

Material Name: Concrete Masonry Products

Section 1: Identification

- 1.1 Product trade names:** Block, Concrete Block, SRW Units
- 1.2 Product Class:** Concrete / Stone Products
- Product Codes: N/A
- CAS/EC Number: Mixture (composition detailed in Section 3)
- Intended Use: Design for landscape, masonry structural and non-structural use; such as decorative veneer products, concrete block, interlocking pavers, patio products, retaining wall systems, and site amenities.

1.3 Supplier:

County Materials Corp.
205 North St., P.O. Box 100
Marathon, WI 54448-0100
General Information Telephone: (800) 289-2569
Email: riskclaimssafety@countymaterials.com

1.4 Emergency telephone:

715-223-7788

Section 2: Hazard(s) Identification

2.1 Classification:

Skin Sensitizer – Category 1
Carcinogenicity – Category 1A
Specific Target Organ Toxicity (Single Exposure-Respiratory System) – Category 3
Specific Target Organ Toxicity (Repeat Exposure-Respiratory System) – Category 1

2.2 Labeling:

Pictograms:



Signal Word: DANGER

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.

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.

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Section 2: Hazard(s) Identification

Response

P302 + P352 – IF ON SKIN: Wash with plenty of water.
 P304 + P340 + P312 – IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.
 P308 + P313 – IF exposed or concerned: Get medical advice/attention.
 P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention.
 P362 + P364 – Take off contaminated clothing. And wash before reuse.

Storage

P403 – Store in a well-ventilated place.
 P405 – Store locked up.

Disposal

P501 – Dispose of contents in accordance with local/regional/national/international regulations.

2.3 Other Hazards: This product is classified based on the dust/particulate generated during cutting, crushing, drilling, grinding or any other disruption of the structural integrity of the product. Potential hazards are related to dust exposure including, but not necessarily limited to, acute and chronic health problems. This product may contain metals or other inorganics as reinforcement components. Observe PELs and TLVs for particulates of the following components: Iron, Carbon, Silicon, Aluminum, Arsenic, Boron, Calcium, Chromium, Cobalt, Copper, Lead, Manganese, Molybdenum, and Nickel. Dusts may be generated during cutting or grinding of the products. Certain products may be coated with calcium soaps and/or metal working compounds which should be recognized and considered when evaluating potential health hazards and exposure during dust/fume generating activities.

Section 3: Composition/Information on Ingredients ^(1,2)

Chemical Name	EINECS/EC	CAS	Percent	Classification
Fine Aggregate-Silica Dioxide (Silica, Quartz, Crystalline Silica) ⁽³⁾	231-545-4	14808-60-7	60-72%	Carcinogenicity – Category 1A Specific Target Organ Toxicity (Single Exposure-Respiratory System) – Category 3 Specific Target Organ Toxicity (Repeat Exposure-Respiratory System) – Category 1
Course Aggregate (pea stone and limestone)	207-439-9	1317-65-3	20-28%	Specific Target Organ Toxicity (Single Exposure-Respiratory System) – Category 3 Specific Target Organ Toxicity (Repeat Exposure-Respiratory System) – Category 1
Portland Cement	266-043-4	65997-15-1	6-10%	Skin Sensitizer – Category 1 Carcinogenicity – Category 1A Specific Target Organ Toxicity (Single Exposure-Respiratory System) – Category 3 Specific Target Organ Toxicity (Repeat Exposure-Respiratory System) – Category 1

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Section 3: Composition/Information on Ingredients ^(1,2)

Fly Ash	268-627-4	68131-74-8	0-4%	Skin Sensitizer – Category 1 Carcinogenicity – Category 1A Specific Target Organ Toxicity (Single Exposure-Respiratory System) – Category 3 Specific Target Organ Toxicity (Repeat Exposure-Respiratory System) – Category 1
Amorphous Silica (fused)	231-545-4 ⁽⁴⁾	7631-86-9	0-5%	
Ferric Oxide	215-168-2	1309-37-1	0-5%	Specific Target Organ Toxicity (Single Exposure-Respiratory System) – Category 3
Calcium Hydroxide	215-137-3	1305-62-0	0-5%	

1. Portland Cement and Fly Ash. These products may contain trace amounts of chemicals including silicates and metals which may be toxic in some forms. These ingredients may include, but are not limited to, Aluminum, Arsenic, Barium, Beryllium, Cadmium, Chromium, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Vanadium and Zinc, along with other trace constituents.
2. Metal reinforcements may be added for physical stability. During dust/fume generating activities, assess and adhere to applicable occupational exposure limits.
3. This product's composition varies naturally. "Sand" and "aggregates" may contain crystalline silica (i.e. quartz), which is classified as a carcinogen.
4. EINECS/EC number for Amorphous silica is a general silica number.
5. Products may include admixtures (organic and inorganic) 0.1-1%.

