



# SAFETY DATA SHEET

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Revision Number 0

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### GHS product identifier

**Product Name** Portland Cement Based Products

### Other means of identification

**Synonyms** Pakmix Concrete, Pakmix Fiber Reinforced Concrete, Pakmix Super 5000 Concrete Mix, Pakmix Type I/II Portland Cement Pakmix Fast Set Concrete, Pakmix Instant Post Set, Pakmix Sand Mix, Pakmix Crack Resistant Concrete, Pakmix Type N Masonry Cement Pakmix Type S Masonry Cement, Pakmix Mortar Mix, Pakmix Type S Mortar Mix, Pakmix Vinyl Concrete, Pakmix Anchor Cement Pakmix Surface Bonding Cement, Pakmix Glass Block Mortar, Pakmix Veneer Stone Mix, Pakmix Fast Setting Repair Mortar Pakmix Commercial Grade Grout, Pakmix Non-Shrink Grout, Pakmix Precision Non Shrink Grout, Pakmix Stop Leak, PM Fastset Acelerator

### Recommended use of the chemical and restrictions on use

**Recommended Use** Footings, Slab, Posts, Block and Mortar Repair

**Uses advised against** No information available

### Supplier's details

#### Supplier Address

Pakmix  
PO Box 1561  
Middlesboro, KY 40965  
TEL: 800-272-5649

### Emergency telephone number

**Emergency Telephone Number** 800-272-5649

## 2. HAZARDS IDENTIFICATION

### Classification


This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Acute Oral Toxicity	Category 4
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Carcinogenicity	Category 1A
Specific Target Organ Toxicity (Repeated Exposure)	Category 2

### GHS Label elements, including precautionary statements

#### Emergency Overview

<b>Signal Word</b>	Danger
<b>Hazard Statements</b>	
• Harmful if swallowed	
• Causes severe skin burns and eye damage	
• May cause cancer	
• May cause damage to organs through prolonged or repeated exposure	



**Appearance** Gray
**Physical State** Solid (powder).
**Odor** No information available

**Precautionary Statements**

**Prevention**

- Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Wear eye/face protection.
- Do not breathe dust/fume/gas/mist/vapors/spray.

**General Advice**

- Immediately call a POISON CENTER or doctor/physician.
- Specific treatment (see supplemental first aid instructions on this label)

**Eyes**

- 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.

**Skin**

- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Wash contaminated clothing before reuse.

**Inhalation**

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Ingestion**

- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Rinse mouth.
- Do NOT induce vomiting.

**Storage**

- Store locked up.

**Disposal**

- Dispose of contents/container to an approved waste disposal plant.

**Hazard Not Otherwise Classified (HNOC)**

Not applicable

**Other information**

50% of the mixture consists of ingredient(s) of unknown toxicity.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Synonyms**

Pakmix Concrete, Pakmix Fiber Reinforced Concrete, Pakmix Super 5000 Concrete Mix, Pakmix Fast Set Concrete, Pakmix Instant Post Set, Pakmix Sand Mix

Chemical Name	CAS-No	Weight %	Trade secret
Quartz	14808-60-7	40-70	*

Portland cement	65997-15-1	10-30	*
Silica	7631-86-9	5-15	*
Limestone	1317-65-3	5	*
Gypsum (Ca(SO <sub>4</sub> ).2H <sub>2</sub> O)	13397-24-5	5	*
Aluminum oxide	1344-28-1	5	*

\* Where range is displayed, the exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of necessary first-aid measures

<b>General Advice</b>	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Immediate medical attention is required.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
<b>Protection of First-aiders</b>	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

##### Most important symptoms/effects, acute and delayed

**Most Important Symptoms/Effects** Corrosive Serious eye irritation or damage. Skin irritation

##### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to Physician** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** No information available.

##### Specific Hazards Arising from the Chemical

Avoid dust formation.

##### Explosion Data

<b>Sensitivity to Mechanical Impact</b>	None.
<b>Sensitivity to Static Discharge</b>	None.

##### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Avoid contact with skin, eyes and clothing. Use personal protective equipment. Avoid dust formation. Avoid inhalation of dust. Ensure adequate ventilation.

##### Environmental Precautions

**Environmental Precautions** See Section 12 for additional Ecological Information.

**Methods and materials for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Avoid dust formation. Clean up promptly by scoop or vacuum. Dispose of promptly. Clean contaminated surface thoroughly.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Do not breathe dust. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not eat, drink or smoke during manufacturing use of this product. Do not take internally. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep container tightly closed in a dry and well-ventilated place.

