This Safety Data Sheet (SDS) has been prepared specifically for professionals (stonemasons, installers, etc.) who mechanically process material in a way that could generate respirable dust. If you are going to process material in this way, please read this information carefully.

These products contain crystalline silica. Processing them incorrectly or without adopting the appropriate safety measures can cause serious illnesses.

Always obtain advice in regards health and safety from your local administration and from a professional industrial hygienist, to implement the occupational safety measures required to meet the regulatory requirements and to mitigate the exposition to dust, as the required safety measures depend on the specific conditions of the workplace.

The employers of workers processing the material are responsible for informing their employees about the risks, and for ensuring that the workplace complies with applicable obligations. They are also responsible for implementing the required workplace health and safety measures.

SECTION 1: IDENTIFICATION OF THE ARTICLE AND OF THE COMPANY / UNDERTAKING

1.1	**Product identifier**	Porcelain tiles with fiberglass mesh manufactured by Panariagroup Industrie Ceramiche S.p.A.
	Commercial name	Porcelain tiles and slabs with fiberglass mesh for floor and walls
1.2	**Use**	Coating of floors, walls and in general of surfaces
1.3	**Details of the supplier of the safety data sheet**	Panariagroup Industrie Ceramiche S.p.A. Via Panaria Bassa, 22/a 41034 Finale Emilia (MO) Tel: +39 0536 915211

SECTION 2: HAZARDS IDENTIFICATION

Classification of the chemical

There is no proof or indication that the whole, finished product [definable as an "article" according to 29 CFR 1910.1200 (Hazard Communication Standard)] has any risks according to Globally Harmonized System (GHS). The product is an article in accordance also with Regulation 1272/2008/EC (CLP) .

In the case of the breakage of the article or its processing, involving cutting, shaping, engraving or any other process which could lead to the release of dust traceable to the matrix of the article, it may generate crystalline silica powder (SiO2) in the form of quartz. The hazard assessment refers to this specific case. No acute or chronic effects are known from exposure to intact tiles.

NOTES: **Not applicable for intact tiles.**

Additional information: The breathable fraction of crystalline silica (SiO_2), particularly during prolonged exposures and/or exposures to high concentrations, may lead to lung damage or illnesses, such as silicosis.

Label elements

Not applicable to intact product

We recommend wet cutting or the score and snap method during the installation process. Improper installation techniques could expose installer to inhalation of harmful silica dust (SiO2). Do not dry cut using power tools during the installation process. Using dry cutting methods could present a risk of acute lung injury. If adequate ventilation cannot be achieved, wear a mask or respirator.

Hazard pictograms:

GHS07

GHS08

Hazard statements:
H335 May Cause respiratory irritation
H350 May cause cancer.
H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.
Precautionary statements:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with applicable regulations.
Special Provisions:
None

Other hazards

If the product is dry cut/sanded or altered in such a way that excessive and/or significant particulates and/or dusts may be generated, exposure may aggravate pre-existing eye, skin, or respiratory conditions. We recommend wet cutting or the score and snap method during the installation process. Do not dry cut using power tools during the installation process. Improper installation techniques could expose installer to harmful silica dust. Contains crystalline silica (quartz). When exposed to high temperatures, free quartz can change crystal structure to form tridymite (above 870°C.) or cristobalite (above 1470°C.) which have greater health hazards than quartz due to their more fibrogenic characteristics. Manufacturers who crush, grind or cut ceramic bodies fired to high temperatures should recognize the possible presence of tridymite and/or cristobalite

· **Results of PBT and vPvB assessment**

PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

The components of the article are incorporated into the matrix.
8-22 % Crystalline Silica (Quartz)
CAS 14808-60-7
Carcinogenicity, Category 1A (H350)
Specific Target Organ Toxicity – Repeated Exposure, Category 1 (H372)
< 5% Fibrous glass, continuous filament
CAS 65997-17-3
Not classified as hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200)
Not classified as carcinogenic when in continuous, non-respirable filament form.

SECTION 4: FIRST AID MEASURES

Description of necessary measures

Skin contact: Immediately take off all contaminated clothing. Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediately and dispose off safely.

Eye contact: rinse the eyes with plenty of water keeping the eyelids open. In case of contact with splinters or irritation seek medical assistance.
Inhalation: In the case of exposure to dust generated during processing, transport outdoors. Consult a doctor if symptoms occur.
Ingestion: Rinse out mouth and make victim drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting unless directed to do so by medical personnel; call for medical help.

No acute effects are known from exposure to intact tiles. 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 or drilling the 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 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.

No chronic effects are known from exposure to intact tiles. 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 (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.

Most important symptoms and effects, both acute and delayed

Information not available.

Indication of any immediate medical attention and special treatment needed

Treat according to symptoms. No specific treatment.

SECTION 5: FIREFIGHTING MEASURES

The product is not flammable.

Extinguishing media

Use extinguishing systems compatible with the local situation and the surrounding environment.
Water, Cabon dioxide.

Special hazards arising from the product

The product is not flammable, combustible or explosive. No dangerous thermal decomposition.

Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing in case of fire. Avoid breathing fire fumes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Keep unnecessary and unprotected personnel from entering. Wear appropriate personal protective equipment as described in Section 8. Follow the advice for safe handling and use given in Section 7.
For emergency responders: Emergency procedures are not required. However, respiratory protection is needed in situations with high dust levels.

Environmental precautions

Avoid release to the environment. Inform appropriate authority in case of accidental contamination of watercourses or drains.

Methods and material for containment and cleaning up

Recover the product if possible. Collect mechanically, dispose of in accordance with national and local waste regulations (see Section 13). If dust is formed applying a dry-cleaning method, personal protective equipment must be used. Avoid inhalation of product dust and skin contact.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Wear personal protective equipment (see Section 8).
Provide adequate ventilation. Provide local exhaust or general room ventilation to minimize dust concentrations. Avoid inhalation and contact with skin, eye and clothing.
Do not eat, drink, smoke in the work areas. Wash your hands after using the product. Do not enter areas where food and drinks are consumed wearing contaminated clothing.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Quartz – respirable fraction – CAS 14808-60-7

- OSHA PEL – TWA (8h): 0.05 mg/m³
- ACGIH TLV – TWA (8h): 0.025 mg/m³ (R), A2

Fibrous glass, continuous filament – CAS 65997-17-3

- OSHA PEL – TWA (8h): 5 mg / m^3 (breathable dust), 15 mg / m^3 (total dust)
- ACGIH TLV – TWA (8h): 1 f/cc (total fiber), not classified as carcinogenic if in continuous filament, non-respirable form.

Exposure controls

Collective protection systems
If the material is mechanically processed with dust formation, identify the potential exposure situations and then provide for the consequent technical (localized aspirations and / or adequate ventilation) and organizational adjustments. Wet cutting methods are recommended.
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Respiratory protection

If the dust concentration exceeds the exposure limit value at the workplace, it is necessary to wear a suitable respiratory protection system (we recommend a nose-mouth mask equipped with a dust filter P2).

Hand protection

It is recommended to use cut-resistant protective gloves to handle the material and to work it in pieces.

Eye protection

It is recommended to wear safety glasses with side protection.

Skin protection: Wear category I professional long-sleeved overalls and safety footwear.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: solid sheet.
Odour: odourless
Relative apparent density: 2,3 g/cm^3 (water = 1 g/cm^3)
Water solubility: not soluble

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Under normal conditions of use and storage, there are no particular dangers of reaction with other substances.

Chemical stability

The product is stable under normal conditions of use and storage.

Possibility of hazardous reactions

Under normal conditions of use and storage, hazardous reactions are not foreseeable.

Conditions to avoid

To the best of our knowledge there are no conditions to be avoided.

Incompatible materials

No data available.

Hazardous decomposition products

No dangerous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute: 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.

Chronic: Not applicable for intact tiles. Excessive exposure to tile dust can cause discomfort and mechanical irritation. Long term exposure to silica dusts can lead to silicosis.

Crystalline Silica (Quartz):
LD50 Rat oral > 22,500 mg / kg & LD50 Mouse oral > 15,000mg/ kg

LC50 Carp > 10,000 mg / l (per 72 hrs.)

Skin & Eye corrosion / irritation

Inhalation and potential eye exposure to eyes may cause irritation 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**.**

Sensitization

Existing lung disease may be aggravated after exposure to tile dusts. Long term exposure to silica dusts can lead to silicosis.

Carcinogenicity: Respirable crystalline silica is classified by the International Agency for Research on Cancer (IRAC) as a Group 1 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.

With regard to fiber-glass, the International Agency for Research on Cancer (IARC) has defined continuous fiber-glass filaments as not classifiable for human carcinogenicity (Group 3). The results of human and animal studies have been assessed by the IARC as insufficient to classify continuous fiber-glass filaments as a possible, probable or certain carcinogenic material.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.
The product is not classified for environmental hazards.
Based on available data, the classification criteria are not met.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: TRANSPORT INFORMATION

RCRA HAZARD CLASS: Not Applicable

SPECIAL SHIPPING INFORMATION Not Applicable

In Accordance with DOT Not regulated for transport

In Accordance with IMDG Not regulated for transport
In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

· Section 355 (extremely hazardous substances): None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings): None of the ingredients is listed.

· TSCA (Toxic Substances Control Act): All ingredients are listed or exempt.

· Hazardous Air Pollutants: None of the ingredients is listed.

Proposition 65

· Chemicals known to cause cancer: CAS 14808-60-7 Quartz (SiO2)

· Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.

· Chemicals known to cause developmental toxicity: None of the ingredients is listed.

Carcinogenic categories

· EPA (Environmental Protection Agency): None of the ingredients is listed.

· ACGIH TLV (Threshold Limit Value): CAS 14808-60-7 Quartz (SiO2) A2

· NIOSH-Ca (National Institute for Occupational Safety and Health): CAS 14808-60-7 Quartz (SiO2)

SECTION 16: OTHER INFORMATION

Disclaimer: The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

CAS:	Chemical Abstracts Service (division of the American Chemical Society).
DOT:	Department of Transportation
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
LC50:	Lethal concentration, for 50 percent of test population.

LD50:	Lethal dose, for 50 percent of test population.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limit
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average