



MATERIAL SAFETY DATA SHEET

Mahaphant Fibre Cement Public Co., Ltd.
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1. Products and Company Identification

Product Name/Trade Names:

Shera Strip, Shera Flexy Board, Shera Plank, Shera Splendid Plank, Shera Skirt, Shera Lining Board, Shera Decopanel, Shera Dec' floor, Shera Flooring Board, Shera Eave, Shera Eave Lace, Shera Eave Drop, Shera Vent Board, Shera Baluster

Other Names: Fiber-cement, Fiber-reinforced cement

Use: The products in shera brand are used as internal/external wall cladding partition flooring and tile underlayment.

Manufacturer Branch: Mahaphant Fiber Cement public company limited
59 Moo 12, SARABURI-LOMSAK RD., K.M. 16, CHONGSARIKA DIST.,
PATTANANIKOM, LOPBURI 15220 THAILAND

2. Physical and Chemical Properties

Appearance: Solid with varying dimensions

Odor: product is odorless

Vapor Pressure: Not Relevant **Flash Point:** Not Relevant

Specific Gravity: Not Relevant **Autoignition Temp:** Not Relevant

Flammability Limits: Not Relevant **Volatility:** Not Relevant

Boiling Point: Not Relevant **Solubility in Water:** Not Relevant

Melting Points: Not Relevant **Evaporation Rate:** Not applicable

Component

Substance Name	CAS Number	UN Number	Proportion
Crystalline Silica (Quartz)	14808-60-7	None allocated	30-40 %
Portland Cement	65997-15-1	None allocated	30-40 %
Cellulose	9004-34-6	None allocated	< 10 %
Other non hazardous ingredients (fillers)			10-40 %

Color products are coated with water-based acrylic paint or acrylic sealer.

3. Hazards Identification

Health Effects:

Inhalation:



Acute effects - Dust occurred during sanding or sawing operation may cause irritation of the nose, throat, and respiratory system, resulting in coughing and sneezing.

Chronic Effects - Repeated and prolonged inhalation of dust containing crystalline silica can cause silicosis (scarring of the lung) and increases the risk of bronchitis, tuberculosis, lung cancer, renal disease, and scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels, and internal organs). Some studies suggest that cigarette smoking increases the risk of silicosis, bronchitis and lung cancer in persons also exposed to crystalline silica.

Swallowing:

Swallowing the dust being alkalinity from this product may result in –irritation or damage to the mouth and gastrointestinal tract.

Eye:

Dust may irritate the eyes from mechanical abrasion causing watering and redness.

Skin:

Irritating and drying to skin. May cause alkaline burn and irritant or allergic of the skin.

Carcinogenicity:

Some studies suggest that crystalline silica inhaled in the forms of quartz or cristobalite is carcinogenic to humans.

LD50:

Silicon Dioxide: Rat oral >22,500 mg/kg Mouse oral>10,500 mg/kg

4. First Aid

Swallowed:

If swallowed, rinse mouth and lips with water. Give water to drink to dilute stomach contents. Do not induce vomiting. If symptoms persist, seek medical attention.

If unconscious, loosen tight clothing and lay the person on his/her left side. Give nothing by mouth to an individual who is not alert and conscious.

Eye Contact:

Remove contact lens or eyeglasses. Flush thoroughly with flowing water or saline for at least 15 minutes. Seek medical attention if redness persists or visual changes occur.

Skin Contact:

Wash with mild soap and water. Contact physician if irritation persists or later develops.

Inhaled:

Remove from dusty area to fresh air. If shortness of breath or wheezing develops, seek medical attention. Shera fiber-cement products are neither flammable nor explosive.

5. Fire Fighting Measures

Extinguishing Media; Appropriate extinguishing media such as carbon dioxide, foam, water or dry chemical should be used for surrounding fire.

6. Accidental Release Measures

Broken or damage product can be directly picked up. But this cause will generate dust wanted to clean up in appropriate methods.

Precautions: Good housekeeping practices are necessary for cleaning up areas where spills or releases dust are occurred.



