craftstone
manufactured stone veneer

Material Safety Data Sheet

Chemical Name or Synonym: None

II. Chemical Composition

Component	CAS#	%Composition
Expanded Slate & Clay	N/A	65
Portland Cement	65997-15-1	33
Iron Oxide	1309-37-1	1
Sand	14808-60-7	<1
Propriety Component 1	Trade Secret	<1
Propriety Component 2	Trade Secret	<1
Propriety Component 3	Trade Secret	<1

III. Hazards Identification

Potential Health Effects:

Acute Eye:

Dusts may cause irritation.

Acute Skin:

Dusts may cause irritation.

Acute Inhalation:

May cause respiratory irritation or breathing difficulties.

Acute ingestion:

No adverse effects anticipated under normal use conditions.

Chronic effects:

Crystalline silica is a potential trace level contaminant in cement. The adverse health effects from crystalline silica exposure - silicosis, cancer, scleroderma, tuberculosis, and nephrotoxicity - are chronic effects.

IV. First Aid Measures

First Aid Measures for Accidental:

Eye Exposure:

Immediately flush eyes with copious amounts of water for at least 15 minutes. If irritation develops, SEEK MEDICAL ATTENTION.

Skin Exposure:

Flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention. Wash clothing and thoroughly clean shoes before reuse.

Inhalation:

Move to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen. SEEK MEDICAL ATTENTION.

Ingestion:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. SEEK MEDICAL ATTENTION.

V. Fire Fighting Measures

Fire Hazard Data:

Auto ignition: ND

Flash Point:ND

Flammability Limits (vol/vol%):

Lower: ND Upper: ND

Extinguishing Media:

Use extinguishing media appropriate for surrounding fire.

Special Fire Fighting Procedures:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Unusual Fire and Explosion Hazards:

None

Hazardous Decomposition Materials (Under Fire Conditions):

None

VI. Accidental Release Measures

Cleanup and Disposal of Spill:

Contain dry material and place in waste container. Avoid dust generation and discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.

VII. Handling and Storage

Handling/Storage:

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Remove dusty clothing or clothing which is wet with fluids and launder before reuse.

VIII. Exposure Controls / Personal Protection

Exposure Guidelines:

Component	ACGIH	NIOSH	OSHA-PELs
Expanded Slate & Clay	3 mg/m3, respirable	ND	ND
Portland Cement	0.05 mg/m3, respirable	ND	10 mg/m3 respirable/% silica +2
Iron Oxide	0.1 mg/m3	ND	15 mg/m3 (total dust) 5 mg/m3 (respirable)
Sand	0.1 mg/m3	ND	0.1 mg/m3
Proprietary Component	ND	ND	ND
Proprietary Component	ND	ND	ND
Proprietary Component	ND	ND	ND

Engineering Controls:

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

Respiratory Protection:

The following chart specifies the types of respirators which may provide respiratory protection for dust containing crystalline silica (quartz).

CONDITION Particulate Concentration	**MINIMUM RESPIRATORY PROTECTION*** ***Use only NIOSH-approved equipment. See 42 CFR §84**
5 x PEL or less	Any particulate respirator.
10 x PEL or less	Any particulate respirator, except single-use or quarter-mask respirator. Any fume respirator or high efficiency particulate filter respirator. Any supplied-air respirator. Any self-contained breathing apparatus.
50 x PEL or less	A high efficiency particulate filter respirator with a full facepiece. Any supplied-air respirator with a full facepiece, helmet, or hood. Any self-contained breathing apparatus with a full facepiece.
50 x PEL or less	A powered air-purifying respirator with a high efficiency particulate filter. A Type C supplied-air respirator operated in pressure-demand or other positive pressure or continuous -flow mode.
Greater than 500 x PEL or entry and escape from unknown concentrations.	Self-contained breathing apparatus with a full facepiece operated in pressure-demand or other positive pressure mode. A combination respirator which includes a Type C supplied-air respirator with a full facepiece operated in pressure-demand or other positive pressure continuous-flow mode and an auxiliary self-contained breathing apparatus operated in pressure- demand or other positive pressure mode.

Also see ANSI standard Z88.2 (latest revision) American National Standard for Respiratory Protection.

Eye / Face Protection:

Use chemical safety goggles and/or a full face shield where potential for splash may exist. Maintain eye wash fountain and quick-drench facilities in work area.

Skin Protection:

Wear appropriate protective clothing and chemical resistant gloves to prevent skin contact. Consult the glove/clothing manufacturer to determine the appropriate type of glove/clothing for a given application. Wash immediately if skin is contaminated. Launder contaminated clothing and clean protective equipment before reuse. Wash thoroughly after handling.

