



Safety Data Sheet



Product Name: Concrete Structural Units

SECTION 1: COMPANY AND PRODUCT IDENTIFICATION	
PRODUCT NAME Concrete Structural Units	Revised: 31 December 2014
SYNONYMS Manholes, box culverts, curb inlets, inverts, etc.	
Manufacturer Concrete Pipe and Precast, LLC	Emergency Phone Number 1-804-798-6068

SECTION 2: HAZARDS IDENTIFICATION	
HAZCOM GHS CLASSIFICATION	
GHS SYMBOLS	 
SIGNAL WORD: WARNING!	
HAZARD STATEMENT: Concrete structure itself is not hazardous. Odorless, gray, solid or hollow concrete objects of various shapes. Non-flammable product. Exposure to dust may cause respiratory irritation. Repeated or prolonged exposure to dust can damage lungs if inhaled. Exposure to crystalline silica dust can cause Silicosis, a form of lung cancer. Exposure to dust may cause irritation to skin or contact dermatitis. Exposure to dust can cause irritation to eyes.	
PREVENTION STATEMENT: Do not eat, drink or use tobacco when using this product. Do not chip, grind or break product to create dust. Do not breathe dust created. Wear respiratory protection, protective gloves and eye/face protection if large amounts of dust are created. Wash exposed skin thoroughly until dust is removed. Flush eyes for 15 minutes. If irritation persists, seek medical attention.	
RESPONSE: If concerns or exposure occurs, seek medical attention.	
STORAGE: Prevent rolling, falling or tip over.	
DISPOSAL: Dispose of structure or parts thereof in accordance with state and local regulations.	

SECTION 3: COMPOSITION & INFORMATION ON INGREDIENTS	
OSHA / MSHA REGULATORY STATUS	

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Concrete structural units are not considered hazardous as shipped. Dust generated from crushing, cutting, grinding or drilling hardened concrete may contain amounts of crystalline silica considered hazardous under the OSHA and MSHA Hazard Communication Standards.

Concrete is a mixture is gravel or rock, sand, Portland cement and water. It may also contain fly ahs, slag, silica fume, fibers (organic) and color pigment.

HAZARDOUS COMPONENTS	Percent (By Weight)	CAS Number	OSHA PEL-TWA (mg/m3)	ACGIH TLV--TWA (mg/m3)	MSHA PEL-TWA (mg/m3)
Crystalline Silica	<1%	14808-60-7	(10)/(%SiO2 + 2)(R) (30)/(%SiO2 + 2)(T)	.025 (R)	(10)/(%SiO2 + 2)(R)
Portland Cement	5-10	65997-15-1	(5) (R) ; (15) (T)	1 (R)	(10)
Calcium Hydroxide	15-25	1305-62-0	(5) (R) ; (15) (T)	5 (T)	(5)

- Notes: 1. Concrete contains No Asbestos.
 2. (T)= Total Particulate
 3. (R)= Respirable Particulate

SECTION 4: FIRST AID MEASURES

INHALATION

Move exposed individual to fresh air. Dust in throat and nasal passages should clear naturally by coughing, sneezing and nasal discharge. Obtain medical attention if symptoms persist or develop later.

EYE CONTACT

Do not allow individual to rub eyes. Flush gently under running water for 15 minutes or longer, making sure that the eyelids are held open. Other than washing with water, do not attempt to remove material from eyes. If pain or irritation persist or develop later, obtain medical attention.

SKIN CONTACT

If irritation occurs, flush gently with water until dust is removed. If irritation persists or develops later, obtain medical attention.
 Dermatitis- Concrete dust, in association with sweat and friction, can lead to skin irritation and dermatitis. Skin affected by dermatitis may include symptoms such as redness, itching, rash, scaling and cracking. Irritant dermatitis is caused by the physical properties of concrete dust such as abrasion.

INGESTION

Ingestion is not a common route of occupational exposure for this product.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT

Not combustible

FLAMMABLE LIMITS

Not applicable

EXTINGUISHING AGENTS

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Not combustible. Use extinguishing agent appropriate for surrounding flammable materials.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Spalling of hardened concrete may occur under conditions of intense heat.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

If large amounts of dust have been generated, eye protection and appropriate respiratory protection should be used to protect cleanup personnel against dust.

SPILL AND LEAK PROCEDURES

Do not dry sweep broken, dusty material. Use water spray to minimize dust or vacuum with HEPA filters

SECTION 7: HANDLING AND STORAGE

HANDLING PRECAUTIONS

General- Concrete products are heavy and pose risks such as sprains and strains to the back, arms, shoulders and legs during maneuvering. Handle with care and use appropriate control measures. Use appropriately rated equipment (such as cranes) and rigging when moving and placing concrete products.

Housekeeping- Dust containing crystalline silica may be generated during cutting, grinding or crushing. Activities which generate dust should take place in well ventilated areas. Use good housekeeping methods to prevent the accumulation of dust in the workplace. Wear appropriate PPE when dust is present.

