Turlington® Structural Brick

By Harvey Cement Products, Inc.

Strength
Value
Beauty
Longevity

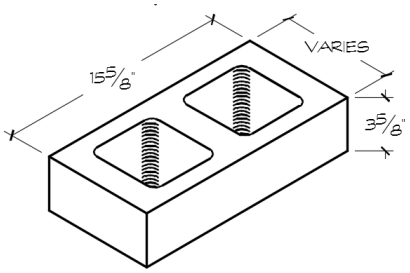
STONE-FINISH SINGLE WYTHE WALL CONSTRUCTION

- SIGNIFICANTLY REDUCED LABOR COSTS DUE TO CONSTRUCTION OF A SINGLE WALL SYSTEM
- CUSTOMIZED STONE COLORS / PALETTES / BLENDS AVAILABLE UPON REQUEST
- MADE IN 4” THRU 12” SIZES / SMOOTH AND SPLITFACE FINISH)
- EXCEPTIONALLY LOW 6.15% AVERAGE INTEGRAL WATER ABSORPTION RATE VS. COMPETING SINGLE WYTHE PRODUCTS
- DOUBLE-SIDED FINISH CREATES AN EQUALLY ATTRACTIVE INTERIOR WALL
- TURLINGTON MEETS AND EXCEEDS ALL ASTM C90 TESTS

Turlington® Structural Brick Specifications for ASTM C90

ASTM C90 Specifications for Load Bearing Concrete Masonry Units

Property	Test	Target Value	Turlington Brick®
Compressive Strength	ASTM C140	More than 1900 PSI	3089 PSI
Absorption	ASTM C140	Less than 15 lbs./cu.ft.	6.15 lbs./cu.ft.
Density	ASTM C140	105 - 125 lbs./cu.ft.	126.44 lbs./cu.ft.
Linear Shrinkage	ASTM C140	Less than .065%	.05%



Turlington® Brick Sizes

Width	Height	Length
4”	**4”**	**16”**
8”	4”	16”
10”	4”	16”
12”	4”	16”

TURLINGTON® STRUCTURAL BRICK
BY HARVEY CEMENT PRODUCTS, INC.

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Harvey, IL 60426
P: 708.333.1900
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Turlington Brick

Harvey Cement Products, Inc.
16030 Park Ave.
Harvey, IL 60426

Division 04 – Masonry / Cement Brick

The following specification has been written for Turlington Brick, which is a Portland cement based cement brick manufactured by Harvey Cement Products, Inc. The methods and standards shown below are strictly adhered to and ultimately represent a product free of bug holes, natural in appearance, with virtually limitless coloring potentials. Every unit is manufactured with an integral water repellent [Rainbloc®] which results in a water absorption rate of less than 13 lbs. per cubic foot on average when combined with the other aggregates and additives within our proprietary mix design.

PART 1: GENERAL

Submittal:
Submit full size color samples of each color specified from the manufacturer's color selection. Submit product literature, test reports, and letter of certification.

Quality Assurance:
All pre-finished concrete masonry units shall be "Turlington Brick" masonry units manufactured by Harvey Cement Products, Inc. All units shall conform to ASTM C-90 Load bearing Concrete Masonry Units and shall have a smooth finish as shown on the drawings.

Sample Panels:
Construct a separate sample panel (not part of the actual building) no less than 4' x 4' of units of each color and size to be used in the project. The cleaning agent and method should be performed at the time the sample panel is constructed. Walls built without approved field mock-ups constitute acceptance.

Delivery, Storage, and Handling:
Turlington Brick units shall be delivered to the job site on skids. Store in single-stacks on level ground and cover with waterproof covering to protect the units from weather. Units must be handled carefully to avoid breakage and chipping to the finished surfaces. Cover tops of walls each day after installation to keep open walls dry.

