MATERIAL SAFETY

DATA SHEET

Product Name: Quantum Quartz
MSDS Preparation Date: 6th December 2016.
Version No.: 1.2

SECTION 1: PRODUCT DESCRIPTION & COMPANY IDENTIFICATION

Product Description

Product Identity	Quantum Quartz
Use(s)	Quantum quartz surfaces are designed for indoor use, particularly kitchen and bathroom worktops, flooring, shower trays, cladding and other similar uses.

Company Identification

Manufacturer/Supplier	Quantum Quartz
Corporate Office Address	5300 West Knox Street Tampa, Florida 33634 ,
Emergency Contact	(813) 514-2140
Email	tampa@stonewarehouseusa.com
Website	www.quantumsurfacesusa.com

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS#	Composition
Crystalline Silica (quartz) and other natural stones	14808-60-7	85-94%
Resins and trace minerals including Fe2O3, Fe3O4, TiO2	NA	6-15%
Cristobalite	14464-46-1	0- 60%
Physical Description	Agglomerated stone	

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview

Colour	Can be of any colour
Appearance	Sheets
Odor	Odorless

Under normal conditions of use, this product is not expected to create any unusual industrial hazards.

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Primary Routes of Exposure	Potential Health Effects	Personal Protective Equipment to be used
Inhalation	No hazard expected in normal use. However, dust generated during fabrication operations such as sawing, routing, drilling, polishing, cutting, grinding, etc., may cause irritation to respiratory tract, causing coughing and sneezing.	Suitable anti-dust masks.
Eye Contact	No hazard expected in normal use. However, dust generated during fabrication operations such as sawing, routing, drilling, polishing, cutting, grinding, etc., may cause irritation.	Suitable eyewear. Do not wear contact lenses.
Skin Contact	No hazard expected in normal use. However, dust generated during fabrication operations such as sawing, routing, drilling, polishing, cutting, grinding, etc., may cause irritation. Any debris generated during fabrication operations may cause minor cuts	Suitable bodysuits and safety shoes.
Ingestion	No hazard expected in normal use. However, dust generated during fabrication operations such as sawing, routing, drilling, polishing, cutting, grinding, etc., may cause irritation.	Suitable anti-dust masks.

SECTION 4: FIRST AID MEASURES

Primary Routes of Exposure	First Aid Procedures
Inhalation	Take the person to a place with an ample amount of fresh air. Artificial respiration can be used if required. Consult a doctor if symptoms persist.
Eye Contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, or until all material has been removed. Obtain medical attention if irritation develops.
Skin Contact	Flush skin with plenty of water. Obtain medical attention if irritation develops.
Ingestion	Obtain medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media	Appropriate extinguishing media for surrounding fire.
Special Fire Fighting Procedures	As in any fire, wear self-contained breathing apparatus pressure-demand, OSHA/NIOSH (approved or equivalent) and full protective gear.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

a) Collect material/waste generated during the fabrication process and place in a disposal container. Obey relevant local, state, provincial and federal laws and regulations.

b) Dampen the dust generated during fabrication operations with water or use vacuum avoiding dust generation. Wear recommended personal protective equipment. Obey relevant local, state, provincial and federal laws and regulations for disposal.

SECTION 7: HANDLING & STORAGE

Handling	The product is heavy and breakable so it needs to be handled with proper handling equipment to avoid injury and damage. Use safety shoes and helmet while handling the slabs.
Storage	Store in a cool, dry and covered place. Palletize on appropriate stands and in recommended numbers. Place finish to finish, to avoid scratches.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Components	CAS#	Control Parameters	Basis
Crystalline Silica	14808-60-7	0.025 mg/m3 TWA (respirable)	ACGIH
		0.05 mg/m3 TWA (respirable)	
		((250)/ (%SiO2 + 5) mppcf TWA (respirable))	OSHA-PELs
		((10)/ (%SiO2 + 2) mg/m3 TWA (respirable))	
		((30)/ (%SiO2 + 2) mg/m3 TWA (total dust))	

Personal Protective Equipment

Eyes	During fabrication operations wear appropriate protective eyeglasses.
Skin	During fabrication operations wear appropriate protective clothing and hand gloves to prevent skin exposure.
Feet	Wear safety shoes while handling the slabs.
Respirators	If required, a respiratory protection program that meets OSHA's 29 CFR 1910.134 or CSA standard Z94.4-93.

