

# Material Safety Data Sheet

Material Name: Precast Stone Veneer

## \*\*\* Section 1 – Chemical Product and Company Identification \*\*\*

### Manufacturer Information

Eldorado Stone, LLC  
1410 Grand Ave.  
San Marcos, CA 92069

Phone: 760-736-3232  
Emergency #: 800-925-1491

## \*\*\* Section 2 – Composition / Information on Ingredients \*\*\*

CAS #	Component*	Percent
1332-09-8	Pumice	40-60
65997-15-1	Portland Cement	30-40
14808-60-7	Crystalline Silica (Quartz)	5-30
71243-67-9	Pozzolan Grade Coal Fly Ash**	0-30
68334-37-2	Expanded Shale	0-40
1310-73-2	Sodium Hydroxide	0-10
1309-37-1	Iron Oxide	0-5
1308-38-9	Chromium (III) Oxide	0-3

\* The ingredients listed above are combined with water to produce a concrete mix that cures and hardens into a precast concrete veneer product. Various reactions occur during the mixing and curing process. Sodium hydroxide may exist only as a transient reactant.

\*\* Not listed specifically by substance name. Exposure to fly ash aluminosilicate glass dust may be covered by inert or nuisance dust limits of 15 mg/m<sup>3</sup> for total dust and 5 mg/m<sup>3</sup> for respirable portion.

## \*\*\* Section 3 – Hazards Identification \*\*\*

### Emergency Overview

No unusual conditions are expected from this product. Inhalation of dusts produced during dry cutting, sawing, grinding, sanding, breaking, or drilling of this product may cause irritation of the respiratory tract.

### Potential Health Effects: Eyes

Dust from this product may cause slight irritation to the eyes including redness, tearing and blurred vision. Such exposures require immediate first aid (see Section 4) and may require medical attention to prevent damage to the eye.

### Potential Health Effects: Skin

Dust from this product may cause itching and short-term irritation.

### Potential Health Effects: Ingestion

Ingestion of this product is unlikely under normal use. However, ingestion of product may produce gastrointestinal irritation and disturbances.

### Potential Health Effects: Inhalation

Exposure to dust generated from Precast Stone Veneer in excess of the applicable TLV or PELs (see Section 2) may cause or aggravate other lung conditions. Concrete Precast Stone Veneer contain mineral dust and crystalline silica which may be released as dust when dry cutting, sawing, grinding, sanding, breaking or drilling. Dusts of this product may cause irritation of the nose, throat, and respiratory tract by mechanical abrasion. Prolonged and repeated inhalation of respirable crystalline silica can cause silicosis, a chronic lung disease characterized by fibrosis and scarring of the lung tissue resulting in a decrease in lung function, breathlessness, wheezing, coughing and sputum production.

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Short-term overexposures to extremely high concentrations of respirable crystalline silica can produce acute silicosis. Acute silicosis is a rapidly progressive, incurable lung disease that can be fatal; over exposure has reportedly caused death within 1 to 2 years. Symptoms include (but are not limited to) shortness of breath, cough, fever, weight loss, and chest pain.

## Medical Conditions Aggravated by Exposure

Chronic respiratory or skin conditions may temporarily worsen from exposure to dust from this product. Precast stone veneer is not listed as a carcinogen by NTP, OSHA, or IARC. It contains crystalline silica, and may contain trace amounts of substances listed as carcinogens by these organizations: hexavalent chromium, lead compounds, mercury compounds, nickel compounds, arsenic, cadmium and cadmium compounds, cobalt II oxide, aniline, and possibility other chemicals which may result in exposures which require the following warning pursuant to California Proposition 65.

**HMIS RATINGS: Health: 1 Fire: 0 Reactivity: 0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

## \* \* \* Section 4 – First Aid Measures \* \* \*

### First Aid: Eyes

Immediately flush eye(s) with plenty of clean water for at least 15 minutes, while holding the eyelid(s) open. Occasionally lift the eyelid(s) to ensure thorough rinsing to remove all particles. Beyond flushing, do not attempt to remove material from the eye(s). Contact a physician if irritation persists or later develops.

### First Aid: Skin

For skin contact, wash with soap and water. Contact a physician if irritation persists or later develops.

### First Aid: Ingestion

Ingestion of this material is unlikely. If it does occur, watch the person for several days to make sure that partial or complete intestinal obstruction does not occur. Do not induce vomiting unless directed to do so by medical personnel.

### First Aid: Inhalation

Do not induce vomiting. If inhaled, immediately remove the affected person to fresh air. Dust in throat and nasal passages should clear spontaneously. Contact a physician if irritation persists or later develops.