Part 2: Products

Product: **Turlington Brick**

Manufacturer: **Harvey Cement Products, Inc.**
16030 Park Avenue
Harvey, IL 60426

Part 3: Execution

Laying Masonry Walls:

Lay units using good concrete masonry practices***.*** Install only quality units, reject all defective units. Use uniform, carefully-tooled 3/8" wide joints on each finished side of the wall. Type N mortars are recommended, unless specifications are requiring type M or S mortars.

Installation:

Sills, copings, and caps of solid masonry units, or cast stone, are to be used. To be most effective, masonry, cast stone, and sills, copings and chimney caps should project beyond the face of the wall. They should have drips that are at least 1 inch (25mm) from the face of the wall, and have functional flashing and weep holes. In addition, all sills, copings and caps should be sloped a minimum ratio of 1:4 and be mechanically anchored to the wall. They should have properly sized, located, and sealed control joints when necessary.

Control Joints:

Control joints are recommended approximately every eighteen (18) feet, at inside corners, 4 ft. from one of the exterior corners, at jambs of windows or at change of heights. Application of Dow Corning sealant #495 is recommended at vertical joints. Listed below are some instances when control joints are necessary.

- When wall height changes.
- When wall thickness changes.
- Above movement joints in foundations and floors.
- Below movement joints in roofs and floors.
- Near one or both sides of door and window openings. A control joint

is usually placed at one side of an opening less than 6 ft wide and at both jambs of openings over 6 ft wide. Control joints can be away from the opening if adequate
tensile reinforcement is placed above, below, and beside wall openings.

Grouting Procedures:

High lift grout is not to be used under any circumstance with this product. High lift grouting is considered any grouting over 5'. Low lift grouting is required to prevent blowouts due to hydrostatic/lateral pressure. Furthermore, masonry standards require that the contractor never grout through a bondbeam. It is proper procedure to grout below the bondbeam course then separately above.

Horizontal Joint Reinforcement:

Continuous horizontal ladder joint reinforcement is required in the exterior wythe every 16 inches. **This is in addition to the adjustable joint reinforcement.**

Weep Holes and Vents:
Install weep holes and vents at proper intervals (32" O.C. and 2" high) at flashing, as well as at flashing over windows, doors, beams, and bond beams.

Veneer Anchors:
Use anchors that allow for vertical and horizontal movement.

Flashing:
Install flashing at locations shown in the plans and in strict accordance with the details and the best masonry flashing practices. Functional, non-punctured flashing and weep holes are to be used in the following circumstances: base of wall above grade, above openings in wall, shelf angles, lintels, wall-roofing intersections, chimneys, bay windows, and below window sills and copings. The flashing should be extended beyond the exterior face of the wall. The flashing should have end dams at its discontinuous ends, and properly sealed splices and laps at its joints.

Lighting:
Provide necessary lighting for masonry installation by placing all lighting a reasonable distance from the wall for even illumination. Do not use trough permanent lighting.

Cutting:
Make all unit cuts, including those for bonding, holes, boxes, etc., with motor-driven masonry saws, using either an abrasive or diamond blade. Cut neatly for best end results.

Mortar Joints:
All mortar joints should be tooled, concave, or v- joints.

Mortar Admixtures:
An integral liquid polymeric admixture designed specifically for use in a mortar mix, which becomes an integral part of the cement matrix being locked into the mortar to provide resistance to water penetration, should be added to the mortar to achieve a Class E rating when tested in a wall section in accordance with ASTM 514. The same brand of water repellent should be used in the mortar as is used in the cement brick to ensure compatibility. See manufacturer for further details.

Cleaning:

Clean cement brick components as the work progresses. Perform final cleaning as soon as possible after mortar has set and been tooled. Clean faces of brick at pointed joints immediately. Remove soiled areas, streaks and stains from prefinished panels using clean water and soft bristle brush, followed by clear water rinse. Protect units and surrounding masonry prior to cleaning. "Thoroughly pre-wet the area to be cleaned prior to applying an approved masonry cleaner. Consult with manufacturer of cleaner prior to using any harsh chemical cleaners in order insure that it will not damage the brick**.** Pre-wet any masonry below. Do not allow the masonry to dry before applying the diluted cleaning solution.

