

# ONE QUARTZ

# MATERIAL SAFETY DATA SHEET

## PRODUCT AND COMPANY IDENTIFICATION

Product Name: ONE Quartz

Product Use: ONE Quartz Surfacing

Company: Daltile Corporation  
7834 C F Hawn Freeway  
Dallas, Texas 75212

Emergency

Phone Number: 214-309-1411

## COMPOSITION/INFORMATION ON INGREDIENTS

Material	CAS Number	
Crystalline silica and other natural stone	14808-60-7	> 85
Polymeric resin		7-15
Additives		0-8

## EMERGENCY OVERVIEW

Information Pertaining To Particular Dangers for Man and Environment: Classification: This preparation is not classified as hazardous according to the latest adaptation of European Union Directives 67/548/EEC and 1995/45/EC.

## POTENTIAL HEALTH EFFECTS

Quartz surfaces products are not hazardous as shipped. However, operations such as sawing, grinding, routing, drilling and sanding can generate dust. Inhalation of such dusts, smoke and vapors may cause upper respiratory tract irritation. Symptoms may include burning sensation, coughing, sneezing, and sore throat. Skin contact with dust may produce transitory mechanical irritation. Symptoms may include redness and itching. High concentrations of dust may cause irritation to the eyes causing burning, redness, and tearing. This product is not expected to be toxic if ingested.

Overexposure to airborne crystalline silica can cause silicosis, a chronic and progressively debilitating disease, characterized by the formation of silica-containing scar tissue in the lungs. Symptoms of silicosis include coughing, difficulty breathing, wheezing and progressive impairment of lung function. In addition to silicosis, epidemiology studies show limited evidence of an excess of lung cancer in occupations involving exposures to crystalline silica, such as stone cutters and granite industry workers.

Individuals with chronic respiratory disorders may be adversely affected by any fume or airborne particulate matter exposure. Persons with preexisting skin disorders may be more susceptible to the effects of this material.

### Carcinogenicity Information

The following components are listed by IARC, NTP, OSHA or ACGIH as carcinogens:

Material	IARC	NTP	OSHA	ACGIH
Silica, Crystalline (Quartz)	1	X		A2

## FIRST AID MEASURES

Eye Contact: Flush immediately with copious amounts of water for a minimum of 15 minutes. Seek immediate medical attention.

Skin Contact: Wash affected area with soap and plenty of water. Seek medical attention if adverse effect occurs.

Inhalation: Remove person to fresh air. If breathing is difficult, or has stopped, administer artificial respiration (mouth-to-mouth) or oxygen as indicated. Call a physician.

Ingestion: Product in its marketed form is inert. If large amounts are swallowed, seek medical attention or advice.

## FIRE FIGHTING MEASURES

Auto Ignition: Quartz surfaces products can be combusted only with difficulty. Fire Spreading

Rating: 5

Smoke Developed Rating: 25

Flash Point: 490°C

Flammable Limits in Air (% by Volume): NA

Extinguishing Media: Water, Dry Chemical, CO2 and Foam

Special Fire Fighting Procedures: Keep personnel away and upwind of fire. Use self contained breathing apparatus with full face mask. Unusual Fire and Explosion

Hazards: Decomposition products resulting from the polymer and pigments degrading at elevated temperatures include various hydrocarbons, carbon dioxide, carbon monoxide and water. Fumes of metal oxides and mica particles could also be released

## ACCIDENTAL RELEASE MEASURES

Cleanup and Disposal of Spill: Solid slabs can simply be gathered and disposed of as necessary. If large amounts of dust or waste are created

# ONE QUARTZ

# MATERIAL SAFETY DATA SHEET

by cutting process, vacuum or sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust. Wear suitable respiratory protection and protective clothing where necessary. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or local Waste Management Authority. Dispose of waste in accordance with local, state and federal regulation.

## HANDLING AND STORAGE

Handling/Storage: Avoid breathing dust. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Good industrial hygiene practices should be followed when handling this material. Product is heavy and breakable; handle with care to avoid injury and prevent damage.

## EXPOSURE CONTROLS/PERSONAL PROTECTION

### EXPOSURE GUIDELINES

Reference	Substance	Guideline or limit (mg/m3)
OSHA (29 CFR 1910.1000-Table Z-3) OSHA Vacated PELs	Respirable crystalline silica: quartz, cristoballite, and triymite	Total dust, (30 mg/m3 / % SiO2 + 2); Respirable dust, (10 mg/m3 / % SiO2 + 2) as 8hr TWAs 0.1 mg/m3 TWA (respirable dust)
ACGIH (2004)	Respirable crystalline silica: quartz, cristoballite, and triymite	0.025 mg/m3 (8hr TWA)
OEL UK	Respirable crystalline silica Total dust	TWA 0.1 mg/m3 TWA 0.3 mg/m3
Australia**	Respirable crystalline silica	0.05 mg/m3 (8hr TWA)
NIOSH	Respirable crystalline silica: quartz, cristoballite, and triymite	0.05 mg/m3 (8hr TWA)

Abbreviations: TWA = time-weighted average; ACGIH = American Conference of Governmental Industrial Hygienists, Inc.; OSHA = Occupational Safety and Health Administration; NIOSH = National Institute of Occupational Safety and Health; OEL = Occupational Exposure Limit \*\* Cement Australia upper threshold limits. Where state or territory prescribe a lower exposure standard, the lower exposure standard applies.

