

**MATERIAL SAFETY DATA SHEET**

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NON-TRANSPORTATION  
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 VOLTERRA INFORMATION PHONE: (602) 258-7373

**1. CHEMICAL PRODUCT IDENTIFICATION:**

PRODUCT NAME.....: Tivoli Manufactured Stone Veneer  
 PRODUCT CODE.....: VAP#0017  
 CHEMICAL FAMILY.....: Concrete (Cured)  
 CHEMICAL NAME.....: Pre-cast Concrete  
 SYNONYMS.....: Decorative Concrete Brick/Block, Veneer Stone

**2. COMPOSITION/INFORMATION ON INGREDIENTS:**

INGREDIENT NAME	CAS NUMBER	(LESS THAN) CONCENTRATION (%)
Portland Cement	65997-15-1	<35.0%
Pumice	1332-09-8	<65.0%
Iron Oxide	1309-37-1	< 5.0%
Non-Hazardous Material	N/A	<20.0%

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**3. HAZARDS IDENTIFICATION:**

POTENTIAL HEALTH EFFECTS:

ROUTE(S) OF ENTRY.....: Inhalation; Skin Contact; Eye Contact.

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:

ACUTE INHALATION.....: Coughing and irritation of the throat and bronchiole tubes may occur upon exposure to dust.

CHRONIC INHALATION.....: Silicosis of the lungs and bronchitis may be observed. Exposure to crystalline silica dust may cause cancer.

ACUTE SKIN CONTACT.....: Irritation, drying and cracking of the skin may occur.

CHRONIC SKIN CONTACT.....: Irritation, cracking of the skin.

ACUTE EYE CONTACT.....: Irritation from scratching of the cornea may occur.

CHRONIC EYE CONTACT.....: Scratching of the cornea may occur. Loss of sight could occur from prolonged and excessive exposure.

ACUTE INGESTION.....: Irritation of the esophagus.

CHRONIC INGESTION.....: Not Determined.

CARCINOGENICITY.(IARC).....: Yes.

Explanation of Carcinogenicity.....: IARC considers crystalline silica to be a carcinogen.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Asthma and most other respiratory ailments.

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**4. FIRST AID MEASURES:**

- FIRST AID FOR EYES.....: Flush eyes with clean of water for 15 minutes. Seek immediate medical attention.
- FIRST AID FOR SKIN.....: Wash skin with water. If irritation persists, seek medical attention.
- FIRST AID FOR INHALATION.....: Relocate to a clean air environment. If problems breathing are encountered, seek immediate medical attention.
- FIRST AID FOR INGESTION.....: Do not induce vomiting. Victim should drink copious amounts of water and seek medical attention.

**NOTE TO PHYSICIAN..:**

EYES: Check for scratching on the cornea, and treat accordingly.

SKIN: None.

INGESTION: None

INHALATION: None

**5. FIRE FIGHTING MEASURES:**

- FLASH POINT.....: Not Applicable - Setaflash(ASTM D-3243, D-3278, D-3828)
- FLAMMABLE LIMITS.....: UPPER EXPLOSIVE LIMIT (UEL)(%): Not Flammable  
LOWER EXPLOSIVE LIMIT (LEL)(%): Not Flammable
- AUTO-IGNITION TEMPERATURE:.....: Not Flammable - DIN 51794
- EXTINGUISHING MEDIA:.....: None Determined.
- SPECIAL FIRE FIGHTING PROCEDURES....: None.

**6. ACCIDENTAL RELEASE MEASURES:**

- SPILL OR LEAK PROCEDURES.....: Material should be swept and placed into a suitable container for disposal.

**7. HANDLING AND STORAGE:**

- STORAGE TEMPERATURE (MIN/MAX).....: 32°F ( 0°C) / Max Not Determined
- SHELF LIFE.....: Indefinitely at 77°F (25°C) when kept dry.
- SPECIAL SENSITIVITY.....: None.
- HANDLING/STORAGE PRECAUTIONS.....: Handle with adequate ventilation for nuisance dust. See OSHA 29CFR1910.94 (Ventilation) & 29CFR1910.1000 (Air Contaminants)

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**8. PERSONAL PROTECTION:**

REQUIRED WORK/HYGIENE PROCEDURES:

EYE PROTECTION REQUIREMENTS.....: Safety glasses (ANSI Z 87.1)