Inadequate pre-wetting of masonry has been proven to cause efflorescence and can also result in discoloring the units due to the removal of the cement/pigment paste." **Always** test the cleaner on a sample that is not part of the actual wall prior to using on the building for final cleaning. Do not use wire brushes, cleaning compounds with caustic chemicals, or other materials or methods which could damage, discolor, or etch the surface. Remove cleaner promptly by rinsing thoroughly with water.

Inspection:

The finished facing should be free from chips, cracks, crazing, and any imperfections that would take away from the overall appearance of the finished wall when viewed from a distance of twenty (20) feet at right angles to the wall with normal lighting.

Maintenance:

Turlington Brick units, once properly installed and cleaned need almost no maintenance other than routine cleaning with standard commercial grade cleaning agents. Graffiti, paint or dye stains may need special cleaning methods and products. Contact manufacturer for specific cleaning recommendations.

Turlington Brick Report of Tests:

Absorption	7.34 lbs./cu.ft.
Compressive Strength	2970 PSI
Density	126.26 lbs./cu.ft.

Turlington Brick units conform to ASTM C-90-02, Standard Specification for Load-Bearing Concrete Masonry Units.

NELSON TESTING LABORATORIES

Construction Materials
1210 REMINGTON ROAD
SCHAUMBURG, ILLINOIS 60173 USA
Phone (847) 882-1146 Fax (847) 882-1148
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www.nelsontesting.com

Harvey Cement Products, Inc.
16030 Park Avenue
Harvey, Illinois 60426-5069

June 10, 2009

Attn: Mr. Phil Steck

REPORT OF TESTS

SUBJECT: **Physical Analysis of Concrete Masonry Units**

PROJECT: Plant Research – Harvey Cement Products, Inc.

SPECIFICATION: ASTM C 90, "Specification for Loadbearing Concrete Masonry Units"

TEST METHODS: ASTM C 140, "Test Methods for Sampling and Testing Concrete Masonry Units and Related Units."

ASTM C 426, "Test Method for Linear Drying Shrinkage of Concrete Masonry Units"

NTL PROJECT #: 1072-09

TEST DATA

Test Date: May 27, 2009
Solids: 49.92%
Net Area: 59.00 sq.in.
Dimensions: Length (in.) 15.5 Width (in.) 7.625 Height (in.) 3.75

TEST RESULTS

Physical Properties	A	B	C	Average
Weight Dry (lbs.)	15.23	15.49	15.32	15.35
Absorption (%)	10.56	9.69	10.31	10.19
Absorption (lbs/cu.ft.)	12.58	11.69	12.35	12.21
Compressive Strength (PSI)	3200	3250	3360	3270
Density (lbs/cu.ft.)	119.08	120.69	119.80	119.86
Linear Shrinkage (%)	0.05	0.05	0.05	0.05

These tests show compliance with ASTM C 90, "Specification for Loadbearing Concrete Masonry Units".

Respectfully submitted,

NELSON TESTING LABORATORIES

Mark R. Nelson
President

NELSON TESTING LABORATORIES

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Harvey Cement Products, Inc.
16030 Park Avenue
Harvey, Illinois 60426-5069

May 1, 2007

Attn: Mr. Skip Steck

REPORT OF TESTS

SUBJECT:	**Physical Analysis of 8"x 8"x 16" Thru Wall Cast Stone**
PROJECT:	Plant Research – Harvey Cement Products
SPECIFICATION:	ASTM C 90, "Specification for Loadbearing Concrete Masonry Units"
TEST METHOD:	ASTM C 140, "Test Methods for Sampling and Testing Concrete Masonry Units and Related Units."
DATE OF TESTS:	April 27, 2007
NTL PROJECT #:	1057-07 (g)

TEST DATA

Solids: 52.3%
Net Area: 62.10 sq.in.
Dimensions: Length (in.) 15.5625 Width (in.) 7.625 Height (in.) 7.625

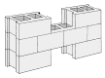
TEST RESULTS

Physical Properties	A	B	C	Average
Weight Dry (lbs.)	34.40	34.85	34.70	34.65
Absorption (%)	5.81	4.30	4.47	4.86
Absorption (lbs/cu.ft.)	7.34	5.46	5.64	6.15
Compressive Strength (PSI)	3100	3190	2977	3089
Density (lbs/cu.ft.)	126.27	126.80	126.26	126.44

Respectfully submitted,

NELSON TESTING LABORATORIES

Robert L. Nelson
Principal



SAFETY DATA SHEET

HARVEY CEMENT PRODUCTS, INC.