Engineered Controls: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS. General room ventilation is satisfactory under anticipated use conditions.

### Personal Protective Equipment

Eye/Face Protection: If eye contact while using this product may be anticipated, wear appropriate safety glasses with side shields or chemical goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166.

Respiratory Protection: Respiratory equipment approved by NIOSH/MSHA for protection against organic vapors and dusts is necessary to avoid inhalation of excessive air contaminants. The appropriate respirator selection depends on the type and magnitude of exposure (refer 29 CFR 1910.134 for appropriate NIOSH approved respirators and to the NIOSH Pocket Guide to Chemical Hazards, DHHS (NIOSH) Publication NO. 2001145 for equipment selection). Use a positive pressure air supplied respirator if there is a potential for an uncontrolled release, exposure levels are not known or under any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: During cutting, grinding or sanding operations use body protection appropriate for task including work gloves if handling sharp or rough edges and steel-toed shoes if lifting product.

## PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance: Multi-colored engineered stone

Odor: Odorless pH:

NA

Specific Gravity: 2.4

Water Solubility: Insoluble

Flash Point: 490°C

Melting Point: NA

Boiling Point: NA

Vapor Pressure: NA

% Volatiles: NA Viscosity: NA

# ONE QUARTZ

# MATERIAL SAFETY DATA SHEET

## STABILITY AND REACTIVITY

Chemical Stability: Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials: This product is incompatible with hydrofluoric acid.

Hazardous Decomposition Products: Thermal decomposition can release various hydrocarbons, carbon dioxide, carbon monoxide and water. Fumes of metal oxides and mica particles could also be released.

Hazardous Polymerization: Will not occur.

## TOXICOLOGICAL INFORMATION

### Acute Effects

*Crystalline Silica:* Inhalation (human) LCLo: 0.3mg/m3/10Y

Inhalation (human) TCLo: 16mppcf/8H/17,9Y

Intermittent; focal fibrosis, (pneumoconiosis), cough, dyspnea.

Inhalation (rat) TCLo: 50mg/m3/6H/71W

Intermittent; liver – tumors

Oral LD50 RAT: 500 mg/kg

### Chronic Effects

*Crystalline Silica:*

Silicosis: caused by the inhalation and retention of respirable crystalline silica dust.

Carcinogenicity: The International Agency for Research on Cancer (IARC) concluded that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).” The National Toxicology Program (NTP), in its Ninth Annual Report on Carcinogens, concluded that silica, crystalline (respirable) is “known to be a carcinogen, based on sufficient evidence in experimental animals and in humans.” The U.S. Occupational Safety and Health Administration (OSHA) does regulate crystalline silica (quartz) as a carcinogen.

The American Thoracic Society position on the issue of silica carcinogenicity was published in Adverse Effects of Crystalline Silica Exposure, American Journal of Respiratory and Critical Care Medicine, Vol. 155, pp. 761-765 (1997). The official statement 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.”

Aggravation of Pre-existing Conditions: Inhalation may increase the progression of tuberculosis; susceptibility is apparently not increased.

Persons with impaired respiratory function may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury. Mutagenicity: No Data

Reproductive Effects: No Data

Developmental Effects: No Data

## ECOLOGICAL INFORMATION

Toxicity is expected to be low based on insolubility in water.

Environmental Fate: Not Determined

Environmental Toxicity: Not Determined

ISO 14001 Certification: One Quartz is ISO 14001 certified for Environmental Management Systems

GREENGUARD Certification: One Quartz is compliant with GREENGUARD standard Quartz (14808-60-7) Environmental Fate: No information found

Environmental Toxicity: No information found **DISPOSAL**

## CONSIDERATIONS

Waste Disposal Method: Preferred options for disposal are (1) recycling, (2) incineration with energy recovery, and (3) landfill.

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 in accordance with federal, state and local requirements.

## TRANSPORTATION INFORMATION

Proper Shipping Name

Not Regulated

Hazard Class

Not Regulated

ADR/RID/IMO/ICAO/US DOT

ID Number

Not Regulated

Packaging Group

Not Regulated

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## REGULATORY INFORMATION

U.S. Federal Regulations 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 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.

Other Regulations

EU Marking and Labeling

Symbol: None

Risk Phrases: None

Safety Phrases: None

Inventory Information: The substances in this preparation have been checked against the European Inventory of Existing Commercial Substances (EINECS), the European List of Notified Chemical Substances (ELINCS), and the No Longer Polymer (NLP) list. Substances not identified on these inventories are exempt.

## 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:

ACGIH American Conference of Governmental Industrial Hygienists

IARC International Agency for Research on Cancer

IDLH Immediately Dangerous to Life and Health

NA Not Applicable

ND Not Determined

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

STEL Short Term Exposure Limit TLV

Threshold Limit Value

TWA Time Weighted Average

The information contained herein is based on the data available to us and is believed to be correct. However Daltile Corp makes no warranties expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.