

SAFETY DATA SHEET

PORCELAIN SLAB PRODUCTS

1. **PRODUCT IDENTIFICATION**

Product Name:	Porcelain Slab products distributed by MS International, Inc. (MSI)
Synonyms:	Porcelain
Recommended Use:	Countertop, Flooring and Wall Application
Manufacturer Name:	MS International, Inc.
Address:	2095 N. Batavia Street
	Orange, CA 92865
Telephone:	(714) 685-7500

This document has been prepared in accordance with the Occupational Safety and Health Administration (OSHA) Hazard Communication standard, 29 Code of Federal Regulations (CFR) 1910.1200(g), Safety Data Sheets.

2. HAZARDS IDENTIFICATION

Porcelain slab products are mixtures of predominantly clays, silica sand, and other minerals. The finished 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 when cutting, grinding, or polishing porcelain slab products.

Classification of the Chemical (Crystalline Silica) in Accordance with Paragraph (d) of 1910.1200:

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 Hazard Pictogram:



Category 3 (Respiratory tract irritation) (H335)

Category 1A (Carcinogenicity) (H372)

GHS Signal Word: Danger

GHS Hazard Statements:

May cause cancer (inhalation) (H350) May cause respiratory irritation (H335) Causes damage to organs (lung/respiratory) through prolonged or repeated exposure (inhalation) (H372)

GHS Precautionary Statements:

Obtain, read and follow all safety instructions before use. (P203) Do not breathe dust/spray. (P260 + P261) Wash skin thoroughly after handling. (P264) Do not eat, drink, or smoke when using this product. (P270)



Use only outdoors or in a well-ventilated area (P271) Wear protective gloves, protective clothing, eye protection, face protection. (P280)

Unknown Acute Toxicity: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Porcelain slab products are mixtures of predominantly clays, silica sand and other minerals. The products are manufactured in various shapes, sizes, and colors.

Composition		CAS# Estimated % by Wt	
Crystalline Silica as Quartz	CAS:	14808-60-7	3-<25%
Clays	CAS:	1332-58-7 (Kaolin/Ball Cl	ay) 20-40%
		1302-78-9 (Bentonite)	
Feldspar	CAS:	68476-25-5	40-70%
Zirconium	CAS:	10101-52-7	< 12%

4. FIRST AID MEASURES

Description of 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 porcelain slab products.
Inhalation:	Remove to fresh air if exposed to large amounts of dust. Administer artificial respiration
	if breathing has stopped. Keep individual at rest. Call for prompt medical attention.
Ingestion:	Not applicable for intact porcelain slab products.

Most Important Symptoms/Effects, Acute and Delayed:

May cause respiratory irritation. May cause cancer. May cause damage to lungs through prolonged or repeated exposure.

Indication of Immediate Medical Attention and Special Treatment Needed:

If exposed or concerned, get medical advice and attention. Have emergency eyewash station available in area where products are cut

5. FIRE-FIGHTING MEASURES AND INFORMATION

Suitable Extinguishing Media:	ABC fire extinguished
Specific Hazards:	Not applicable
Special Fire Fighting Procedures:	None required
Fire and Explosion Hazards:	None

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures:

Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8 of this SDS.



Methods and Materials for Containment and Clean Up:

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

7. HANDLING AND STORAGE

Precautions for Safe Handling:

SILICA DUST HARMFUL IF INHALED. Repeated inhalation of respirable crystalline silica dust from cutting, grinding, polishing, intentional breaking, machining, sweeping, or other clean-up tasks during fabrication can cause acute lung injury, silicosis, or cancer. Wear a respirator when cutting, grinding, polishing, intentionally breaking, machining, sweeping, or cleaning up during fabrication as required by NIOSH and/or the Cal/OSHA standard. Use wet cutting methods and do not dry cut. Segregate work that involves repeated cutting, grinding, polishing, intentional breaking, or machining. Wash contaminated clothing before reuse and do not take work clothes home.

Conditions for Safe Storage, Including Incompatibilities:

Do not store near acids. If porcelain slab 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	OSHA	NIOSH	ACGIH
	PEL	AL	REL	TLV
Crystalline silica as quartz	50 μg/m ³	25 μg/m ³	0.05 mg/m ³	0.025 mg/m ³
Clays (Kaolin/Ball/Bentonite)			-	-
-Respirable Fraction	5 mg/m ³	N.E.	5 mg/m ³	2 mg/m ³
-Total Dust**	15 mg/m ³	N.E.	10 mg/m ³	N.E.
Feldspar	C		C	
-Respirable Fraction**	5 mg/m ³	N.E.	N.E.	N.E.
-Total Dust**	15 mg/m ³	N.E.	N.E.	N.E.
Zirconium	5 mg/m ³	N.E.	5 mg/m ³	5 mg/m ³

Based on an 8hr TWA or Time Weighted Average

** Covered as particles not otherwise regulated per OSHA and particles not otherwise specified per ACGIH.

N.E. – Not Established

AL – Action Level



8.2 ENGINEERING 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 when using dry cutting methods. Wet cutting methods and exposure control methods set forth in OSHA Table 1 of 29 CFR § 1926.1153 are recommended.

Respiratory Protection: Wear a respirator when cutting, grinding, polishing, intentionally breaking, machining, sweeping, or cleaning up during fabrication as required by NIOSH and/or the Cal/OSHA standard.