Section 1: INDENTIFICATION

1.1 PRODUCT IDENTIFIER:

Product Name: CMU Block, Turlington® Brick, and SavannaStone® Cast Stone
Product Code:

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Use: Construction material used in building and hardscape applications

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATE SHEET:

Name/Address: Harvey Cement Products, Inc.
16030 Park Ave,
Harvey, IL 60477

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Number: CHEMTREC 1 (800) 424-9300
Date of Preparation: November 27th, 2015 Version#:1.1

Section 2: HAZARD(S) INDENTIFICATION

2.1 CLASSIFICATION OF THE CHEMICAL ACCORDING TO OSHA HAZCOM 2012

- Skin Irritation 2
- Eye Irritation 2A
- Skin Sensitization 1
- Carcinogenicity 1A
- Specific target organ toxicity – Single Exposure 3
- Specific target organ toxicity – Repeated Exposure 1

2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM 2012

Hazard Pictograms:

Signal Word:	Danger
Hazard Statement:	Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Respirable dust may contain crystalline silica, known to cause cancer. May cause respiratory irritation. Causes damage to lungs through prolonged or repeated exposure.
PREVENTION:	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust.
RESPONSE:	If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If in the eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
STORAGE:	Not applicable.
DISPOSAL:	Dispose of unused or unwanted concrete products in accordance with all local, regional, national and international regulations.

2.3 ADDITIONAL INFORMATION

Hazards not otherwise classified: Not applicable.

47% of the mixture consists of ingredient(s) of unknown acute toxicity.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 MIXTURES

Ingredient	UN#	H / F / R / *	CAS No	Wt. %
Aggregates	N/A	N/A	N/A	15-60
Portland cement	N/A	1/0/0	65997-15-1	10-30
Ashes [residues]	N/A	N/A	68131-74-8	0.1-30
Slags, ferrous metal, blast furnace	N/A	N/A	65996-69-2	0.1-30
Water	N/A	N/A	7732-18-5	10-30
Silica, crystalline, quartz	N/A	N/A	14808-60-7	3-7
Ferric oxide	UN1376	1/0/0	1309-37-1	1-5
Calcium carbonate	N/A	1/0/0	1317-65-3	1-5
Calcium hydroxide	N/A	3/0/0	1305-62-0	1-5
Silica, amorphous, fumed	N/A	N/A	7631-86-9	1-5
Admixtures [organic and inorganic]	N/A	N/A	N/A	0.1-1

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of 1910.1200

*Per NOM-018-STPS-2000

Section 4: FIRST AID MEASURES

4.1 DESCRIPTION OF THE FIRST AID MEASURE

EYE: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If eye irritation persists: Get medical advice/attention.

SKIN: If irritation occurs, flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

INHALATION: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

INGESTION: Not a normal route of exposure. May result in obstruction and temporary irritation of the digestive tract.

4.3 INDICATIONS OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED

Note to Physicians: Symptoms may not appear immediately.

Specific Treatments: In case of accident or if you feel unwell, seek medical advice immediately [show the label or SDS where possible]

Section 5: FIRE-FIGHTING MEASURES

5.1 FLAMMABILITY

Flammability: Not flammable by WHMIS/OSHA/NOM-018-STPS-2000 criteria.

5.2 EXTINGUISHING MEDIA

Suitable Extinguishing Media: Treat for surrounding area.

Unsuitable Extinguishing Media: Not available.