RECOMMENDED STORAGE CONDITIONS

Store concrete products in a secure manner to prevent falling or rolling. Ensure adequate load bearing capacity of ground, floor or other areas when placing or storing concrete products.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS

When crushing, cutting, grinding or drilling concrete, use general ventilation, local exhaust and/or wet suppression methods to maintain exposures below allowable exposure limits.

RESPIRATORY PROTECTION

The need for respiratory protection should be evaluated by a qualified professional. The use of respirators for controlling exposures in excess of PEL must comply with OSHA and MSHA requirements for medical surveillance, respirator fit testing, repair and cleaning and user training.

EYE PROTECTION

ANSI rated Safety glasses with side shields should be worn as minimum protection. Dust

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<p>goggles or full face protection should be worn when conditions with high dust concentrations exist or are anticipated.</p>
<p>FOOT PROTECTION</p> <p>ANSI rated safety-toed boots when handling or working around concrete products.</p>
<p>SKIN PROTECTION</p> <p>Use gloves to provide hand protection from abrasion. In very dusty conditions, clothing with long sleeves will provide skin protection. Contaminated work clothing should be washed after use.</p>
<p>ADDITIONAL PROTECTIVE MEASURES</p> <p>Air monitoring for respirable dust containing quartz should be conducted regularly. Airborne dust levels in excess of appropriate exposure limits should be reduced by all feasible engineering controls, including (but not limited to) wet suppression, ventilation, process enclosure, and enclosed employee work stations.</p>

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<p>APPEARANCE</p> <p>Solid or hollow concrete objects of various shapes.</p>	<p>SPECIFIC GRAVITY</p> <p>Unknown</p>
<p>COLOR</p> <p>Gray.</p>	<p>EVAPORATION RATE</p> <p>Not applicable.</p>
<p>ODOR</p> <p>None.</p>	<p>VAPOR DENSITY (AIR = 1)</p> <p>Not applicable.</p>
<p>BOILING POINT</p> <p>Not applicable.</p>	<p>pH</p> <p>Not applicable.</p>
<p>VAPOR PRESSURE</p> <p>Not applicable.</p>	<p>SOLUBILITY IN WATER</p> <p>Negligible.</p>

SECTION 10: STABILITY AND REACTIVITY

<p>STABILITY</p> <p>Stable.</p>
<p>INCOMPATIBILITY</p> <p>Strong acids may etch concrete.</p>
<p>HAZARDOUS DECOMPOSITION PRODUCTS</p> <p>None.</p>
<p>HAZARDOUS POLYMERIZATION</p> <p>Does not polymerize.</p>
<p>CONDITIONS TO AVOID</p> <p>Avoid contact with strong acids.</p>

SECTION 11: TOXICOLOGICAL INFORMATION

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ACUTE TOXICITY DATA

Standard animal toxicity data (e.g. LD₅₀, LC₅₀) are not available for quartz. Epidemiologic studies of workers indicate an increased risk of lung cancer from chronic exposure to respirable crystalline silica; this effect was more pronounced in those with silicosis. However, many of the studies did not account for effects of smoking or other confounding exposures.

Epidemiologic studies have linked crystalline silica exposure with autoimmune diseases and kidney disorders. Individuals with silicosis show a higher incidence of scleroderma, a thickening of the skin. Current data have not shown a definite causal effect between these effects and exposure to respirable crystalline silica.

In laboratory animal tests, dust containing newly broken particles of respirable silica particles caused greater lung injury than equal exposures to particles aged for sixty days or more.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL DATA

Generally considered chemically inert in the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Dispose of waste product and unused product in compliance with federal, state and local requirements. Used material which has become contaminated, may have significantly different characteristics based on the contaminant and should be evaluated accordingly.

SECTION 14: TRANSPORT INFORMATION

DOT HAZARD CLASS

None.

DOT PLACARD

None.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

OSHA/MSHA HAZARD COMMUNICATION

This product is considered by OSHA/MSHA to a hazardous chemical and should be included in the employer's hazard communication program.

SARA 313

Not applicable.

CERCLA 103

Not applicable.

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<i>RCRA HAZARDOUS WASTE</i>	
Waste is not hazardous according to 40 CFR 261.	
<i>California Proposition 65</i>	
Crystalline silica (airborne particles of respirable size) is a substance known y the State of California to cause cancer.	
<i>STATE REGULATIONS</i>	
<i>COMPONENT</i>	<i>STATE REGULATORY LISTS</i>
Crystalline Silica, quartz 14808-60-7	CA, FL, MA, MN, NJ, PA
SECTION 16: OTHER INFORMATION	
This MSDS (SDS), Sections 1-16 was updated on December 31, 2014	
NOTICE: Concrete Pipe and Precast LLC., believes that the information contained in this Material Safety Data Sheet is accurate. The suggested procedures are based on experience as of date of publication. They are not necessarily all-inclusive or fully adequate in every circumstance. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulations, rules, or insurance requirements.	
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