SKIN PROTECTION REQUIREMENTS.....: Gloves

VENTILATION REQUIREMENTS.....: Light air circulation

RESPIRATOR REQUIREMENTS.....: Dust Mask

ADDITIONAL PROTECTIVE MEASURES.....: Not Determined

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

PHYSICAL FORM.....: Solid mineral/stone/rock  
 COLOR.....: Light Gray/white  
 ODOR.....: Negligible-Nearly Odorless  
 ODOR THRESHOLD.....: Not Established  
 MOLECULAR WEIGHT.....: Not Established  
 pH.....: 11.0 – 12.0 s.u.  
 BOILING POINT.....: Not Applicable  
 MELTING/FREEZING POINT....: 2400°F  
 VISCOSITY.....: Not Determined  
 SOLUBILITY IN WATER.....: Slightly  
 SPECIFIC GRAVITY.....: 2.2- 3.3 g/cc  
 VAPOR PRESSURE.....: Not Applicable  
 VAPOR DENSITY.....: Not established (Air = 1)  
 VOC BY WEIGHT.....: Not Applicable

**10. STABILITY AND REACTIVITY:**

STABILITY.....: Very Stable in almost all conditions. No unstable ` conditions have been determined.

HAZARDOUS POLYMERIZATION.....: Polymerization cannot occur under any conditions.

INCOMPATIBILITIES.....: Strong bases, Strong Acids. Hydrofluoric Acid.

INSTABILITY CONDITIONS.....: Not Determined

DECOMPOSITION PRODUCTS.....: Not Determined

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**11. TOXICOLOGICAL INFORMATION:**

ACUTE TOXICITY

ORAL LD50.....: Not Established

DERMAL LD50.....: Not Established

INHALATION LC50...: Not Established

EYE EFFECTS.....: Irritation and redness.

SKIN EFFECTS.....: Drying and cracking of the skin.

SENSITIZATION.....: None observed.

OTHER ACUTE EFFECTS: Not Determined

OTHER TOXICITY DATA.....: None

**12. ECOLOGICAL INFORMATION:**

NO ECOLOGICAL INFORMATION AVAILABLE

**13. DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHOD.....: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Incineration is the preferred method. If incinerated, toxic and corrosive combustion gases must be properly handled.

**14. TRANSPORTATION INFORMATION:**

TECHNICAL SHIPPING NAME.....: Not regulated by this mode of transportation.

FREIGHT CLASS BULK.....: Not Required

FREIGHT CLASS PACKAGE.....: Not Required

PRODUCT LABEL.....: Not Required

DOT (DOMESTIC SURFACE)

PROPER SHIPPING NAME.....: Pre-cast Concrete is not hazardous under DOT regulations.

HAZARD CLASS OR DIVISION.....: Not Required

UN/NA NUMBER.....: Not Required

PACKING GROUP.....: Not Required

DOT PRODUCT RQ lbs (kgs).....: Not Established

HAZARD LABEL(s).....: Not Required

HAZARD PLACARD(s).....: Not Required

**14. TRANSPORTATION INFORMATION: (Continued)**IMO / IMDG CODE (OCEAN)

HAZARD CLASS DIVISION NUMBER.....: Not Regulated

ICAO / IATA (AIR)

HAZARD CLASS DIVISION NUMBER.....: Not Regulated

**15. REGULATORY INFORMATION:**

OSHA STATUS.....: Crystalline Silica is considered a hazardous chemical under this regulation and should be included in the employer's hazard communication program.

TSCA STATUS.....: Crystalline Silica in Pre-cast Concrete are on the TSCA inventory list.

CERCLA REPORTABLE QUANTITY...: Not listed.

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES..: Not Regulated

SECTION 311/312

HAZARD CATEGORIES.....: Crystalline Silica qualifies as a hazardous substance with delayed health effects.

SECTION 313

TOXIC CHEMICALS.....: Not subject to reporting requirements under Section 313.

RCRA STATUS.....: Not Regulated

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

<u>COMPONENT NAME &amp; CAS NUMBER</u>	<u>CONCENTRATION</u>	<u>STATE CODE</u>
Silica Crystalline (Silicon Dioxide) [7631-86-9]	<5.0%	CA, MA

**CALIFORNIA PROPOSITION 65**

This product contains crystalline silica, a substance known to the State of California to cause cancer. This product also may contain trace amounts of heavy metals known to the State of California to cause cancer, birth defects or other reproductive harm.

**MASSACHUSETTS SUBSTANCE LIST (MSL)**

Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. To the best of our knowledge, this product contains no substances at a level which could require reporting under the statute.

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**16. OTHER INFORMATION:**

HMIS RATINGS:            Health    Flammability    Reactivity

2\*                    0                    0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

\*=Chronic Health Hazard

VOLTERRA's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS ratings are provided by VOLTERRA as a customer service.

REASON FOR ISSUE.....: 1<sup>st</sup> Issue

PREPARED BY.....: A.D. Skelhorn.

ISSUE DATE.....: 03/10/2007

SUPERSEDES DATE.....: N/A

MSDS NUMBER. ....: VAP#0017

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