

# MATERIAL SAFETY DATA SHEET CITY

### Section 1 - Chemical Product and Company Identification

| 1.1.1 | Material name  |
|-------|--|
|       | CITY   |
| 1.1.2 | Other Designations   |
|       | Lea Ceramiche Porcelain Tile   |
| 1.2   | Use relevant identified the substance or mixture and use not recommended |
|       | For the construction industry  |
| 1.3   | Manufacturer's Name  |
|       | LEA CERAMICHE – Panariagroup Industrie Ceramiche S.p.A.                  |
| 1.4   | Telephone Number (for emergencies)                                       |
|       | +39 0536 837811  |
| 1.5   | Telephone Number (for information)                                       |
|       | +39 0536 837811  |

#### Section 2 - Hazards Identification

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.

| 3.1 Substances                            |               |                        |  |                     |                                |       |
|---|---------------|------------------------|--|---------------------|--------------------------------|-------|
| COMPOSITION                               | CAS<br>NUMBER | ESTIMATED<br>% BY WGT. | OSHA<br>PEL                            | NIOSH<br>IDLH       | ACGIH TLV                      | UNITS |
| Feldspathic Materials                     | 14808-60-7    | 40-60%                 | 0.1 mg/m <sup>3</sup>                  | 25mg/m <sup>3</sup> | RESP<br>0.025mg/m <sup>3</sup> | mg/m³ |
| SiO2                                      |               |                        |  |                     |                                |       |
| Respirable Dust                           |               |                        |  | N.E.                | N.E.                           |       |
|   |               |                        |  |                     |                                |       |
| Clays                                     | 1332-58-7     | 30-50%                 |  |                     |                                |       |
| Total Particulate                         |               |                        | 15 mg/m³                               | N.E.                | 10 mg/m3                       | mg/m³ |
| <b>Respirable Fraction</b>                |               |                        | 5 mg/m <sup>3</sup>                    | N.E.                | 2 mg/m3                        | mg/m³ |
|   |               |                        |  |                     |                                |       |
| Sand/Silica                               |               | 0-10%                  | N.E.                                   |                     |                                |       |
| Total Particulate                         |               |                        |  | N.E.                | N.E.                           | mg/m³ |
| <b>Respirable Fraction</b>                |               |                        |  | 0.1                 | N.E.                           | mg/m³ |
| HAZARDOUS<br>COMPONENTS                   | CAS<br>NUMBER | ESTIMATED<br>% BY WGT. | OSHA PEL<br>mg/m3<br>(8 Hr-TWA)        | NIOSH<br>IDLH       | ACGIH TLV                      | UNITS |
| Respirable Crystalline<br>Silica (Quartz) | 14808-60-7    | 0%                     | [10mg/m <sup>3</sup><br>(*)/(%SiO2 +2] | 25mg/m <sup>3</sup> | RESP<br>0.025mg/m <sup>3</sup> | mg/m³ |

## Section 3 - Composition / Information on Ingredients

(\*) The OSHA PEL for respirable dusts containing 1% or greater crystalline silica varies depending on the percentage of crystalline silica found in the air sample according to this formula



### 3.2 Mixtures

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.

### Section 4: First Aid Measures

### 4.1 Description of first aid

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.

Ingestion: Seek medical attention if nausea develops.

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

### 4.2 Major symptoms and effects, both acute and delayed

<u>Primary Routes of Exposure</u>: None for intact tile or cut using tools that do not produce dust (glass cutter, tile cutter, wet saw, etc.). Inhalation and potential eye exposure to eyes, hands, or other body parts if contact is made with broken, and/or during procedures involving dry cutting (not recommended) of tiles, and/or for operations involving the removal of installed tiles.

Symptoms of Overexposure (by route):

Inhalation: Mild irritation of nose and throat.

**Eye Contact**: Mild irritation of eyes.

<u>Acute Effects</u>: No acute effects from exposure to intact tile are known. Working with broken or cut tile 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 tile or during the removal of tile surfaces. 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 generated from tile dust. Signs such as labored breathing and early fatigue may indicate silicosis; however, these symptoms can arise from many other causes.

<u>Chronic Effects</u>: No chronic effects are known for exposure to intact tile. Long-term, continual exposure to respirable crystalline silica at or above allowable occupational exposure limits may lead to the development of silicosis (a nodular pulmonary fibrosis), and are associated with pulmonary tuberculosis, bronchitis, emphysema, and other airway diseases. This type of exposure may also be related to 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 symptoms can arise from many other causes.

<u>Potential Adverse Interactions</u>: 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 at or above allowable limits.

<u>Carcinogen Status</u>: 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.

Only Respirable Crystalline Silica (size less than 5 micron) is a known carcinogen and produces a condition known as silicosis in humans.



4.3 Indication of any need to consult a doctor immediately and special treatment **No entry.** 

## Section 5 – Fire fighting measures

## Non-flammable

- 5.1 Extinguishing Media
- NA
- 5.2 Unusual Fire or Explosion Hazards
- NA
- 5.3 Recommended Fire-Fighting Procedures

NA

### Section 6 – Accidental Release Measures

6.1 Precautions on personal protective equipment and procedures in case of emergency

## **Recommended Spill / Response Procedures**

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

6.2 Environmental precautions

Scrap ceramic tile should be disposed of in accordance with applicable State and Local regulations. Scrap ceramic tile is not a hazardous waste under U.S.E.P.A. regulations.

