



Safety Data Sheet (SDS)

Date of Preparation: 11-5-2015

Prepared to comply with GHS (Globally Harmonized System) and OSHA-Hazard Communication Standard 29 CFR.1910.1200, System of Classifying and Labeling of Chemicals.

Material Name: **Hardened Concrete & Concrete Products**

Section 1: Identification

Manufacturer:	R.W. Sidley Inc. 436 Casement Avenue Painesville, OH 44077 (440) 352-9343	Product Name: Concrete Block, Pavers, Concrete Precast, Retaining Wall Products
		Chemical Name: Silicon Dioxide, Concrete/Aggregate
		Formula: Mixture
Emergency Information:	(440) 352-9343	Product Use: Masonry building material/component

Section 2: Hazard Identification

Hazard Pictogram:

2.1



2.2 **SIGNAL WORD:** Warning

2.3 Hazard Statements

H317 – May cause an allergic skin reaction

H335 – May cause respiratory irritation

H351 – Suspected of causing cancer

H372 – Causes damage to the organs (respiratory system) through prolonged or repeated exposure.

2.4 Precautionary Statements

P102 – Keep out of the reach of children.

P201 – Obtain special instructions before use.

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

P260 – Do not breathe dusts.

P264 – Wash exposed areas of face and body with water thoroughly after handling.

P270 – Do not eat, drink, or smoke when using this product.

P272 – Contaminated work clothing should not be allowed out of the workplace.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

2.5 Product Hazards:

Hardened concrete and related hardened concrete products are not hazardous in the delivered state. The following potential hazards may result upon crushing, grinding, cutting or drilling the hardened concrete.

2.6 Potential Health Effects:

Acute Eye:

Contact with concrete dust may cause irritation.

Acute Skin:

Skin contact with concrete dust may cause irritation.

Acute Inhalation:

Cutting, grinding, crushing, or drilling hardened concrete or concrete products may generate dust containing crystalline silica. Repeated exposures to very high levels of respirable crystalline silica (quartz, cristobalite, tridymite) for periods as short as six months have caused acute silicosis. Acute silicosis is a rapidly progressive, incurable lung disease that is typically fatal. Dusts may irritate the nose, throat, and respiratory tract by mechanical abrasion.

Coughing, sneezing, and shortness of breath may occur.

Chronic effects:

Chronic bronchitis may result from chronic exposure to dust generated from cutting, grinding, crushing, or drilling hardened concrete. Chronic exposure to respirable limestone dust in excess of the ACGIH TLV has caused pneumoconiosis (Dusty Lung). Concrete dust may contain more than 0.1% crystalline silica, which is a cancer hazard if inhaled. Cancer risk depends on duration and level of exposure. Prolonged exposure to crystalline silica can cause silicosis, a progressive pneumoconiosis (lung disease).

Section 3: Composition/Ingredients:

Component	CAS#	% Composition
Particulates not otherwise classified	N/A	>35%
Portland Cement	65997-15-1	5-10%
Crystalline Silica (Quartz) (Concrete contains aggregate materials which may contain crystalline silica)	14808-60-7	>0.1%

Section 4: First Aid Measures

4.1 Description of first aid measures:

Inhalation: Dust from cutting, grinding, sawing, or drilling product may be inhaled. If inhaled remove person immediately to fresh air. If person is unconscious or unable to breathe SEEK MEDICAL ATTENTION IMMEDIATELY.

Skin Contact: Treat symptomatically. Cuts and abrasions should be cleaned and bandaged. Dust on skin should be rinsed with clean potable water. If irritation persists or develops later seek medical attention.

Eye Contact: Rinse eyes thoroughly with potable water for at least 15 minutes and remove contact lenses if easy to do. Rinse under eyelids to remove any particles. Seek medical attention for abrasions, and irritation.

Ingestion: Highly improbable. If the person is conscious and aware, give large amounts of water. Never attempt to make an unconscious person drink or vomit. If the person is choking due to blocked airway it may be necessary to perform the Heimlich maneuver. If the person is unconscious it may be necessary to sweep the blockage out of the mouth using a finger. CPR chest compressions may also dislodge any blockage. Seek emergency medical attention from a physician immediately.

4.2 Most important symptoms and effects:

Inhalation: Inhalation of dust may cause irritation of the respiratory tract. May cause allergic or asthma- like respiratory reactions.

Skin Contact: Projectile fragments may cause cuts or abrasions when in contact with skin. Dusts may irritate the skin.

Eye Contact: Projectile fragments may cause cuts or abrasions. Dusts may cause severe irritation, abrasions, redness, tissue destruction and permanent eye damage including blindness.

Ingestion: Virtually nontoxic. Ingestion of large amounts of dust may cause gastrointestinal irritation and choking/blockage.

4.3 Indication of any immediate medical attention and special treatment

needed: See Section 4.1.

Section 5: Fire Fighting Measures

5.1 Extinguishing media: Product is not flammable. Use appropriate media for fire adjacent to product.

5.2 Special hazards arising from the substance or mixture: None.

5.3 Advice to firefighters: None.

Section 6: Accidental Release

6.1 Personal precautions: Highly improbable. Wear appropriate protective equipment and clothing during clean-up as recommended in Section 8. Use caution and avoid breathing dust. Wear dust-mask or respirator if required. Respirable crystalline silica dust particles may be generated by clean-up of crushed product, or with cutting, grinding, and drilling activities.

