, and whether based on contract, breach of warranty, negligence, or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with Hardened Concrete (dry) to produce Hardened Concrete (dry) products. Users should review other relevant safety data sheets before working with Hardened Concrete (dry) or working on Hardened Concrete (dry) products, for example, Hardened Concrete (dry).

## Abbreviations

ACGIH — American Conference of Governmental Industrial Hygienists  
CAS — Chemical Abstract Service  
CERCLA — Comprehensive Emergency Response and Comprehensive Liability Act  
CFR — Code of Federal Regulations DOT — Department of Transportation  
GHS — Globally Harmonized System 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  
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  
TLV — Threshold Limit Value  
TPQ — Threshold Planning Quantity  
TSCA — Toxic Substances Control Act  
TWA — Time-Weighted Average  
UN — United Nations