IX. Physical and Chemical Properties

Physical Appearance:	Solid
Odor:	None
pH:	ND
Specific Gravity:	ND
Water Solubility:	ND
Melting Point:	ND
Freezing Point:	ND
Boiling Point:	ND
Vapor Pressure:	N/A
Vapor Density:	ND
Percent Volatiles by Volume:	ND
Evaporation Rate:	ND
Viscosity:	ND
Density:	ND

X. Stability and Reactivity

Chemical Stability: Stable

Conditions to Avoid: None

Materials / Chemicals to Be Avoided:

Acids, ammonium salts, phosphorous, hydrazine, calcium hypochlorite, performic acid, bromine pentafluoride, fluorine, chlorine trifluride, manganese trioxide and oxygen difluoride, incompatible with this product.

Hazardous Decomposition Products:

Oxides of carbon

Hazardous Polymerization:

Will not occur.

XI. Toxicological Information

SILICOSIS

The major concern is silicosis, caused by the inhalation and retention of respirable crystallinesilica dust. Silicosis can exist in several forms: chronic (or ordinary), accelerated, or acute.

Chronic or ordinary silicosis is the most common form of silicosis, and can occur after manyyears of exposure to relatively low levels of airborne respirable crystalline silica dust. It is furtherdefined as either simple or complicated silicosis.

Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less than 1centimeter in diameter, primarily in the upper lung zones. Often, simple silicosis is not associatedwith symptoms, detectable changes in lung function, or disability.

Simple silicosis may be progressive and may develop into complicated silicosis or progressivemassive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown asradiographic opacities) greater than 1 centimeter in diameter. Although there may be nosymptoms associated with complicated silicosis or PMF, the symptoms, if present, are shortnessof breath, wheezing, cough and sputum production. Complicated silicosis or PMF may beassociated with decreased lung function and may be disabling. Advanced complicated silicosis orPMF may lead to death. Advanced complicated silicosis or PMF can result in heart diseasesecondary to the lung disease (cor pumonale).

Accelerated silicosis can occur with exposure to high concentrations of respirable crystallinesilica over a relatively short period; the lung lesions can appear within five (5) years of the initialexposure. The progression can be rapid. Accelerated silicosis is similar to chronic or ordinarysilicosis, except that the lung lesions appear earlier and progression is more rapid.

Acute silicosis can occur with exposures to very high concentrations of respirable crystallinesilica over a very short time period, sometimes as short as a few months. The symptoms of acutesilicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis isfatal.

Cancer

The International Agency for Research on Cancer **(IARC)** concluded that there was “sufficientevidence in humans for the carcinogenicity of crystalline silica in the forms of quartz orcristobalite from occupational sources”, and that there is “sufficient evidence in experimentalanimals 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 iscarcinogenic to humans (Group 1)” .The IARC evaluation noted that “carcinogenicity was notdetected in all industrial circumstances studied. Carcinogenicity may be dependent on inherentcharacteristics of the crystalline silica or on external factors affecting its biological activity ordistribution of its polymorphs.” For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68, Silica, Some Silicates (1997).

The National Toxicology Program (NTP), in its Ninth Annual Report on Carcinogens, concludedthat silica, crystalline (respirable) is “known to be a carcinogen, based on sufficient evidence inexperimental animals and in humans.”

The U.S. Occupational Safety and Health Administration (OSHA) does not regulate crystallinesilica (quartz) as a carcinogen.

Scleroderma

There is evidence that exposure to respirable crystalline silica or that the disease silicosis isassociated with the increased incidence of scleroderma, an immune system disorder manifestedby a fibrosis (scarring) of the lungs, skin and other internal organs.

Tuberculosis

Individuals with silicosis are at increased risk to develop tuberculosis, if exposed to persons withtuberculosis.

Nephrotoxicity

There are several recent studies suggesting that exposure to respirable crystalline silica or thatthe disease silicosis is associated with the increased incidence of kidney disorders.

XII. Ecological Information

Ecotoxicological Information:

Degradation	Not Determined
Accumulation	Not Determined
Fish-Toxicity	Not Determined
Chemical Fate Information	Not Determined

XIII. Disposal Considerations

Waste Disposal Method:

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

XIV. Transportation Information

US Department of Transportation Shipping Name:

Proper Shipping Name	Not Regulated
Hazard Class	Not Regulated
ID Number	Not Regulated
Packaging Group	Not Regulated

XV. Regulatory Information

Federal Regulations:

SARA Title III Hazard Classes:

Fire Hazard	No
Reactive Hazard	No
Release of Pressure	No
Acute Health Hazard	Yes
Chronic Health Hazard	Yes

TSCA

All components of this product are on the TSCA inventory or are exempt from TSCA Inventory requirements

Other Regulations: None

XVI. Other Information

National Paint & Coating Hazardous Materials Identification System – HMIS(R):

Health Hazard:	1
Flammability:	0
Reactivity:	0

Key Legend Information:

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