# SAFETY DATA SHEET PRODUCT SERIES: MARBLE COLLECTION

## PRODUCT IDENTIFICATION

Common Name: Natural Stone Products (For purposes of this SDS, the term "Natural Stone" encompasses

all types of Stone products sourced by Dal-Tile Corporation.)

Synonyms: Natural Stone Products and Wares

Manufacturer Name: Dal-Tile Corporation

Headquarters Office

7834 C.F. Hawn Freeway, Dallas, TX 75217

Address: Environmental, Health and Safety Department

Richard Ray - (214) 309-4295

Communication standard, 29 Code of Federal Regulations (CFR) 1910.1200(g), Safety Data Sheets.

Recommended Use: Building Material - Natural Stone products sourced by Dal-Tile Corporation are natural

building materials typically used as floor/wall and countertop coverings. Should you desire additional information, please direct your inquiry to the address above.

This document has been prepared in accordance with the Occupational Safety and Health Administration (OSHA) Hazard

## HAZARDS IDENTIFICATION

Natural Stone products are mixtures of Limestone and other natural occurring minerals that have been mined. The finished, Natural Stone products are odorless, stable, non-flammable, and pose no immediate hazard to health. Respiratory, hand and eye protection may be needed to prevent excess exposure to airborne particulates if dust is produced by cutting product during installation or if dust is produced by any other operations, including demolition/removal projects.

Emergency Overview: Danger! Lung injury and Cancer Hazard GHS Classification (Global Harmonized Standard Classification):

Carcinogenicity Category 1A (H350)

Specific target organ toxicity, single exposure; Respiratory tract irritation - Category 3 (H335)

Specific target organ toxicity, repeated exposure - Category 1A (H372)

GHS Label, Hazards and Precautionary Statements

GHS Pictogram:

Crystalline Silica:



Category 3 (Respiratory tract irritation) (H335)



Categories 1A(Carcinogenicity)(H372)

Label Signal Word: Danger

Hazard Statements:

(H350) May cause CANCER (inhalation) (H335) May cause respiratory irritation

(H372) Causes damage to organs (lung/respiratory) through prolonged or repeated exposure (inhalation)

## 2. HAZARDS IDENTIFICATION (CONT.)

Do not handle until all safety precautions have been read and understood. (P2O2)

Do not breathe dust/spray. (P260 + P261)

Wash skin thoroughly after handling. (P264)

Do not eat, drink or smoke when using this product. (P270)

Wear protective gloves, protective clothing, eye protection, face protection. (P280)

## Precautionary Statements:

Do not handleuntil all safety precautions have been read and understood. (P2O2)

Do not breathe dust/spray. (P260 + P261)

Wash skin thoroughly after handling. (P264)

Do not eat, drink or smoke when handling this product. (P270)

Wear protective gloves, protective clothing, eye protection, face protection when handling this product. (P280)

## Potential Health Effects:

Inhalation: Do not breathe dust. See "Health Hazards" in Section 11 for more details.

## COMPOSITION/INFORMATION ON INGREDIENTS

Natural Stone products are composed of Quartz, Feldspar and other naturally-occurring minerals, that have been mined. Natural Stone Products are mined and fabricated into various shapes, sizes, and colors.

These products do not contain asbestos.

Under normal conditions these products do not release hazardous materials after installation and are not considered hazardous waste should disposal be necessary.

Composition	CAS# / EINECS#	Estimated % by Wt.	EU Class
Marble	CAS: 471-34-1 / EINECS: 207-439-9	0-99	(67/548/EEC) Xi R36/37/38
Crystalline silica as quartz	CAS: 14808-60-7 / EINECS: 238-878-4	0-1	(67/548/EEC) Xn R48/20
Iron Oxide	CAS: 1345-25-1 / EINECS: 215-721-8	0-2	(67/548/EEC) Xi R36/37/38

## 4. FIRST AID MEASURES

Eyes: Immediately flush eyes with large amounts of water for at least 15 minutes if dust gets in eyes.

Get medical attention if irritation persists.

Skin: Wash thoroughly after working with Natural Stone products.

Inhalation: Remove to fresh air if exposed to large amounts of dust. Administer artificial respiration if breathing has

stopped. Keep victim at rest. Call for prompt medical attention.

Ingestion: Not applicable for intact natural stone products.