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.

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Section 4: First-Aid Measures

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 Measures

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

8.1 Control parameters: Note the limits shown below are for guidance only. Follow applicable regulations in your jurisdiction.

Substance Name	Source	Exposure Limit
Portland Cement	ACGIH	1 mg/m ³ (R)
	OSHA	15 mg/m ³ (T) / 5 mg/m ³ (R)
	NIOSH	10 mg/m ³ (T) / 5 mg/m ³ (R)
	IDLH	5000 mg/m ³
Calcium Carbonate	ACGIH	Removed TLV due to insufficient data. Use PNOG for exposure limit.
	OSHA	15 mg/m ³ (T) / 5 mg/m ³ (R)
	NIOSH	10 mg/m ³ (T) / 5 mg/m ³ (R)

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Section 7: Handling and Storage		
Fly Ash	--	*Fly Ash is a byproduct from combustion of coal and thus may contain a number of trace chemicals including silicates and metals. No exposure limit is available for Fly Ash. Use proper ventilation or approved respirator to avoid breathing dusts.
Quartz, Silica (Crystalline Silica)	ACGIH	0.025 mg/m ³
	OSHA	(30 mg/m ³ ÷ (%SiO ₂ +2)) (T) (10 mg/m ³ ÷ (%SiO ₂ +2)) (R)
	NIOSH	0.05 mg/m ³ / 0.025 mg/m ³
Total Dust (or Particulates Not Otherwise Classified)	ACGIH	10 mg/m ³ (IP) / 5 mg/m ³ (R)
	OSHA	15 mg/m ³ (T) / 5 mg/m ³ (R)
	NIOSH	10 mg/m ³ (T) / 5 mg/m ³ (R)
Amorphous Silica (fused)	ACGIH	Removed TLV due to insufficient data. Use PNOG for exposure limit.
	OSHA	80 mg/m ³ / %SiO ₂ or 20 mppcf
	NIOSH	6 mg/m ³
	IDLH	3000 mg/m ³
Iron Oxide	ACGIH	5 mg/m ³ (R)
	OSHA	10 mg/m ³
	NIOSH	5 mg/m ³
	IDLH	2500 mg/m ³
Calcium Hydroxide	ACGIH	5 mg/m ³
	OSHA	15 mg/m ³ (T) / 5 mg/m ³ (R)
	NIOSH	5 mg/m ³

8.1.1 Currently recommended monitoring procedures: No recommendations.

8.1.2 Exposure guidelines for air contaminants, if any: See Section 8.1

8.1.3 DNELS and PNECS for exposure scenarios: Information not available at this time.

8.1.4 Control banding for risk management: Use good industrial hygiene practice, where appropriate PPE and use local ventilation.

8.2 Exposure Controls:

8.2.1 Appropriate engineering controls: Use local exhaust ventilation when possible to remove and prevent buildup of any dusts generated from the handling of this product. Water suppression may also be considered to limit airborne dusts during grinding, cutting, drilling or crushing activities.

8.2.2 Individual protection methods: Use good industrial hygiene practices in handling this material. Eye wash stations should be available. Wash exposed skin thoroughly with potable water and mild soap after use. If any irritation or redness is noted, treat symptomatically or consult a doctor immediately. Wear gloves, safety glasses and protective clothing. Safety shoes (steel toe) should be worn when handling heavy materials that could be dropped on the feet. In case of eye contact with projectile debris or dust, flush with plenty of clean, potable water for at least 15 minutes. Remove contacts if easy to do so. Seek medical attention immediately. Avoid dust inhalation and direct contact with skin and eyes. Wash contaminated skin before eating, drinking or smoking.

Eye/Face: Use appropriate eye protection: glasses with side shields or goggles. Dust goggles or a face shield (preferred) should be worn during cutting, grinding crushing, or drilling activities.

Skin: Avoid contact by covering skin with protective clothing or protective suit. Wear leather heavy-duty gloves when handling the product. Wear eye protection. Wash exposed skin thoroughly with potable water and mild soap.

Respiratory: If airborne concentrations are above the applicable exposure limits, use NIOSH-approved respirator if qualified.