**Incompatible Products** Strong oxidizing agents. Acids. Phosphorus.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	30/(%SiO <sub>2</sub> +2) mg/m <sup>3</sup> TWA, Total Dust; 250/(%SiO <sub>2</sub> +5) mppcf TWA, respirable fraction; 10/(%SiO <sub>2</sub> +2) mg/m <sup>3</sup> TWA, respirable TWA: 0.1 mg/m <sup>3</sup> (vacated)	IDLH: 50 mg/m <sup>3</sup> respirable dust TWA: 0.05 mg/m <sup>3</sup> respirable dust
Portland cement 65997-15-1	TWA: 1 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction TWA: 50 mppcf &lt;1% Crystalline silica	IDLH: 5000 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Silica 7631-86-9	-	(vacated) TWA: 6 mg/m <sup>3</sup> <1% Crystalline silica TWA: 20 mppcf : (80)/(% SiO <sub>2</sub> ) mg/m <sup>3</sup> TWA	IDLH: 3000 mg/m <sup>3</sup> TWA: 6 mg/m <sup>3</sup>
Limestone 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 15 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> respirable dust TWA: 10 mg/m <sup>3</sup> total dust
Gypsum (Ca(SO <sub>4</sub> ).2H <sub>2</sub> O) 13397-24-5	TWA: 10 mg/m <sup>3</sup> inhalable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Aluminum oxide 1344-28-1	TWA: 1 mg/m <sup>3</sup> respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	-

**Appropriate engineering controls**

**Engineering Measures**  
Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Tightly fitting safety goggles.  
**Skin and Body Protection** Lightweight protective clothing. Protective gloves.  
**Respiratory Protection** A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

**Hygiene Measures** Provide regular cleaning of equipment, work area and clothing. Remove contaminated clothing and protective equipment before entering eating or smoking areas.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical State</b>	Solid (powder)	<b>Appearance</b>	Gray
<b>Odor</b>	No information available	<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
pH	13	None known
Melting Point/Range	>1482.2 °C / >2700 °F	None known
Boiling Point/Boiling Range	> 1482.2 °C / >2700 °F	None known
Flash Point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Specific Gravity	2.6 - 3.15	None known
Water Solubility	Slightly soluble	None known
Solubility in other solvents	0 g/l.	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known

**Flammable Properties** Not flammable

**Explosive Properties** No data available

**Oxidizing Properties** No data available

**Other information**

**VOC Content (%)** No data available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

None under normal processing.

### **Hazardous Polymerization**

Hazardous polymerization does not occur.

### **Conditions to avoid**

Dust formation. Incompatible products.

### **Incompatible materials**

Strong oxidizing agents. Acids. Phosphorus.

### **Hazardous decomposition products**

Silicon oxides. Calcium oxides

## **11. TOXICOLOGICAL INFORMATION**

### **Information on likely routes of exposure**

#### **Product Information**

<b>Inhalation</b>	Inhalation of dust in high concentration may cause irritation of respiratory system.
<b>Eye Contact</b>	Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. Dust contact with the eyes can lead to mechanical irritation.
<b>Skin Contact</b>	Corrosive. Dusts may cause mechanical irritation. May cause severe irritation and possibly burns, especially in contact with broken skin.
<b>Ingestion</b>	Harmful if swallowed. Ingestion of corrosive substances can cause burns of the upper digestive and respiratory tract.

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

**Symptoms** No information available.

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

<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1).

Chemical Name	ACGIH	IARC	NTP	OSHA
Quartz	A2	Group 1	Known	X
Silica		Group 3		

#### **ACGIH: (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

#### **IARC: (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 3 - Not Classifiable as to its Carcinogenicity to Humans

#### **NTP: (National Toxicity Program)**

Known - Known Carcinogen

#### **OSHA: (Occupational Safety & Health Administration)**

X - Present

**Reproductive Toxicity** No information available.

<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure.
<b>Chronic Toxicity</b>	Inhalation overexposure to free crystalline silica may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease. Inhalation exposure to respirable levels of crystalline silica may cause respiratory impairment and lung damage.
<b>Aspiration Hazard</b>	No information available.

**Numerical measures of toxicity - Product**

**Acute Toxicity** 50% of the mixture consists of ingredient(s) of unknown toxicity.

*The following values are calculated based on chapter 3.1 of the GHS document:*

**LD50 Oral** 607 mg/kg; Acute toxicity estimate

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Silica 7631-86-9	EC50 72 h: = 440 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: = 5000 mg/L static (Brachydanio rerio)		EC50 48 h: = 7600 mg/L (Ceriodaphnia dubia)
Aluminum oxide 1344-28-1		LC50 96 h: > 100 mg/L semistatic (Salmo trutta)		LC50 48 h: > 100 mg/L (daphnia magna)

**Persistence and Degradability** No information available.

**Bioaccumulation** No information available.

**Other Adverse Effects**

No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** Dispose of in accordance with federal, state, and local regulations

**Contaminated Packaging** Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

## 15. REGULATORY INFORMATION

**International Inventories****Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Quartz	14808-60-7	Carcinogen

**U.S. State Right-to-Know Regulations**

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Quartz	X	X	X	-	X
Portland cement	X	X	X		X
Silica	X	X	X		
Limestone	X	X	X		X
Gypsum (Ca(SO <sub>4</sub> ).2H <sub>2</sub> O)	X		X		X
Aluminum oxide	X	X	X		X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	Health Hazard 3	Flammability 0	Instability 0	Physical and Chemical Hazards -
<b>HMIS</b>	Health Hazard 3	Flammability 0	Physical Hazard 0	Personal Protection X

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**General Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**