

Material Safety Data Sheet

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Section 1: Product and Company Identification

Product Name: Terrazzo & Marble Supply Co. – Difiniti™ Quartz
Product Use Description: Agglomerated Quartz Slabs, Tiles and Fabricated Items
Company: Terrazzo & Marble Supply Companies
77 South Wheeling Road
Wheeling, Illinois 60090
Telephone: 847.353.8000
Emergency Telephone Number: 800.424.9300 USA
01.703.527.3887 International

Section 2: Composition / Information on Ingredients

Component(s) Chemical Name	CAS Registry No.	% (approx.) (optional)
Silicon Dioxide*	14808-60-7	< 92%

* The composition of Silicon Dioxide may be up to 100% crystalline silica.

Section 3: Potential Health Hazards

Health Effects: No unusual conditions are expected from this product. The information below represents an overview of health effects caused by overexposure to one or more components in granite. The individual effects are described in Section XI.

Primary route(s) of exposure: Inhalation when cutting or abrading material.
Eye contact : Direct contact with dust may cause irritation by mechanical abrasion. Conjunctivitis may occur.
Skin contact : Direct contact may cause irritation by mechanical abrasion.
Skin Absorption: Not expected to be a significant route of exposure.
Ingestion: Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury. Ingestion of larger amounts may cause gastrointestinal irritation and blockage.
Inhalation : Dust may irritate nose, throat, mucous membranes, and respiratory tract due to mechanical abrasion. Coughing, sneezing, chest pains, shortness of breath, inflammation of mucous membrane, and flu-like fever may occur following exposures in excess of appropriate exposure limits. Repeated excessive exposure may cause pneumoconiosis, such as silicosis and other respiratory effects. Inhalation of dusts produced during cutting, grinding, or sanding of this product may cause irritation of the respiratory tract.

Notes on Silicosis

Use of quartz products for construction purposes is not believed to cause acute toxic effects. Repeated overexposures to respirable crystalline silica (quartz, cristobalite, tridymite) for periods as short as 6 months has caused acute silicosis.

Symptoms of acute silicosis include (but are not limited to): shortness of breath, cough, fever, weight loss, and chest pain. Acute silicosis is a rapidly progressive, incurable lung disease and is typically fatal.

Chronic exposure to respirable quartz-containing dust in excess of appropriate exposure limits has caused silicosis, a progressive pneumoconiosis (lung disease). Restrictive and/or obstructive lung function changes may result from chronic exposure. Chronic tobacco smoking may further increase the risk of developing chronic lung problems.

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Section 3: Potential Health Hazards *Continued*

Medical Conditions Aggravated by Exposure:

Inhaling respirable dust and/or crystalline silica may aggravate existing respiratory system disease(s) and/or dysfunctions. Exposure to dust may aggravate existing skin and/or eye conditions. Smoking and obstructive / restrictive lung disease may also exacerbate the effects of excessive exposure to this product.

Section 4: First Aid Measures

General advice:	In case of doubt or when symptoms persist, seek medical attention.
Eye contact :	Hold eyelids apart and flush eyes with a steady, gentle stream of water for 15 minutes.
Skin contact :	Wash skin with soap and water.
Inhalation :	The compound is not likely to be hazardous by inhalation during normal use. If inhaled, remove to fresh air. If not breathing, call physician immediately.
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.

Section 5: Fire Fighting Measures

Extinguishing Media :	Use any extinguishing media appropriate for the surrounding fires.
Unsafe Extinguishing Media :	None
Special Exposure Hazards :	N/A
Special Protective Equipment :	As in any fire, MSHA, NIOSH approved self contained breathing apparatus (SCBA) and full protective gear should be worn.”

Section 6: Accidental Release Measures

Personal Protection:	Avoid dust formation. In case of exposure to high levels of air dust, wear a NIOSH approved personal respirator in compliance with national legislation.
Environmental Precautions:	This product does not present any particular risk to the environment. Refer to applicable national, state and local regulations prior to washing in drains.
Clean-up Methods:	Collect mechanically and/or by flushing with water. Avoid dry sweeping. Use water sprayer or ventilated vacuum system to prevent dust formation.