Cleanup Methods: Vacuuming with vacuum cleaner is the best method for cleaning. If sweeping is performed, a fine water spray should be used to suppress dust. Waste may be disposed of by landfill in compliance with federal, state and local requirements.

7. Handling and Storage

When user handles with fiber cement boards by cutting, drilling, routing, sawing, crushing, or otherwise abrading, and cleaning or moving sawdust, Exposure to dust should keep as low as reasonably possible. Respirable crystalline silica levels should not exceed those specified by OSHA and MSHA and identified in this MSDS. Exposure to respirable (fine) silica dust depends on cutting rate, electric shears, weather conditions and control measures used. During handling, Use appropriate respiratory protection.

Keep away from reactive products. Do not store near food, beverages or smoking materials. Avoid spilling and creating dust. Keep products far from moisture.

8. Exposure Controls and Personal Protection

Exposures of mineral dusts limited by OSHA Permissible Exposure Standards (PEL) expressed in milligrams per cubic meter (mg/m³) shall not exceed an 8-hour time weighted average (TWA) i.e. Crystalline Silica (Quartz) = (10mg/m³)/(%SiO₂+2) , Quartz (Total Dust) = (30mg/m³)/ (%SiO₂+2) Calcium Silicate (Respirable) = 5 mg/ m³, Nuisance Dust (Respirable) = 5 mg/ m³, Cellulose (Respirable) 5 mg/ m³

Abbreviations: PEL = Permissible Exposure Limit of the Occupational Safety and Health Administration (OSHA)

mg/cm³ = milligrams of substance per cubic meter of air.

Personal Protection:

Respiratory protection: Dust safety masks are recommended. Select respirators based on the level of exposure to crystalline silica as measured by dust sampling. Use respirators that offer protection to the highest concentrations of crystalline silica if the actual concentrations are unknown.

Eye: When cutting material, dust resistant safety glasses with side shields should be worn and do not wear contact lenses.

Skin: Loose comfortable clothing should be worn. Direct skin contact with dust and debris should be avoided by wearing long sleeved shirts and long trousers, a cap or hat, and gloves. Work clothes should be washed regularly.

Engineering Controls

To reduce exposure, Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dust

Cutting/Sanding/Rebating/Drilling/Other Machining

If cutting/sanding, rebating, drilling, or other machining is performed; you should always wear a NIOSH-approved dust mask or respirator and warn others in the immediate area.

Clean-Up

Never dry sweep as it may excite silica dust particles into the user's breathing area.

A fine water spray should be used to suppress dust during sweeping, or use a vacuum to collect particles.

9. Stability and Reactivity

Stability: Products are stable under ordinary conditions.

Conditions to Avoid: Spread of dust generated during storage and handling.

Materials to Avoid:



Incompatibility: Hydrofluoric acid will dissolve silica and can generate silicon tetrafluoride, a corrosive gas. Contact with strong oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride or oxygen difluoride may cause fires and/or explosions.

10. Toxicological Information

The product is not toxic in entire form but handling generate dust that may be generated during cutting and sanding:

Chronic Effects:

Inhaled:

Repeated and prolonged inhalation of dust containing crystalline silica can cause silicosis (scarring of the lung) and increases the risk of bronchitis, tuberculosis, lung cancer, renal disease, and scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels, and internal organs). Some studies suggest that cigarette smoking increases the risk of silicosis, bronchitis and lung cancer in persons also exposed to crystalline silica.

11. Ecological Information

Clean up of the spilled product would not be expected to leave any hazardous material into environment

12. Disposal Consideration

Dispose of material is not a hazardous waste. Residues being inert and non-metallic mineral destroy in accordance with local regulations.

13. Transport Information

There are no special requirements for storage and transport.

14. Regulatory Information

RCRA Waste Number: Not applicable.

California Proposition 65: Warning: Airborne particles of crystalline silica presented in respirable size are known to the State of California to cause cancer.

CERCLA Hazardous Substance (40 CFR Part 302): Not hazardous waste

15. Other Information

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing law and regulations.