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Section 9: Physical and Chemical Properties

Physical State:	Solid Concrete
Color:	Varying gray shades
Odor:	Odorless
Odor Threshold:	Not applicable
Melting Point:	Not applicable
Freezing Point:	Not applicable
Initial Boiling Point:	Not applicable
Flammability (solid, gas):	Not applicable
Lower and Upper Explosion Limits/Flammability Limit:	Not applicable
Flash Point:	Non-flammable
Auto-Ignition Temperature:	Not applicable
Decomposition Temperature:	Not evaluated
pH:	Not-applicable (powdered product may be caustic when in contact with water)
Kinematic Viscosity:	Not applicable
Solubility:	Non-soluble
Partition Coefficient:	Not applicable
Vapor Pressure	Not applicable
Density (and/or Relative Density):	Not evaluated
Relative Vapor Density:	Not applicable
Particle Characteristics:	Variable (when broken)

Section 10: Stability and Reactivity

10.1 Reactivity: Ingredients may react with incompatible materials. Product may react with strong oxidizers, reducing agents, and acids.

10.2 Chemical stability: Stable

10.3 Possibility of hazardous reactions: Possible release of gases when ingredients come into contact with incompatible materials. Avoid dust created by agitation. Avoid contact or storage of dusty materials near incompatible substances. Avoid contact with strong oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride. Silica dissolves readily in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride.

10.4 Conditions to avoid: Avoid excessive handling, cutting, drilling, or grinding of hardened material which may generate dust levels above permissible exposure limits.

10.5 Incompatible materials: Some ingredients have incompatible materials as detailed in Section 10.3.

10.6 Hazardous decomposition or byproducts: Highly improbable. Hazardous polymerization will not occur.

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Section 11: Toxicological Information

11.1 Information on toxicological effects:

Acute Exposure and Symptoms:

Inhalation: 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 when in contact with eyes. Dusts may cause severe irritation, abrasions, redness, tissue destruction and permanent eye damage including blindness (in extreme cases).

Ingestion: Highly improbable. Virtually nontoxic. Ingestion of large amounts may cause gastrointestinal irritation, choking/blockage.

Chronic Exposure:

Prolonged inhalation of dusts may cause damage to the respiratory tract.

Repeated inhalation of high concentrations of dusts, especially 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. Not all individuals with silicosis will exhibit symptoms (signs) of the disease. However, silicosis can be progressive, and symptoms can appear at any time, even years after exposure has ceased. Symptoms of silicosis may include, but are not limited to, the following: shortness of breath; difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume; right heart enlargement and/or failure. Smoking may increase the risk of developing lung disorders, including emphysema and lung cancer. Persons with silicosis have an increased risk of pulmonary tuberculosis infection.

Several studies of persons with silicosis also indicate an increased risk of developing lung cancer, a risk that increases with the duration of exposure. Many of these studies do not account for confounding variables for lung cancer, especially smoking.

Acute and Chronic Toxicity

Component Analysis: LD50/LC50 for exposure to particulate forms of the product's components.

Portland Cement (65997-15-1): No data available

Calcium Carbonate (1317-65-3): No data available

Fly Ash (68131-74-8): Oral LD₅₀ Rat >2000 mg/kg (toxicity presented is for Ashes, residues (CAS no. 68131-74-8))

Silica, Quartz (Crystalline, Silica) (14808-60-7): LD₅₀ oral rat >500 mg/kg.

Component Carcinogenicity

Concrete is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), the Occupational Safety and Health Administration (OSHA), the American Conference of Governmental Industrial Hygienists (ACGIH), or the State of California. In October 1996, an IARC Working Group re-assessing crystalline silica, a component of this product, designated crystalline silica as a carcinogen (Group 1). The NTP, ACGIH, and the State of California have listed crystalline silica (respirable size) as a known human carcinogen. This information is based on sufficient evidence of carcinogenicity in certain experimental animals and on selected epidemiological studies of workers exposed to crystalline silica.

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Section 11: Toxicological Information

Substance Name	IARC	NTP	ACGIH	OSHA	NIOSH	Cal. Prop. 65
Portland Cement (65997-15-1)	--	--	A4	--	--	--
Calcium Carbonate (1317-65-3)	--	--	--	--	--	--
Fly Ash (68131-74-8) ⁽⁶⁾	--	--	--	--	--	--
Amorphous Silica (fused) (7631-86-9)	--	--	--	--	--	--
Iron Oxide (1309-37-1)	--	--	A4	--	--	--
Calcium Hydroxide (1305-62-0)	--	--	--	--	--	--
Silica, Quartz (Crystalline, Silica) (14808-60-7)	G1	G2	A2	GS	Listed	YES ⁽⁷⁾

1. "--" – Not Listed
 2. OSHA - Group S: OSHA Select Carcinogen
 3. IARC - Group 1: Carcinogenic to humans
 4. NTP - Group 2: Reasonably Anticipated to be Human Carcinogens (R)
 5. ACGIH –A2: Suspected Human Carcinogen, A4: Not Classifiable as Human Carcinogen
 6. Fly Ash is a byproduct from combustion of coal and thus may contain a number of trace chemicals including silicates and metals. Some of the components may be suspected or known carcinogens.
 7. California Prop. 65 Components: WARNING! This product contains a chemical known to the State of California to cause cancer: Crystalline Silica.