6.3 Methods and materials for the containment and remediation **No entry** 

6.4 Reference to other sections **No entry** 

## Section 7 – Handling and Storage

## 7.1 Precautions for safe handling

When cutting or grinding, use equipment that do not produce dust (glass cutter, diamond points, saw water) or with integral dust collection and/or local exhaust ventilation. Use wet methods if needed to avoid generation of dust. Use respiratory protection in the absence of effective engineering controls. Shelf life is unlimited.

If you cut the slabs use appropriate gloves to protect hands.

Do not store near Hydrofluoric acid. If tiles contact Hydrofluoric acid there is a limited potential for leaching heavy metals.

## 7.2 Conditions for safe storage, including any incompatibilities

Storage Requirements: Store in a dry area at ambient temperature. Implement adequate exhaust ventilation where necessary. Where particulates cannot be controlled in this way, a NIOSH approved respirator should be employed.



Recommended Handling Precautions: Use of respirator and goggles is recommended where respirable particulates are present. Respirable particulates are of minimal concern as long as the material (fired tile) is not being dry cut, crushed, or otherwise broken.

7.3 Specific end uses For the construction industry.

## Section 8 - Exposure Controls / Personal Protection

## 8.1 Exposure Controls

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.

## **Section 9 – Physical and Chemical Properties**

#### 9.1 Information on basic physical and chemical properties

| Appearance:           | Solid, flat shapes any color | Water Solubility:             | insoluble  |
|-----------------------|------------------------------|-------------------------------|------------|
| Odor:                 | none                         | Specific Gravity (water = 1): | 2.4-2.7    |
| Vapor Pressure:       | NA                           | Flash Point:                  | NA         |
| <b>Boiling Point:</b> | NA                           | Vapor Density (air = 1):      | NA         |
| Freezing Point:       | NA                           | Melting Point:                | NA >2100°F |

## 9.2 More Information

No entry

## Section 10 – Stability and Reactivity

10.1 Reactivity Will not occur.

10.2 Chemical stability **Stable.** 

10.3 Possibility of hazardous reactions **No entry.** 

10.4 Conditions to avoid **No entry.** 

10.5 Chemical Incompatibilities

Avoid contact with acids (e.g., acetic, hydrofluoric, etc.).

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10.6 Hazardous Products of Decomposition **No entry.** 

### Section 11 – Toxicological Information

No entry.

## Section 12 – Ecological Information

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

### Section 13 – Disposal Considerations

### 13.1 Methods of waste treatment

EPA Waste Codes: If this material becomes a waste, it shall be designated as solid waste according to EPA and disposed of by the following methods or technologies.

Recommended Disposal Methods/Technologies: A disposal method should be selected based upon environmental acceptability in the following order of preference:

1) Recycle or rework if feasible.

2) Landfill at an approved facility.

Contact the appropriate government environmental agencies if further disposal guidance is required.

| D.O.T. Shipping Name:   | Not applicable  |
|-------------------------|---|
| Hazard Class:           | Non-regulated (for disposal purposes material<br>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 Ceramic Tiles   |
| Packaging References:   | None  |

## Section 14 – Transport Information

### Section 15 – Regulatory Information

15.1 Rules and regulations about health, safety and environment specific for the substance or the mixture EPA Designations: 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 |
|---------------------------|---|-------------------|
| Compressed Gas            |   | Explosive         |
| Flammable Gas             | х | Health Hazard     |
| Flammable Liquid          |   | Organic Peroxide  |
| Flammable Solid           |   |                   |
| Based on information      |   |                   |
| presently available, this |   |                   |
| product does not meet     |   |                   |
| any of the hazard         |   |                   |
| definitions of 29 CFR     |   |                   |
| Section 1910.1200.        |   |                   |

| Oxidizer       |
|----------------|
| Pyrophoric     |
| Unstable       |
| Water Reactive |
|                |
|                |
|                |
|                |
|                |
|                |
|                |

## 15.2 Chemical Safety Assessment

Toxic Chemical (SARA-313): Fired Tiles are articles, and not subject to SARA 313 reporting requirements. However, tiles do contain trace concentrations of metal compounds (e.g., chromium compounds).

Title 22 Division 2, California Code of Regulation Chapter 3 (Proposition 65): This product contains a chemical or chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

Note: The information in this data sheet provides information related to the potential hazards associated with dusts which may be produced during cutting or otherwise changing the shape of the tile during installation and/or removal.

## Section 16 – Other Information

Disclaimer: While the information and recommendations set forth herein are believed to be accurate as of the date hereof, the preparer and/or manufacturer makes no warranty with respect thereto, and disclaims liability from reliance thereon. This data relates only to the specific material(s) designated herein, and does not relate to use in combination with any other material(s) or in any process. Any use of this data and information must be determined by the user to be in accordance with Federal, State, and local laws and regulations.