

pinfix nano-cement Material Safety Data Sheet

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Disclaimer:

The information contained in the Material Safety Data sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information set forth herein is based on technical data that the Company believes to be accurate. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside the Company's control, the Company makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information.



Product and Company Identification

Product Name

Concrete Collaborative Primer

Manufacturer

Huestone Pty Ltd t/a Concrete Collaborative 82 Wedge Street, Kyneton, VIC 3444 Australia +61 3 54 223 450 www.concrete-collaborative.com

1 Hazardous Ingredients/Identity Information

| Substance Name | CAS Number | UN Number | EINECS Number | Proportion (by weight) |
|--------------------------------------|---------------|---|------------------|------------------------|
| | 05007.45.4 | | 000 040 4 | 40 000/ |
| Calcium Silicate (Hydrate) | 65997-15-1 | Not a hazardous material for shipping purposes | 266-043-4 | 10 - 30% |
| Calcium Carbonate | 471-34-1 | Not a hazardous material for shipping purposes | 207-439-9 | 10 – 35% |
| Calcium Aluminium Silicate (Hydrate) | N/A | Not a hazardous material for shipping purposes | N/A | 5 – 20% |
| Other non hazardous ingredients | 1332-58-7 | Kaolin | 310-194-7 | <10% |



2 Physical/Chemical Characteristics

| Boiling Point | Not Applicable | Specific Gravity (H ₂ 0 = 1) | Not Applicable |
|---|----------------|--|----------------|
| Vapor Pressure (mm Hg) | Not Applicable | Melting Point | Not Applicable |
| Vapor density (Air = 1) | Not Applicable | Evaporation Rate (Butyl acetate = 1) | Not Applicable |
| Solubility in Water: Not Soluble | | | |
| Appearance and Odor: Odorless solid materials | | | |

3 Fire and Explosion Hazard Data

| Flash Point: Non | Flammable | LEL: N/A | UEL: N/A |
|--|-------------|----------|----------|
| Combustible | Limits: Non | | |
| | Flammable | | |
| Extinguishing Media: This material is non-combustible. Use extinguishing | | | |
| media appropriate to surrounding fire. | | | |
| Special Fighting Procedures: Fire fighting personnel should wear normal | | | |
| protective equipment and positive self-contained breathing apparatus. | | | |
| Unusual Fire and Explosion Hazards: None Reported. | | | |

4 Stability and Reactivity Data

| Stability: Stable | Unstable | | Conditions to Avoid: Excessive |
|--|----------|---|--------------------------------|
| under normal | Stable | Х | dust generation during storage |
| conditions. | | | and handling. |
| Incompatibility (Materials to Avoid): Stable under expected conditions of use. | | | |
| Under unanticipated conditions of use, crystalline silica may react with | | | |
| hydrofluoric acid to produce a corrosive gas (silicon tetraflouride). Furthermore, | | | |
| limestone is incompatible with acids and ammonium salts. | | | |
| Hazardous Decomposition or By products: Thermal oxidative decomposition | | | |
| of CaCO ₃ limestone) can produce lime (CaO). The lime does not add to the | | | |
| hazards associated with the use of the product. | | | |
| Hazardous Polymerization: Will not occur. | | | |



5 Toxicology Information

The product is not toxic in its intact form. The following applies to dust that may be generated during cutting:

Chronic Effects:

Inhaled: Repeated and prolonged overexposures to 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. Acute silicosis is a rapidly progressive, incurable lung disease that is typically fatal. Symptoms include, but are not limited to, shortness of breath, cough, fever, and weight loss and chest pain. Such exposure may cause pneumoconiosis and pulmonary fibrosis.

6 Ecological Information

There is a very limited amount of ecological data available on the effects of releases that may occur from this product being released into the environment. Clean up on the spilled product would not be expected to leave any hazardous material that could cause a significant adverse impact. There is a limited amount of ecological data available on crystalline silica, primarily because it is anaturally occurring mineral. An adequate representation of these data is beyond the scope of this document.

7 Transportation Information

| There are no special requirements for storage and transport. | | |
|--|----------------|--|
| UN No: | None Allocated | |
| Dangerous Goods Class: None Allocated | | |
| Hazchem Code: | None Allocated | |
| Poisons Schedule: | None Allocated | |
| Packing Group: | Not Applicable | |

8 Disposal Considerations

Dispose product in accordance with federal, state and local regulations. Product is recyclable.

9 Regulatory Information

Not applicable



10 Health Hazard Data

Route(s) of Entry: Inhalation? Yes Skin? No Ingestion: Unlikely Primary Routes of Entry and Potential Health Hazards:

Inhalation

Acute Effects: Dust may cause irritation of the nose, throat, and airways, resulting in coughing and sneezing. Certain susceptible individuals may experience wheezing (spasms of the bronchial airways) on inhaling dust during sanding or sawing operations.

