

## MATERIAL SAFETY DATA SHEET

### Section 1 – Chemical Product and Company Identification

Material Name : fired Tile  
 Other Designations : Glazed Porcelain Tiles  
 Manufacturer's Name : ASTOR GRUPPO BETA SPA  
 Manufacturer's Address : S.S. 569 NO 234  
                                   41014 Solignano di Castelvetro (MO)  
                                   Italy  
 Telephone Number ( for information ) : ++39 – 059 – 74.89.01  
 Telephone Number ( for emergencies ) : ++39 – 059 – 74.89.01

### Section 2 – Composition / Information on Ingredients

<u>COMPOSITION</u>	<u>CAS NUMBER</u>	<u>ESTIMATED % BY WGT.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Feldspathic Materials	N.E.	25 – 35%	10 mg / m <sup>3</sup> *	Resp. 0.025 mg / m <sup>3</sup> *
Recovered Tile Material	N.E.	10 – 25%	10 mg / m <sup>3</sup> *	Resp. 0.025 mg / m <sup>3</sup> *
Clays	N.E.	35 – 45%	N.E.	N.E.
Pigments	N.E.	2 – 5%	N.E.	N.E.
Sands	N.E.	5 – 10%	10 mg / m <sup>3</sup> *	Resp. 0.025 mg / m <sup>3</sup> *

\* these datas refer only to the exposure limits of silica as quarts.

Crystalline Silica as quartz CAS# 14808 – 60 – 7  
 Airborne Exposure Limits : Silica Dust

	OSHA PEL	ACGIH TLV
Respirable Fraction	10 mg / m <sup>3</sup>	0.025 mg / m <sup>3</sup>

The tiles do not contain asbestos

### Section 3.1 – Hazards Identification

#### Summary/Overview of Hazards

Porcelain tile products are mixtures of predominantly clays, silica sand, and other natural occurring minerals that have been mixed with water and fired in a high temperature kiln. The tiles 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 dry cutting tiles (not recommended) or if dust is produced by any other operations, including removal.

#### **EMERGENCY OVERVIEW – Non-hazardous PRODUCT as an intact tile.**

NFPA Rating: Health - 0, Flammability - 0, Reactivity - 0  
 NFPA Definitions: (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme).

### Section 3.2 – Potential Health Effects

**Potential Health Effects:** None for intact tile. Inhalation and potential exposure to eyes, hands, or other body parts if contact is made with broken, and/or during procedures involving the cutting of tiles, and/or for operations involving the removal of installed tiles.

**Inhalation:** This product may represent an inhalation hazard during cutting or removal with creation of respirable dust.

**Ingestion:** This product does not represent an ingestion hazard.

**Skin Contact:** Dust maybe irritating to skin

**Eye Contact:** Dust may cause irritation

**Chronic Exposure:** No chronic effects for intact tiles. Long-term, continual exposure to Respirable crystalline silica at or above allowable occupational exposure limits may lead to the development of silicosis.

**Aggravation of Pre-existing Conditions:** Pre-existing skin and respiratory problems.

**Carcinogenicity:** Silica is listed by the NTP, IARC, or regulated by OSHA as a carcinogen.

### Section 4 - First Aid Measures

**Eye Exposure:** Immediately and thoroughly flush eyes with water for 10-15 minutes while holding eyelids open. Contact physician if irritation persists.

**Inhalation:** Remove victim to fresh air and provide oxygen if breathing is difficult. Administer artificial respiration if breathing has stopped. Keep victim at rest. Call for prompt medical attention. Contact physician if breathing difficulty persists.

**Skin:** Wash thoroughly after working with tiles.

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

### Section 5 - Fire Fighting Measures

**Non-flammable**

**Extinguishing Media:** NA

**Unusual Fire or Explosion Hazards:** NA

**Recommended Fire-Fighting Procedures:** NA

### Section 6 - Accidental Release Measures

**Recommended Spill / Response Procedures:**

**Spills:** Clean up and collect spilled material. Use wet sweeping compound or water to minimize particulates.

### Section 7. Handling and Storage

**Storage Temperature (min/max):** 35.6°F (2°C.) to 100°F (38°C)

**Shelf Life:** N/A

**HANDLING (PERSONNEL):** Handle in accordance with good hygiene and safety procedures.

**STORAGE PRECAUTIONS:** None Established.

## Section 8 - 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 dry cutting (not recommended) or removal of installed tile. Wet cutting methods are recommended.

**Respiratory Protection:** Use a properly fitted NIOSH/MSHA approved particulate respirator if dry cutting (not recommended) is necessary or during the removal of tile surfaces.

**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.

### Airborne Exposure Limits:

Airborne Exposure Limits: Silica Dust

	OSHA PEL	ACGIH TLV
Respirable Fraction	10 mg/m <sup>3</sup>	0.025 mg/m <sup>3</sup>

## Section 9 - Physical and Chemical Properties

**Appearance:** Solid, flat shapes any color

**Odor:** none

**Vapor Pressure:** NA

**Boiling Point:** NA

**Freezing Point:** NA

**Water Solubility:** insoluble

**Specific Gravity:** 2.4-2.7

**Flash Point:** NA

**Vapor Density (air = 1):** NA

**Melting Point:** NA >2100°F

## Section 10 - Stability and Reactivity

**Stability:** Stable

**Polymerization:** Will not occur

**Chemical Incompatibilities:** (Materials to Avoid): Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)

**Hazardous Products of Decomposition:** none

## Section 11 – Toxicological Information

Toxicity Data:

Product Name	Oral, LD50, Rat	Dermal	Inhalation
Tile (Contains Silica)	>22,500 mg/kg	N/A	N/A

### Cancer Lists

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Silica	YES	YES	A4

## Section 12 – Ecological Information

No harmful effects known other than those associated with suspended inert solids in water.

## Section 13 – Disposal Considerations

Dispose of container and unused contents in accordance with federal, state and local requirements.

## Section 14 – Transportation Information

D.O.T. Shipping Name:	Not applicable
Hazard Class:	Non-regulated ( <i>for disposal purposes material is non-hazardous Class III regulated material</i> )
ID Number:	Not applicable
Marking:	Not applicable
Label:	None
Placard:	None
Hazardous Substance/RQ:	Not Applicable
Shipping Description:	Glazed Porcelain Ceramic Tiles
Packaging References:	None

## Section 15 – Regulatory Information

This Material Safety Data Sheet (MSDS) has been reviewed to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-2004).

## Section 16 – Other Information

Prepared By : Dott. Paolo Pallante e Dott. Max Bernabei

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