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
Odor Threshold:	Not applicable
pH:	Not applicable
Melting Point:	3110°F
Freezing Point:	Not applicable
Boiling Point:	4046°F
Flash Point:	Not applicable
Evaporation Rate (Ethyl; Ether = 1):	Not applicable
Flammability:	Not applicable
Upper/Lower Flammability Limits:	Not applicable
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Relative Density:	Not applicable
Solubility in Water:	Insoluble
Partition Coefficient: n-octanol/water:	Not applicable
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	Not applicable
Viscosity:	Not applicable

10. STABILITY AND REACTIVITY

Reactivity:	Not available
Chemical Stability:	Stable in in normal conditions and storage conditions
Possibility of Hazardous Reactions:	Not available
Conditions to Avoid:	Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)



Date of Preparation: April 2025 Incompatibility (Materials to Avoid): Hazardous Polymerization: Hazardous Decomposition Products:

Avoid contact with acids (e.g., acetic, hydrofluoric, etc.) Will not occur Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)

11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Primary Routes of Exposure

None for intact porcelain slab products.

Inhalation and potential exposure to eyes, hands, or other body parts if contact is made with broken product, and/or during procedures involving cutting, grinding, or polishing porcelain slab products.

Acute Effects Crystalline Silica

No acute effects from exposure to intact porcelain slab products are known.

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 in excess of established permissible occupational exposure limits and/or failure to follow product use instructions or regulatory standards. Signs such as labored breathing and early fatigue may indicate silicosis; however, these same symptoms can arise from many other causes. Working with broken or cut porcelain slabs 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.

Chronic Effects Crystalline Silica

No chronic effects are known for exposure to intact porcelain slab products.

Long-term, continual exposure to respirable crystalline silica in excess of established permissible occupational exposure limits and/or failure to follow product use instructions or regulatory standards may lead to the development of silicosis, a nodular pulmonary fibrosis (NPF). NPFs are also associated with pulmonary tuberculosis, bronchitis, emphysema, COPD, 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. 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). Silicosis is a risk factor for developing TB. Any existing respiratory or pulmonary diseases may be complicated by exposure to an excess of 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 (IARC) 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 lists crystalline silica in the OSHA Hazard Communication Carcinogen list.

Acute Toxicity

Not available.



12. ECOLOGICAL INFORMATION

No information available at this time.

13. DISPOSAL 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 applicable
Hazard Class:	Non-regulated (for disposal purposes material is non-hazardous Class III regulated material)
ID Number:	Not applicable
Marking:	Not applicable
Label:	None
Placard:	None
Hazardous Substance/RQ:	Not applicable
Shipping Description:	Porcelain Slab products
Packaging References:	None

15. REGULATORY INFORMATION

This product's components have been previously introduced into U.S. commerce and are either listed on or exempted from the Toxic Substances Control Act (TSCA) Inventory of Chemicals in Commerce.

<u>Title 22, Division 2, California Code of Regulations Chapter 3 (Proposition 65)</u>: This product contains crystalline silica known to the State of California to cause cancer.

California Code of Regulations, Title 8, Section 5204 (Cal. Code Regs. tit. 8, §5204), effective February 5, 2025: This product may contain more than 10% crystalline silica. When performing a "high-exposure trigger task," follow Cal-OSHA's regulatory standard for crystalline silica. "High-exposure trigger task" includes machining, crushing, cutting, drilling, abrading, abrasive blasting, grinding, chiseling, carving, gouging, polishing, buffing, fracturing, intentional breaking, or intentional chipping of slabs for the fabrication of countertops, backsplashes, walls, flooring, waterfall countertop edges, and other products from slabs or panels, as well as clean up, disturbing, or handling of wastes, dusts, residues, debris, or other materials created during the above-listed tasks. Do not dry cut. Use one of the following wet cutting methods: (1) applying a constant, continuous, and appropriate volume of running water directly onto the surface; (2) submersing the surfaces underwater; or (3) water jet cutting using high pressure water to cut the surface. If using method (1) and recycling water, filter the water to remove silica prior to reuse. Wear a full face, tight-fitting powered-air purifying respirator (PAPR), a helmet or hood PAPR with an Assigned Protection Factor (APF) of 1000, or another respirator providing equal or greater protection (APF 1000 or greater) equipped with a HEPA, N100, R100, or P100 filter or consult Cal-OSHA's crystalline silica standard Section 5204 on other respiratory protection. Use wet cleanup methods or vacuum cleaners equipped with a HEPA filter. Do not use compressed air on waste, dust, debris, residue, or other materials that may contain crystalline silica or on any surface or clothing or body surface that may contain crystalline silica.



<u>Other State Regulations:</u> Crystalline silica is listed as "hazardous" or "toxic" on state right to know laws including, but not limited to, Massachusetts, New Jersey, and Pennsylvania.

This product or its components meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

Combustible Liquid	Flammable Aerosol	Oxidizer
<u>Compressed</u> Gas	Explosive	Pyrophoric
Flammable Gas	<u>X</u> Health Hazard (Sections 3 & 11)	Unstable
Flammable Liquid	Organic Peroxide	Water Reactive

_____Flammable Solid

Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

Note: The information in this data sheet provides information related to the potential hazards associated with dusts which may be produced when cutting, grinding, or polishing porcelain slab products or otherwise changing the shape of the product.

16. ADDITIONAL INFORMATION

Date of preparation: April 2025