Have emergency eyewash station available in area where products are cut.

## COMPOSITION/INFORMATION ON INGREDIENTS

Flash Point (Method Used): Not applicable
Autoignition Temperature: Not applicable

Flammable Limits (% by Volume in Air): LEL - Not applicable UEL - Not applicable

Fire Extinguishing Media: None required (Non-flammable)

Special Fire Fighting Procedures: None required

Fire and Explosion Hazards: None

## 6. ACCIDENTAL RELEASE MEASURES

Avoid creating excessive dust. Clean up dust with a vacuum system with a High-efficiency particulate (HEPA) air filter vacuum or damp sweeping. See Section 8 of this SDS concerning PPE information for clean-up.

#### HANDLING AND STORAGE

When cutting, grinding or removing, use equipment with integral dust collection and/or use local exhaust ventilation. Use wet cutting methods to reduce generation of dust. Use respiratory protection in the absence of effective engineering controls.

Do not store near acids. If natural stone products contact some acids, damage/discoloration to the surface may occur. Shelf life is unlimited.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## 8.1 EXPOSURE TABLE

Composition	OSHA PEL	NIOSH IDLH	ACGIH TLV*	Units
Crystalline silica as quartz	0.05	0.05	0.05	
- respirable fraction				mg/m3
- total dust	5	N.E.	N.E.	mg/m3
Marble				
- respirable fraction	5	5	5	mg/m3
- total dust**	15	10	10	mg/m3
Iron Oxide				
- respirable fraction	10	5	5	mg/m3

<sup>\* 2006</sup> Edition, respirable fraction to be determined as per Appendix D of ACGIH TLV.

## 8.2 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Use adequate ventilation to keep exposure to dust below recommended exposure levels. Avoid inhalation of dust. The highest probability of silica exposure occurs during installation using dry cutting methods or during removal of installed natural stone tile. Wet cutting methods are recommended.

Respiratory Protection: Use of a properly fitted NIOSH/MSHA approved particulate respirator is recommended when cutting natural stone products for installation or during the removal of installed product.

Eye Protection: Use dust-proof goggles or safety glasses with side shields. Contact lenses may absorb irritants. Do not wear contact lenses in work areas.

Skin Protection: Cotton or leather work gloves should be worn when cutting this product to minimize skin exposure to dust and/or cuts. Wash hands prior to eating, drinking, or smoking, and at the end of the work shift, after cutting operations are conducted.

NOTE: Personal protection information in Section 8 is based on general information for normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the assistance of an industrial hygienist or other qualified professional be obtained.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brittle solid; color may vary

Odor: Odorless

Melting Point: Not available (>1000 °F)

Boiling Point:

Vapor Pressure:

Not applicable

Vapor Density (Air=1):

Solubility in Water:

Specific Gravity (H2) =1):

Not applicable

Insoluable

1.2 to 2.6

Percent Volatile by Volume:

Evaporation Rate (Ethyl Ether =1):

Viscosity:

Not applicable

Not applicable

<sup>\*\*</sup> Covered as particles not otherwise regulated per OSHA and particles not otherwise classified per ACGIH.

N.E. - Not established

#### 10. STABILITY AND REACTIVITY

Stability Stable in current form.

Conditions to Avoid: Avoid contact with acids (e.g., Hydrochloric, acetic, hydrofluoric, etc.)

Incompatibility (Materials to Avoid): Avoid contact with acids (e.g., Hydrochloric, acetic, hydrofluoric, etc.)

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: None.

#### 11. TOXICOLOGICAL INFORMATION

#### POTENTIAL HEALTH EFFECTS

Primary Routes of Exposure: None for intact natural stone products. Inhalation and potential exposure to eyes, hands, or other body parts if contact is made with broken tile, and/or during procedures involving the cutting of products, and/or for operations involving the removal of installed products.

Acute Effects: No acute effects from exposure to intact natural stone products are known. Working with broken or cut natural stone produces a potential for cuts to the hands and exposed body parts. Acute effects such as eye irritation may occur if associated with high dust operations such as dry cutting or during the removal of installed product. In very rare cases, symptoms of acute silicosis, a form of silicosis (a nodular pulmonary fibrosis) associated with exposure to respirable crystalline silica, may develop following acute exposure to extremely dusty environments caused by generation of tile dust. Signs such as labored breathing and early fatigue may indicate silicosis; however, these same symptoms can arise from many other causes.