## \* \* \* Section 5 – Fire Fighting Measures \* \* \*

### General Fire Hazards

See Section 9 for Flammability Properties.  
None identified

### Hazardous Combustion Products

None

### Extinguishing Media

This product is non-combustible. Use any extinguishing media appropriate for the surrounding fires.

### Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

**NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

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## \*\*\* Section 6 – Accidental Release Measures \*\*\*

### Containment Procedures

Scoop up materials and put into a suitable container for disposal as a non-hazardous waste. Dust from dry cutting, sawing, grinding, sanding, or drilling of this material will settle out of the air. If concentrated on land, it can then be scooped up for disposal as a non-hazardous waste.

### Clean-Up Procedures

Sweep up or gather material and place in appropriate container for disposal. Wash spill area thoroughly; do not wash into storm drains or water way. Wear appropriate protective equipment during cleanup. Avoid the generation of dusts during clean up.

### Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

### Special Procedures

None

## \*\*\* Section 7 – Handling and Storage \*\*\*

### Handling Procedures

No special procedures are required for this material. Avoid breathing dusts from this material. Avoid dust contact with eyes and skin. Minimize generation of dusts. Promptly remove dusty clothing and launder before use.

### Storage Procedures

No special procedures are required for this material.

## \*\*\* Section 8 – Exposure Controls / Personal Protection\*\*\*

### A: General Product Information

Concrete stone veneer contains mineral dust and crystalline silica, which may be released as dust when dry cutting, sawing, grinding, sanding, or drilling. Follow all applicable exposure limits if dusts are generated.

### B: Component Exposure Limits\*

#### Portland Cement (65997-15-1)

ACGIH: 10 mg/m<sup>3</sup> TWA (particulate matter containing no asbestos and <1% crystalline silica)

OSHA: 10 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable fraction)

NIOSH: 10 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable dust)

#### Crystalline Silica (Quartz) (14808-60-7)

ACGIH: 0.025 mg/m<sup>3</sup> TWA (respirable fraction)

OSHA: 0.1 mg/ m<sup>3</sup> TWA (respirable dust)

NIOSH: 0.05 mg/ m<sup>3</sup> TWA (respirable dust)

#### Sodium Hydroxide (1310-73—2)

ACGIH: 2 mg/ m<sup>3</sup> Ceiling

OSHA: 2 mg/ m<sup>3</sup> Ceiling

NIOSH: 2 mg/ m<sup>3</sup> Ceiling

#### Iron Oxide (1309-37-1)

ACGIH: 5 mg/ m<sup>3</sup> TWA (respirable fraction)

OSHA: 10 mg/ m<sup>3</sup> TWA (fume)

NIOSH: 5 mg/ m<sup>3</sup> TWA (dust and fume, as Fe)

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**Pozzolan Grade Coal Fly Ash (71243-67-9)\*\***

ACGIH: Not listed  
OSHA: Not listed  
NIOSH: Not Listed

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\*\* Not listed specifically by substance name. Exposure to fly ash aluminosilicate glass dust may be covered by inert or nuisance dust limits of 15 mg/m<sup>3</sup> for total dust and 5 mg/m<sup>3</sup> for respirable portion.

## Engineering Controls

ACGIH and OSHA have determined that adverse effects are not likely to occur in the workplace provided exposure levels do not exceed the appropriate TLV/PEL. However, because of the wide variation in individual susceptibility, lower exposure limits may be appropriate for some individuals, including persons with pre-existing medical conditions such as those described below.

### Ventilation:

General dilution ventilation and/or local exhaust ventilation should be provided as necessary to maintain exposures below occupational exposure limits. Dust collection systems may be necessary in some operations.

### Local Exhaust Ventilation:

When dry cutting, sawing, grinding, breaking, or drilling precast stone veneer, use sufficient local exhaust to reduce the level of respirable dust to the applicable standards set forth in Section II. See ACGIH "Industrial Ventilation, A Manual of Recommended Practice." Latest edition.

### Work/Hygienic Practices:

Avoid creating and breathing dust. Do not eat, drink, or smoke in the work area.

### Other Control Measures:

Respirable dust and quartz levels should be monitored regularly. Dust and quartz levels in excess of appropriate exposure limits should be reduced by feasible engineering controls, including (but not limited to) wet sanding, wet suppression, ventilation, and process enclosures. Respirators must be worn when such controls are not feasible or do not completely control dust generation.