6.2 Environmental precautions: Product, when intact, is not an environmental hazard.

6.3 Methods and materials for containment and cleaning up: Use mechanical aids to lift during manual handling as to reduce chance of injury. Avoid cutting, sawing, drilling or grinding to decrease generation of dusts.

6.4 Reference to other sections: Use information obtained throughout this SDS to be fully prepared in case of accidental release.

Section 7: Handling and Storage

7.1 Precautions for safe handling: Avoid contact with skin, eyes, and clothing. Persons handling the product should wear recommended personal protective equipment (PPE) as noted in Section 8. Wash thoroughly with potable water and mild soap after handling. Avoid breathing dusts. Ensure adequate ventilation (or a respirator should be worn if PELs are exceeded) during drilling, cutting, crushing, and grinding. Use local exhaust or perform activities in well-ventilated areas. Water suppression may be used to limit airborne dusts. Most hazards are related to physical properties (including size and weight). Use mechanical devices to lift or move.

7.2 Conditions for safe storage, including any incompatibilities: Store on flat level ground. Avoid incompatible materials that may break down product such as strong oxidizers or acids.

7.3 Specific end uses: *See Section 1 for intended uses.*

Section 8: Exposure Controls/Personal Protection

Component	OSHA-PELs	ACGIH	NIOSH
Crystalline Silica (Quartz) (Concrete contains aggregate materials which may contain crystalline silica)	30/(%SiO ₂ +2)mg/m ³ (Respirable)	0.05 mg/m ³ (Respirable Quartz)	30/(%SiO ₂ +3) mg/m ³ (Total)
	10/(SiO ₂ +2) mg/m ³ (Respirable)		0.05ms/m ³ Mg/m ³ (Respirable)
Particulates not otherwise classified	15mg/m ³ (Total)	10mg/m ³ (Inhalable)	3mg/m ³ (Respirable)
	5mg/m ³ (Respirable)		10mg/m ³ (Total)

8.1 Engineering Controls: When cutting, grinding, crushing, or drilling hardened concrete, provide general or local ventilation systems, as needed, to maintain airborne dust concentrations below the OSHA PELs, MSHA PELs, and ACGIH TLV. Local vacuum collection is preferred since it prevents release of contaminants into the work area by controlling it at the source. Other technologies that may aid in controlling airborne respirable dust include wet suppression, ventilation, process enclosure, and enclosed employee work stations. When exposed to dust above recommended limits, wear a suitable NIOSH-approved respirator with a protection factor appropriate for the level of exposure. Seek guidance from a qualified industrial hygienist or safety professional, prior to respirator selection and use.

8.2 Eye/Face Protection: When cutting, grinding, crushing, or drilling hardened concrete, wear safety glasses with side shields or dust goggles in dusty environments.

Section 9: Physical and Chemical Properties

9.1 Physical Appearance: Solid gray

9.2 Odor: Odorless

9.3 pH:ND

9.4 Specific Gravity: 1.9-2.4

9.5 Water Solubility: Insoluble

Section 10: Stability and Reactivity

10.1 Chemical Stability: Stable

Section 11: Toxicological Information

11.1 SILICOSIS

The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Silicosis can exist in several forms: chronic (or ordinary), accelerated, or acute. Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown as radiographic opacities) greater than 1 centimeter in diameter. Advanced complicated silicosis or PMF may lead to death or heart disease secondary to the lung disease.

11.2 CANCER

The International Agency for Research on Cancer (IARC) concluded that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)” _ Other conditions that may be caused by, or aggravated by exposure to airborne respirable silica include scleroderma, tuberculosis, and kidney failure.

Section 12: Ecological Information (non-mandatory)

12.1 Ecotoxicity:

General Product Information: Product when used as intended is not anticipated to pose and environmental impact.

Component Analysis - Ecotoxicity: No ecotoxicity data are available for this product's components.

Environmental Fate: No information available for the product.

Section 13: Disposal Considerations (non-mandatory)

13.1 Waste treatment methods:

General Product Information: Whatever cannot be saved or recovered for recycling should be disposed of according to state and local regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14: Transport Information

14.1 US Department of Transportation Shipping Name:

Regulated under US DOT for cargo securement. Not considered a hazardous material under US DOT regulations.

Section 15: Regulatory Information

15.1 Federal Regulations:

15.2 SARA Title III Hazard Classes:

Fire Hazard: N

Reactive Hazard: N

Release of Pressure: N

Acute Health Hazard: N

Chronic Health Hazard: Y

15.3 TSCA:

Crystalline silica (quartz) appears on the EPA Toxic Substances Control Act inventory under the CAS No 14808-60-7.

15.4 CA Proposition 65: Crystalline silica (quartz) is classified as a substance known to the state of California to be a carcinogen. The information contained herein is based on the data available to us and is believed to be correct. Neither The American Concrete Pipe Association, nor its member companies, makes a warranty, expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.

Section 16:

16.1 N/A