5.3 SPECIAL HAZARDS ARISING FROM THE CHEMICAL

Products of combustion: May include, and are not limited to: oxides of carbon.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS

Keep upwind of fire. Wear full fire fighting turn-out gear [full Bunker gear] and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING-UP

Methods of Containment:	Pick up large pieces, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for Cleaning-Up:	Vacuum or sweep material and place in a disposal container. Use wet methods, if appropriate, to reduce the generation of dust. Provide ventilation if dust is generated.

Section 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Handling:	Avoid contact with skin and eyes. Good housekeeping is important to prevent accumulation of dust. Use wet methods, if appropriate, to reduce the generation of dust. The use of compressed air for cleaning clothing, equipment, etc. is not recommended. Handle with care. When using do not eat or drink. (See Section 8)
GENERAL HYGEINE ADVICE:	Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage: Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. (See section 10)

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Exposure Guidelines

OCCUPATIONAL EXPOSURE LIMITS

Ingredient	OSHA-PEL	ACGIH-TLV
Coarse Aggregate	Not available.	Not available.
Portland cement	15 mg/m3 (total); 5 mg/m3 (resp)	1 mg/m3 (no asbestos and <1% crystalline silica, respirable fraction)
Ashes (residues)	Not available.	Not available.
Slags, ferrous metal, blast furnace	Not available.	Not available.
Water	Not available.	Not available.
Silica, Crystalline, Quartz	((10 mg/m3)/(%SiO2+2)(resp)) ((30 mg/m3)/(%SiO2+2)(total)) ((250)/(%SiOs+5) mppcf (resp))	0.025 mg/m3
Ferric oxide	10 mg/m3	5 mg/m3 (iron oxide fume;dust as Fe)
Calcium carbonate	15 mg/m3 (total); 5mg/m3 (resp)	10 mg/m3
Calcium hydroxide	15 mg/m3 (total); 5 mg/m3 (resp)	5 mg/m3
Silica, amorphous, fumed	80 mg/m3/%SiO2	10 mg/m3
Admixtures (organic and inorganic)	Not available.	Not available.

8.2 EXPOSURE CONTROLS

Engineering Controls:	When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

8.3 INDIVIDUAL PROTECTIVE MEASURES

Personal Protective Equipment:

Eye Face Protection:	Safety glasses or goggles are recommended when using product
Skin Protection:	Hand Protection: Wear suitable gloves.
	Body Protection: Wear suitable protective clothing.
Respiratory Protection:	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).
Health/Safety Measures	Handle according to established industrial hygiene and safety practices. Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Fully cured and hydrated concrete.
Color:	Not available.
Odor:	Odorless.
Odor Threshold:	Not available.
Physical State:	Solid.
pH:	Not available

Melting/Freezing Point:	Not available.
Initial Boiling Point/Range:	Not available.
Flash Point:	Not available.
Evaporation Rate:	Not available.
Flammability:	Not flammable.
Lower Flammability	Not available.
Upper Flammability	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Relative Density:	Not available.
Solubility:	Insoluble.
Partition coefficient:	Not available.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	Not available.
Viscosity:	Not available.
Oxidizing Properties:	Not available.
Explosive Properties:	Not available.

Section 10: STABILITY AND REACTIVITY

10.1 REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2 CHEMICAL STABILITY

Stable under normal conditions of use.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

10.4 CONDITIONS TO AVOID

None known.

10.5 INCOMPATIBLE MATERIALS

None known.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None known.

Section 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Likely Routes of Exposure: Skin contact, eye contact, and inhalation.

Symptoms related to physical/chemical/toxicological characteristics:

Eye: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Skin: Causes skin irritation. Wear gloves when handling product to avoid drying and mechanical abrasion of the skin. May cause sensitization by skin contact.

Ingestion: Not a normal route of exposure. May result in obstruction and temporary irritation of the digestive tract.

Inhalation: Dust may cause respiratory tract irritation.