## PERSONAL PROTECTIVE EQUIPMENT

### Personal Protective Equipment: Eyes/Face

When engaged in activities where particulate matter (dust) could contact the eye, wear safety glasses with side shields. Face shields should also be used when dry sawing precast stone veneer. Dust goggles should be worn when excessively (visible) dusty conditions are present or are anticipated, (See ANSI Z87.1). Contact lenses should not be worn when dry cutting, sawing, grinding, sanding, breaking, or drilling precast stone veneer.

### Personal Protective Equipment: Skin

Wear leather / PVC or other appropriate work glove for type of operation.

### Personal Protective Equipment: Respiratory

A properly fitted NIOSH or MSHA approved particulate filter respirator should be used in the in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard (29 CFR 1910.134) to control exposures when ventilation or other controls (engineering or administrative) are inadequate or discomfort or irritation is experienced. Respirator and / or filter selection should be based on American National Standards Institute (ANSI) Standard Z88.2 Practices for Respiratory Protection.

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Use respiratory protection in accordance with your company's respiratory protection program, local and OSHA regulations.

## Personal Protective Equipment: General

Head Protection:

When working in areas where there is potential for injury to the head from falling objects, wear protective helmets that comply with ANSI Z89.1 (latest edition).

Foot Protection:

Wear appropriate foot protection that complies with ANSI Z41 (latest edition).

## \*\*\* Section 9 – Physical & Chemical Properties \*\*\*

<b>Appearance:</b>	Cured concrete product of various shapes, sizes and colors	<b>Odor:</b>	NA
<b>Physical State:</b>	Solid	<b>pH:</b>	NA
<b>Vapor Pressure:</b>	NA	<b>Vapor Density:</b>	NA
<b>Boiling Point:</b>	NA	<b>Melting Point:</b>	NA
<b>Solubility (H<sub>2</sub>O):</b>	NA	<b>Specific Gravity:</b>	NA
<b>Evaporation Rate:</b>	NA	<b>VOC:</b>	NA
<b>Octanol/H<sub>2</sub>O Coeff.:</b>	NA	<b>Flash Point:</b>	NA
<b>Flash Point Method:</b>	NA	<b>Upper Flammability Limit (UFL):</b>	NA
<b>Lower Flammability Limit (LFL):</b>	NA	<b>Burning Rate:</b>	NA
<b>Auto Ignition:</b>	NA		

## \*\*\* Section 10 – Chemical Stability & Reactive Information \*\*\*

### Stability

This is a stable material.

### Chemical Stability: Conditions to Avoid

Avoid dispersion of dust in air.

### Incompatibility

None expected.

### Hazardous Decomposition

None

**Possibility of Hazardous Reactions:** Will not occur

## \*\*\* Section 11 – Toxicological Information \*\*\*

### Acute Dose Effects

#### A: General Product Information

Dusts from dry cutting, sawing, grinding, sanding, breaking, or drilling of this product may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. Higher exposures may cause difficulty breathing, congestion, and chest tightness.

#### B: Component Analysis - LD<sub>50</sub>/LC<sub>50</sub>

**Crystalline Silica (Quartz) (14808-60-7)**

Oral LD<sub>50</sub> Rat: 500 mg/kg

### Carcinogenicity

#### A: General Product Information

CRYSTALLINE SILICA: The International Agency for Research on Cancer (IARC) concluded that

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there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "sufficient evidence in experimental animals for the carcinogenicity of quartz and cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)." The IARC evaluation noted that all "carcinogenicity was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs."

IARC noted that increased rates of lung cancer were reported among some workers in ore-mines, quarries, foundries, ceramics, granite and stone cutting industries. The workers in some of these occupational studies were exposed to other potential respiratory carcinogens such as arsenic, radon, diesel exhaust, polycyclic aromatic hydrocarbons or cadmium. The IARC reviewed animal studies and concluded that there is sufficient evidence in experimental animals for the carcinogenicity of quartz.

Silica-crystalline quartz has resulted in liver, blood, and lung tumors in rats by inhalation, intraperitoneal and intravenous injection, intratracheal, and intrapleural administration.

## B: Component Carcinogenicity

### Crystalline Silica (Quartz) (14808-60-7)

ACGIH: A-2 – Suspected Human Carcinogen

OSHA: potential occupational carcinogen

NTP: Known Human Carcinogen (Select Carcinogen)

IARC: Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources) (Group 1 [carcinogenic to humans])

## \*\*\* Section 12 – Ecological Information \*\*\*

### Ecotoxicity:

#### A. General Product Information

No data available for this concrete product.