Specific Target Organ Toxicity Repeat Exposure – Respiratory System

Inhalation of high concentrations of dust, especially respirable crystalline silica (quartz, cristobalite, tridymite), for periods as short as six months has been known to cause acute silicosis. Silicosis is a rapidly progressive, incurable lung disease that can be fatal. Symptoms of silicosis may include, but are not limited to, the following: shortness of breath; difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume; right heart enlargement and/or failure.

Skin Sensitizer

Some components of this product may cause skin sensitization: Portland Cement and Trace metals found in fly ash.

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.

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Section 14: Transport Information (non-mandatory)

US DOT Information

Not Regulated

IMDG

Not Regulated

IATA

Not Regulated

Section 15: Regulatory Information (non-mandatory)

15.1 Safety, health, and environmental regulation:

US Federal Regulations

General Product Information: All components are on the U.S. EPA TSCA Inventory List. Portland Cement and crystalline silica are exempt from reporting under the inventory update rule.

Component Analysis: Some ingredients within components of this product are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

SARA 311/312 Tier II Hazard Ratings: Crystalline Silica

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

State Regulations

General Product Information: Other state regulations may apply. Check individual state requirements.

California Prop. 65 Components: WARNING! This product contains a chemical known to the State of California to cause Cancer: Crystalline Silica

Component Analysis – WHMISIDL:

Component	EINECS/EC	CAS	Minimum Concentration
Silica, Quartz (Crystalline, Silica)	231-545-4	14808-60-7	1%

Additional Regulatory Information

General Product Information: No additional information available.

Component Analysis – Inventory:

Component	EINECS/EC	CAS	TSCA	CAN	EC
Portland Cement	266-043-4	65997-15-1	Yes	DSL	EINECS
Calcium Carbonate	207-439-9	1317-65-3	Yes	DSL	EINECS
Fly Ash ⁽¹⁾	268-627-4	68131-74-8	Yes	DSL	EINECS
Amorphous Silica (fumed)	231-545-4 ⁽²⁾	7631-86-9	Yes	DSL	EINECS
Ferric Oxide	215-168-2	1309-37-1	Yes	DSL	EINECS
Calcium Hydroxide	215-137-3	1305-62-0	Yes	DSL	EINECS
Silica, Quartz (Crystalline, Silica)	231-545-4	14808-60-7	Yes	DSL	EINECS

1. Information presented is for Ash residues 68131-74-8. Fly ash contains many components that may or may not be listed in these inventories.
2. EINECS/EC number for Amorphous silica is a general silica number.

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Section 16: Other Information

Other Information

Disclaimer: Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Safety Data Sheet before handling product.

Key to Abbreviations and Acronyms:

ACGIH:	American Conference of Governmental Industrial Hygienists
ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP:	Classification, Labelling, and Packaging
DNEL:	Derived no effect level
DSL:	Canada's Domestic Substances List
EC:	European Community
EEC:	European Economic Community
EINECS:	European Inventory of Existing Commercial Chemical Substances
EPA:	Environmental Protection Agency
EU:	European Union
GHS	Globally Harmonized System of classification and labelling of chemicals
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association
ATA-DGR:	Dangerous Goods Regulations by the International Air Transport Association
ICAO:	International Civil Aviation Organization
ICAO-TI:	Technical Instructions by the International Civil Aviation Organization (ICAO)
IMDG:	International Maritime Code for Dangerous Goods
IP:	Inhalable Particles
LC50:	Lethal concentration in air fatal to 50 percent of test animals
LD50:	Lethal dose by mouth or other route to 50 percent of test animals
LDLo:	Lowest lethal dose
MPPCF:	Million Particles Per Cubic Foot
NIOSH:	National Institute for Occupational Safety and Health
NJTSR:	New Jersey Trade Secret Registry
NOEC:	No observed effects
NOS:	Not Otherwise Specified
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration (USA)
PNEC:	Predicted no effect concentration
PPM:	Parts per million
R:	Respirable Particles
RID:	Regulations Concerning the International Transport of Goods by Rail
STEL:	Short term exposure limit
T:	Total Dust
TLV:	Threshold Limit Value
TSCA:	Toxic Substance Control Act
TWA:	Time weighted average

**** This is the end of SDS – Concrete Masonry Products ****