Acute Toxicity:

Ingredient	IDLH	LC50	LD50
Coarse aggregate	Not available	Not available	Not available
Portland cement	5000 mg/m3	Not available	Not available
Ashes (residues)	Not available.	Not available	Oral > 2000 mg/kg, rat
Slags, ferrous metal	Not available.	Not available	Not available
Water	Not available.	Inhalation 90000 mg/m3/4h, rat	Oral >90000 mg/kg, rat Dermal>90000 mg/kg, rabbit
Silica, crystalline, quartz	Ca [25 mg/m3 (cristobalite, tridymite); 50 mg/m3 (quartz, tripoli	Not available	Oral 500 mg/kg, rat
Ferric oxide	2500 mg Fe/m3	Not available	Oral>10000 mg/kg, rat
Calcium carbonate	Not available	Not available	Oral 6450 mg/kg, rat

Calcium hydroxide	Not available	Not available	Oral 7340 mg/kg, rat
Silica, amorphous, fumed	Not available	Inhalation >58.8 mg/l/1h, rat	Oral>5000 mg/kg, rat Dermal>2000 mg/kg, rabbit
Admixtures (organic/inorganic)	Not available	Not available	Not available

Calculated Overall Chemical Acute Toxicity Values

LC50 (inhalation)	LD50 (oral)	LD50 (dermal)
>5 mg/l/4h, rat	>2000 mg/kg, rat	>2000 mg/kg, rabbit

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)*
Coarse Aggregate	Not listed.
Portland Cement	G-A4
Ashes (residues)	Not listed
Slags, ferrous metal, blast furnace	Not listed
Water	Not listed
Silica, crystalline, quartz	G-A2, I-1, N-1, O, CP65
Ferric oxide	G-A4, I-3
Calcium carbonate	Not listed
Calcium hydroxide	Not listed
Silica, amorphous, fumed	I-3
Admixtures (organic and inorganic)	Not listed

*See Section 15 for more information

11.2 DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT-AND LONG-TERM EXPOSURE

Skin Corrosion/Irritation: Causes skin irritation

Serious Eye Damage/Irritation: Causes serious eye irritation

Respiratory Sensitization: Based on available data, the classification criteria are not met.

Skin Sensitization: May cause an allergic skin reaction.

STOT-Single Exposure: Dust may cause respiratory tract irritation.

Chronic Health Effects: Not available.

Carcinogenicity: Respirable dust may contain crystalline silica, known to cause cancer.

Germ Cell Mutagenicity: Based on available data, the classification criteria are not met.

Reproductive Toxicity: Not available.

Developmental: Based on available data, the classification criteria are not met.

Teratogenicity: Based on available data, the classification criteria are not met.

Embryotoxicity:	Based on available data, the classification criteria are not met.
Fertility:	Based on available data, the classification criteria are not met.
STOT-Repeated Exposure:	Causes damage to lungs through prolonged or repeated exposure. Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed in the International Agency for Research on Cancer (IARC) and National Toxicity Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.
Aspiration Hazard:	Based on the available data, the classification criteria are not met.
Toxic Synergistic Materials:	Not available.
Other Information:	Not available.

Section 12: ECOLOGICAL INFORMATION

12.1 ECOTOXITY

Acute/Chronic Toxicity: No ecological consideration when used according to directions.

12.2 PERSISTENCE AND DEGRADABILITY

Not available.

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Not available.

12.4 MOBILITY IN SOIL

Not available.

12.5 OTHER ADVERSE EFFECTS

These products are generally considered chemically inert in the environment.

ENVIRONMENTAL EFFECT ON AQUATIC HABITAT:

Uncured cementitious materials or finely divided (crushed) concrete material is an environmental hazard, which may adversely affect fish and other wildlife. Do not use crushed concrete as fill near any aquatic habitat. Discharge of large quantities to any waterways would be expected to cause significant consequence on aquatic habitat.