## \*\*\* Section 13 – Disposal Considerations \*\*\*

### US EPA Waste Number & Descriptions

#### Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

#### Disposal Instructions

Precast Stone Veneer scrap is classified as a non-hazardous solid waste for disposal. Dispose of in accordance with existing federal, state and local environmental regulations.

Scrap Precast Stone Veneer as supplied do not meet any of the RCRA characteristics of hazardous waste (Ignitable, Corrosive, Reactive, or Toxic), nor are they listed Hazardous Waste [40 CFR § 261]

Dispose of packaging material by either recycling or at an appropriate landfill. See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

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<b>*** Section 14 – Transportation Information ***</b>
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**US DOT Information**

**Shipping Name:** Not Regulated for transport

<b>*** Section 15 – Regulatory Information ***</b>
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**US Federal Regulations**

**A: General Product Information:** No information available for the product.

**State Regulations**

**A: General Product Information**

No information available for the product.

**B: Component Analysis - State**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Portland Cement	65997-15-1	No	Yes	Yes	Yes	Yes	Yes
Crystalline Silica (Quartz)	14808-60-7	No	Yes	Yes	Yes	Yes	Yes
Sodium Hydroxide	1310-73-2	Yes	Yes	Yes	Yes	Yes	Yes
Iron Oxide	1309-37-1	Yes	Yes	Yes	Yes	Yes	Yes
Chromium (III) Oxide	1308-38-9	No	Yes	No	Yes	No	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

**Component Analysis - WHMIS IDL**

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Crystalline Silica (Quartz)	14808-60-7	1 %
Sodium Hydroxide	1310-73-2	1 %
Iron Oxide	1309-37-1	1 %
Chromium (III) Oxide	1308-38-9	1 %

**Additional Regulatory Information**

**Component Analysis – Inventory**

Component	CAS #	TSCA	CAN	EEC
Pumice	1332-09-8	Yes	DSL	No
Portland Cement	65997-15-1	Yes	DSL	EINECS
Expanded Shale	68334-37-2	yes	DSL	No
Crystalline Silica (Quartz)	14808-60-7	Yes	DSL	EINECS
Pozzolan Grade Coal Fly Ash	71243-67-9	Yes	Unknown	Unknown
Sodium Hydroxide	1310-73-2	Yes	DSL	EINECS
Iron Oxide	1309-37-1	Yes	DSL	EINECS
Chromium (III) Oxide	1308-38-9	Yes	DSL	EINECS

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## \*\*\* Section 15 – Regulatory Information \*\*\*

### Other Information

This MSDS provides information on various types of Eldorado Stone precast stone veneer products. THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON THE DATA REASONABLY BELIEVED TO BE CORRECT. HOWEVER, NO GUARANTEE OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, IS MADE WITH RESPECT TO THE INFORMATION CONTAINED HEREIN. THE PREPARER ACCEPTS NO RESPONSIBILITY AND DISCLAIMS ALL LIABILITY FOR ANY HARMFUL HEALTH EFFECTS WHICH MAY BE CAUSED BY EXPOSURE TO AIRBORNE DUST PARTICLES CREATED BY DRY CUTTING, SAWING, GRINDING, SANDING, BREAKING, OR DRILLING OF PRECAST STONE VENEER, NOR ANY OTHER INJURY RESULTING FROM THEIR USE. CUSTOMERS / USERS OF PRECAST STONE VENEER MUST COMPLY WITH ALL APPLICABLE HEALTH, SAFETY, AND ENVIRONMENTAL LAWS, REGULATIONS, AND ORDERS APPLICABLE TO THE SAFE HANDLING AND USE OF THE PRODUCT, TO DETERMINE.

Prepared by: Eldorado Stone

### Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists  
CAS #: Chemical Abstracts Service Registry Number  
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act  
CFR = Code of Federal Regulations  
DSL = Canadian Domestic Substance List  
EPA = Environmental Protection Agency  
HMIS = Hazardous Material Identification System  
IARC = International Agency for Research on Cancer  
LC50 = The concentration of material in air expected to kill 50% of a group of test animals  
LD<sub>50</sub> = The lethal dose expected to kill 50% of a group of test animals  
mg/m<sup>3</sup> = milligrams of substance per cubic meter  
NFPA = National Fire Protection Association  
NIOSH = National Institute for Occupational Safety and Health  
NTP = National Toxicology Program  
OSHA = Occupational Safety and Health Administration  
PEL = Permissible Exposure Limit  
SARA = Superfund Amendments and Reauthorization Act  
TSCA = Toxic Substance Control Act  
TLV = Threshold Limit Value  
TWA = Time Weighted Average  
WHMIS = Workplace Hazardous Materials Information System