Section 7: Handling and Storage

Handling:	Avoid dust formation. Provide appropriate exhaust ventilation in places where dust is formed. In case of insufficient ventilation, wear suitable NIOSH approved respiratory equipment.
Storage:	Store in a dry area. No special procedures are required for this material.

Section 8: Exposure Controls / Personal Protection

Engineering Controls:	Use mechanical ventilation (dilution and local exhaust) to control exposure when cutting or abrading material.
Hand Protection:	Strong impervious gloves.
Eye Protection:	Safety glasses with side shields.
Skin and Body Protection:	Safety toe shoes where toes/feet are exposed to rolling/falling objects.
Respiratory Protection:	In case of exposure to high levels of airborne dust, wear a respirator in compliance with national legislation.
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety practice.
Environmental Exposure:	This product does not present any particular risk for the environment. Refer to applicable national, state and local regulations prior to washing in drain.

Section 9: Physical and Chemical Properties

Appearance/Color:	Various shapes, sizes and colors.
Density:	N/A
Decomposition Temperature:	N/A
pH:	N/A
Water Solubility:	Not soluble
Physical State:	Solid
% Volatiles:	0% at room temperature

Section 10: Stability and Reactivity

Stability :	Stable under ambient temperature (21°C) and pressure (760 mm Hg).
Conditions to Avoid:	Avoid dispersion of dust in air.
Materials to Avoid:	Hydrofluoric Acid spills should be removed immediately. Hydroxides can cause bleaching of colors.
Hazardous Decomposition Products:	Will not occur

Section 11: Toxicological Information

Component(s) Chemical Name	OSHA PEL	ACGIH TLV-TWA
Silicon Dioxide*	(R) 10 mg/m ³ / (% SiO ₂ +2)*	(R) 0.025 10 mg/m ³

(R) : Respirable

* Crystalline silica is normally measured as respirable dust. The OSHA standard also presents a formula for calculation of the PEL based on total dust: 30 mg/m³ / (% SiO₂+2).

Particulate matter containing no asbestos and 1% crystalline silica.

Acute Toxicity:	LD50 Oral (rat) = 6450 mg/kg
Eye Irritation:	Slightly Irritating, not classified
Skin Irritation:	May dry skin and mucous membranes
Sensitization:	Does not cause sensitization.
Chronic Toxicity:	No evidence of Mutagenic, reproductive or carcinogenic effects.

General Product Information:

CRYSTALLINE SILICA: The International Agency for Research on Cancer (IARC) recently reviewed existing epidemiological data and concluded that crystalline silica inhaled in the form of quartz from occupational sources is known human carcinogen (Group 1). In making the assessment, the IARC noted that carcinogenicity was not detected in all industrial circumstances studied. However, IARC reported that a majority of studies indicated an elevated mortality for lung cancer among silica-exposed workers. 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.

Section 12: Ecological Information

Ecotoxicity:	No data available
Mobility:	Inert material
Persistence/Degrability:	None-degradable
Biocumulative Potential:	None
Other Adverse Effects:	None known

Section 13: Disposal Considerations

Disposal: Dispose in accordance with local, state and national regulations. Collect and reuse clean material.

Section 14: Transport Information

DOT: Not Regulated

Section 15: Regulatory Information

NFPA:	Health: 1	Flammability: 0	Reactivity: 0
HMIS:	Health: 1	Flammability: 0	Physical Hazards: 0

Proposition 65: The product contains the following chemicals at levels known to the State of California to cause cancer: Crystalline Silica.

CONEG: We certify that heavy metals defined as lead, mercury, cadmium, and hexavalent chromium are not intentionally introduced to this product and with respect to lead, mercury, cadmium, and hexavalent chromium, the incidental level of these four metals is less than 100 ppm.

FDA: May be used in accordance with the following 21 CFR Sections: 175.105, 175.300, 176.170, 176.180, 177.1210, 178.3297

Section 16: Other Information

The information contained in this Safety Data Sheet to the best of Terrazzo & Marble Supply Companies' knowledge and belief as of the date indicated is believed to be accurate and reliable. However, no representation, warranty or guarantee is implied or expressed regarding the accuracy, reliability or completeness of this information or the use of the product. Nothing contained herein should be construed as a recommendation to use this product in conflict with national or local regulations or existing patents covering any material or its use.

Prepared by Terrazzo & Marble Supply Companies.