Chronic Effects: No chronic effects are known for exposure to intact natural stone products. Long-term, continual exposure to respirable crystalline silica at or above established permissible occupational exposure limits may lead to the development of silicosis, a nodular pulmonary fibrosis (NPF). NPFs are also associated with pulmonary tuberculosis, bronchitis, emphysema, and other airway diseases. This type of chronic exposure to silica dust may also result in the development of autoimmune disorders, chronic renal disease, and other adverse health effects. Recent epidemiologic studies demonstrate that workers exposed to elevated silica concentrations have a significant risk of developing chronic silicosis. Signs such as labored breathing and early fatigue may indicate silicosis; however, these same symptoms can also arise from many other causes.

Potential Adverse Interactions: Silicosis may be complicated by severe mycobacterial or fungal infections and result in tuberculosis (TB). Epidemiologic studies have established that silicosis is a risk factor for developing TB. Any existing respiratory or pulmonary diseases may be complicated by exposure to respirable crystalline silica. Smoking may increase the risk of adverse effects if done in conjunction with occupational exposure to silica dust at or above permissible exposure limits.

Carcinogen Status: Respirable crystalline silica is classified by the International Agency for Research on Cancer (IRAC) as a Group I Carcinogen (carcinogenic to humans). The National Toxicology Program (9th Report) lists respirable crystalline silica as "Known to be a Human Carcinogen". USDOL/OSHA and NIOSH have recommended that crystalline silica be considered a potential occupational carcinogen.

Overview of Animal Testing: Short term experimental studies of rats have found that intratracheal instillation of quartz particles leads to the formation of discrete silicotic nodules in rats, mice and hamsters.

## 11. TOXICOLOGICAL INFORMATION (CONT.)

## ORAL (SILICA) LETHALITY

LD50 Rat oral >22,500 mg/kg LD50 Mouse oral >15,000 mg/kg LC50 Carp >10,000 mg/l (per 72 hr.)

# 12. ECOLOGICAL INFORMATION

No information available at this time

#### DISPOSABLE CONSIDERATIONS

Waste should be disposed of in a landfill certified to accept such materials in accordance with federal, state, and local regulations.

# 14. TRANSPORTATION INFORMATION

D.O.T Shipping Name:		Not a	Not applicable		
Hazard Class:			regulated (for dispo ated material)	sal purposes material is non-hazardous Class III	
ID Number:		Not a	applicable		
Marking:		Not a	applicable		
Label:		None	2		
Placard:		None	9		
Hazardous Substance/RC	):	Not a	applicable		
Shipping Description:		Natu	ral Stone/Granite pr	oducts	
Packaging References:		None			
15. REGULATORY II	NFORMA	TION			
	SCA) Inver	ntory of Che	emicals in Commerce	d into U.S. commerce and is listed in the Toxic e. Hence, it is subject to all applicable provisions and	
	Beryllium	, Cadmium,		owing elements, which are SARA 313 Recordable: Copper, Manganese, Mercury, Nickel, Lead, Silver,	
chemicals known to the St	ate of Cali is dry cut	fornia to ca /ground/po	use cancer, including	cion 65):	
This product or its compor Hazard Communication St				n(s) as defined by the Occupational Safety and Health	
Combustible Liquid	Fla	ammable Ae	erosol	Oxidizer	
Compressed Gas	Ex	plosive		— Pyrophoric	
Flammable Gas	<b>X</b> He	ealth Hazard	d (Sections 3 & 11)	Unstable	
—— Flammable Liquid	Or	ganic Perox	ide	Water Reactive	
—— Flammable Solid			_		
Based on information 29 CFR Section 1910.1		available, t	his product does no	t meet any of the hazard definitions of	
				to the potential hazards associated with dusts which the product during installation and/or removal.	
16. ADDITIONAL IN	FORMAT	ION			
Global Harmonization Ide	ntification	System			
GHIS: Healtl		Fire: 4	Reactivity: 4		
Hazardous Material Ident					
HMIS: Health	-	Fire: 0	Reactivity: 0		
National Fire Protection A					
NFPA: Health		Fire: 0	Reactivity: 0		
SDS Preparation Date 5/3		vised 11/13/	-		