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SECTION 9: PHYSICAL & CHEMICAL PROPERTIES	
Appearance	Sheet
Physical State	Solid
Colour	Can be of any colour
Odor	Odorless
Specific Gravity / Density	2.15 – 2.46 g/cc
Water Solubility	Insoluble
pH Value	NA
Boiling Point	NA
Melting Point	NA
Freezing Point	NA
Vapor Pressure	NA
% Total volatiles by Volume	<0.001 mg/m3
Evaporation Rate	NA
Viscosity	ND

SECTION 10: STABILITY & REACTIVITY	
Chemical Stability	Stable
Materials / Chemicals to be avoided	Hot surfaces and strong bases
Hazardous Decomposition Products	Silica dissolves in Hydrofluoric Acid and produces corrosive gas Silicon Tetrafluoride.
Hazardous Polymerization	Hydrocarbons, carbon dioxide, carbon monoxide and water may be released upon decomposition.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Effects of crystalline silica powder generated during fabrication operations

Route of Exposure	Species Observed	Type of Test Dose/Duration	Dose/ Duration	Toxic Effects
Inhalation	Human	TCLo - Lowest published toxic concentration	16 mppcf/8H/17.9Y	Lungs, Thorax, or Respiration-Intermittent; fibrosis, focal (pneumoconiosis), cough, dyspnea
Inhalation	Human	LCLo - Lowest published lethal concentration	0.3mg /m3/10Y	Liver - other changes
Inhalation	Rodent	TCLo - Lowest published toxic concentration	50mg/ m3/6H/71W	Intermittent; liver - tumors

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Chronic Effects – of crystalline silica powder generated during fabrication operations	
Silicosis	Chronic Inhalation exposure to free silica may cause delayed lung injury, including silicosis, a disabling and potentially fatal lung disease, and/or cause or aggravate other lung diseases or conditions.
Carcinogenic Potential	The International Agency for Research on Cancer (IARC) classifies crystalline silica powder as a known human carcinogen
	The National Toxicology Program (NTP), in its ninth Annual Report on Carcinogens, classified "crystalline silica (respirable)" as a known carcinogen.
	The U.S. Occupational Safety and Health Administration (OSHA) does regulate crystalline silica (quartz) as a carcinogen
	The EU Scientific Committee on Occupational Exposure Limits (SCOEL) has concluded that, "there is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk."
	The American Thoracic Society concluded that "The available data support the conclusion that silicosis produces increased risk for bronchogenic carcinoma. The cancer risk may also be increased by smoking and other carcinogens in the workplace." Adverse Effects of Crystalline Silica Exposure, American Journal of Respiratory and Critical Care Medicine, Vol. 155, pp. 761-765 (1997)
Scleroderma	There is evidence that exposure to respirable crystalline silica or that the disease silicosis is associated with the increased incidence of scleroderma, an immune system disorder manifested by 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 with tuberculosis.
Nephrotoxicity	There are several recent studies suggesting that exposure to respirable crystalline silica or that the disease silicosis is associated with the increased incidence of kidney disorders.
Mutagenicity	No Data
Reproductive Effects	No Data
Developmental Effects	No Data

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SECTION 12: ECOLOGICAL INFORMATION	
Environmental Toxicity	ND
Environmental Fate	ND
ISO 9001:2008	Quantum conforms to the Quality Management System Standard of ISO 9001:2008 and is certified by DNV-GL m
NSF International	Quantum is NSF/ANSI 51 certified for food contact and splash zones. It complies with all applicable requirements. d
Greenguard & Greenguard Gold	Quantum is Greenguard and Greenguard gold certified for low chemical emissions r
US Green Building Council	Pokarna Engineered Stone Limited is a member of US Green Building Council
Kosher	Quantum is Kosher certified

SECTION 13: DISPOSAL CONSIDERATIONS
General Disposal Guidance: Follow relevant local, state, provincial and federal laws and regulations for disposal.

SECTION 14: TRANSPORTATION INFORMATION
Not Regulated.

SECTION 15: REGULATORY INFORMATION	
SARA Title III Hazard Classes:	
Fire Hazard	No
Reactive Hazard	No
Release of Pressure	No
Acute Health Hazard	No
Chronic Health Hazard	Yes

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

U.S. State Regulations
California Prop 65 List: Crystalline Silica (Quartz) is classified as a substance known to the state of California to be a carcinogen.

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SECTION 16: OTHER INFORMATION	
National Fire Protection Association NFPA(R) and Hazardous Materials Identification System (HMIS) Hazard Ratings:	
Health Hazard	1
Flammability	0
Reactivity	0
Key Legend Information	
NA	Not Applicable
ND	Not Determined
PEL	Permissible Exposure Limit
TWA	Time Weighted Average

The information contained herein is based on the data available to us and is believed to be correct. However, Quantum makes no warranties expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. The data is subject to revision as additional knowledge and experience is gained.