Chronic Effects: Repeated and prolonged overexposures to 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. *Acute Silicosis:* A sub-chronic disease associated with acute, massive silica exposure, is a rapidly progressive, incurable lung disease that is typically fatal. Symptoms include, but are not limited to, shortness of breath, cough, fever, and weight loss and chest pain. Such exposure may cause pneumoconiosis and pulmonary fibrosis.

Ingestion:

Unlikely under normal conditions of use, but swallowing the dust from this product may result in irritation or damage to the mouth and gastrointestinal tract due to alkalinity of dust.

Eye: Dust may irritate the eyes from mechanical abrasion causing watering and redness. Skin: Dust may cause irritation of the skin from friction but cannot be absorbed through intact skin. Medical conditions generally caused by aggravated exposure: Pulmonary function may be reduced by inhalation of respirable crystalline silica and/or cellulose. If lung scarring occurs, such scarring could aggravate other lung conditions such as asthma, emphysema, pneumonia or restrictive lung diseases. Lung scarring from crystalline silica may also increase risks to pulmonary tuberculosis.

Smoking: Some studies suggest that cigarette smoking increases the risk of occupational respiratory diseases, including silica-related respiratory diseases.

Carcinogenicity:

California Proposition 65 Warning: Respirable crystalline silica is known to the state of California to cause cancer.

International Agency for the Research of cancer (IARC): Crystalline silica inhaled in the forms of quartz or cristobalite from occupational sources is carcinogenic to humans.

The National Toxicology Program (NTP):

NTP has concluded that respirable crystalline silica is a known human carcinogen.

LD50: Silicon Dioxide: Rat oral > 22,500 ms/kg Mouse oral > 10,500 mg/kg



11 First Aid Measures

Signs and symptoms of over exposure: Breathlessness, wheezing, cough, sputum production

First Aid:

Swallowed: If swallowed, dilute by drinking large amounts of water. Do not induce vomiting. Seek medical attention. In 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. Flush with running water or saline for at least 15 minutes. Seek medical attention if redness persists or if visual changes occur.

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

Inhaled: Remove to fresh air. If shortness of breath or wheezing develops, seek medical attention.

Advice to Doctor: Treat symptomatically.

12 Precautions for Safe Handling and Use

Concrete stone tiles in their intact state do not present a health hazard. The controls below apply to dust generated from cutting, drilling, routing, sawing, crushing etc.

Keep exposure to dust as low as reasonable possible. Exposure to respirable (fine) silica dust depends on a variety of factors, including activity rate (e.g. cutting rate) etc. Wherever possible, practices likely to generate dust should be carried out in well-ventilated areas (e.g. outside and with tiles wet).

Keep away from reactive products. Do not store near food, beverages or smoking materials. Avoid spilling and creating dust. Maintain appropriate dust controls during handling. Follow protective controls defined in Section 13 of this document when handling this product.



13 Control Measures

Respiratory Protection: when exposed to dust from cutting, grinding etc., above recommended limits, wear suitable NOISH-approved respirator with protection factor appropriate for the level of exposure. Seek guidance from a qualified industrial hygienist, safety professional, or other suitably knowledgeable individual prior to respirator selection and use. For emergency or non-routine operations (e.g., confined spaces), additional precautions or equipment may be required. Respirator use must comply with applicable MSHA or OSHA standards, which include provisions for a user training program, respirator or repair and cleaning, respirator fit testing, and other requirements

| repair and cleaning, respirator fit testing, and other requirements. | | | |
|--|--|---|--|
| Ventilation | Local Exhaust: When cutting, grinding etc. provide general or local ventilation systems, as needed, to maintain airborne dust | Other: Respirable dust and quartz levels from hardened concrete cutting etc. should be | |
| | concentrations below the OSHA PELs, MSHA PELs, and ACGIH TLV. Local exhaust ventilation is preferred since it prevents release of contaminants into the work area by controlling it at the source. | monitored regularly. Dust and quartz levels in excess of applicable OSHA PELs, MSHA PELs, and ACGIH TLVs should be reduced by all feasible engineering controls including (but not limited to) wet suppression, ventilation, process enclosure, and enclosed employee workstations. | |
| | Mechanical (General): See above | Special: None reported. | |
| | recommendations | | |

Eye Protection: When cutting etc., wear safety glasses with side shield or dust goggles in dusty environments.

Work/Hygienic Practices: Avoid dust inhalation and direct contact with skin and eyes. If respiratory protection is used, institute a respiratory protection program that includes regular training, inspection, maintenance, and evaluation.

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