Section 13: DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Disposal Method:	**This material must be disposed of in accordance with all local, state, provincial, and federal regulations.**
Other disposal recommendations:	**Not available.**

Section 14: TRANSPORT INFORMATION

14.1 UN NUMBER

DOT	TDG	NOM-004-SCT2-1994
Not regulated	Not regulated	Not regulated

14.2 UN PROPER SHIPPING NAME

DOT	TDG	NOM-004-SCT2-1994
Not applicable	Not applicable	Not applicable

14.3 TRANSPORT HAZARD CLASS (ES)

DOT	TDG	NOM-004-SCT2-1994
Not applicable	Not applicable	Not applicable

14.4 PACKING GROUP

DOT	TDG	NOM-004-SCT2-1994
Not applicable	Not applicable	Not applicable

14.5 ENVIRONMENTAL HAZARDS

Not available.

14.6 TRASNPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not available.

14.7 SPECIAL PRECAUTIONS FOR USER

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

Section 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATIONS SPECIFIC FOR THE CHEMICAL

US: SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200 HazCom 2012)

SARA TITLE III

Ingredient	Section 302 (EHS) TPQ (lbs)	Section 304 EHS RQ (lbs)	CERCLA RQ (lbs)	Section 313
Coarse aggregate	Not listed.	Not listed.	Not listed.	Not listed.
Portland cement	Not listed.	Not listed.	Not listed.	Not listed.
Ashes (residues)	Not listed.	Not listed.	Not listed.	Not listed.
Slags, ferrous metal, blast furnace	Not listed.	Not listed.	Not listed.	Not listed.
Water	Not listed.	Not listed.	Not listed.	Not listed.
Silica, crystalline, quartz	Not listed.	Not listed.	Not listed.	Not listed.
Ferric oxide	Not listed.	Not listed.	Not listed.	Not listed.
Calcium carbonate	Not listed.	Not listed.	Not listed.	Not listed.
Calcium hydroxide	Not listed.	Not listed.	Not listed.	Not listed.
Silica, amorphous, fumed	Not listed.	Not listed.	Not listed.	Not listed.
Admixtures (organic/inorganic)	Not listed.	Not listed.	Not listed.	Not listed.

State Regulations

California Proposition 65 Warning: **Dry cutting, sanding or grinding of concrete products will expose you to respirable crystalline silica which is "known in the State of California to cause cancer and to contain other substances which are known to the State of California to cause cancer, birth defects and other reproductive harm."**

Global Inventories:

Ingredient	Canada DSL/NDSL	USA TSCA
Coarse aggregate	Not available.	Not available.
Portland cement	DSL	Yes.
Ashes (residues)	DSL	Yes.

Slags, ferrous metal, furnace	**DSL**	**Yes.**
Water	**DSL**	**Yes.**
Silica, crystalline, quartz	**DSL**	**Yes.**
Ferric oxide	**DSL**	**Yes.**
Calcium carbonate	**NDSL**	**Yes.**
Calcium hydroxide	**DSL**	**Yes.**
Silica, amorphous, fumed	**DSL**	**Yes.**
Admixtures (organic/inorganic)	**Not available.**	**Not available.**

NFPA-National Fire Protection Association

Health:	**2**
Fire:	**0**
Reactivity:	**0**

HMIS-Hazardous Materials Identification System:

Health:	**2***
Fire:	**0**
Physical Hazard:	**0**

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

SOURCE AGENCY CARCINOGEN CLASSICATIONS

CP65 California Proposition 65

OSHA(O) Occupational Safety and Health Administration

ACGIH G) American Conference of Governmental Industrial Hygienists

- **A1 Confirmed human carcinogen**
- **A2 Suspected human carcinogen**
- **A3 Animal carcinogen**
- **A4 Not classifiable as a human carcinogen**
- **A5 Not suspected as a human carcinogen**

IARC (I) International Agency for Research on Cancer

1. **The agent (mixture) is carcinogenic to humans.**
2. **A. The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.**
   B. The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
3. **The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.**
4. **The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.**

NTP(N) **National Toxicology Program**

1. **Known to be carcinogens**
2. **Reasonably anticipated to be carcinogens.**

Section 16: OTHER INFORMATION

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END OF SAFETY DATA SHEET

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