

MATERIAL SAFETY DATA SHEET

Product Name: Ecotec Silica Fume
Classified as hazardous according to the NOHSC criteria

1. IDENTIFICATION OF THE MATERIAL & SUPPLIER

Product Name: Ecotec Silica Fume
Other names: Silica (Silicon Dioxide); Micro Silica, Amorphous Fumed Silica
Recommended use: General building raw material additive / concrete additive
Company Name: Concrete Waterproofing Manufacturing Pty. Ltd. (ABN 96 093 161 963)
Address: 45 Union Rd
NORTH ALBURY NSW 2640
Tel: 02 6040 2444
Fax: 02 6040 2411

2. HAZARD IDENTIFICATION

Classified as hazardous according to the NOHSC criteria

Risk Phrases: R/36,37,38 Irritating to eyes, respiratory system and skin
R/43 May cause sensitisation by skin contact.
Safety Phrases: S/22 Do not breathe dust.
S/24/25 Avoid contact with the skin and eyes.
S/26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/S39 Wear suitable gloves and eye / face protection.

3. COMPOSITION /INFORMATION ON INGREDIENTS

| Ingredients: | Name | CAS NUMBER | Proportion(wt%) |
|--------------|---------------------------|------------|-----------------|
| | Silica (Amorphous) | 69012-64-2 | >85.0 |
| | Crystalline Silica | 14808-60-7 | <0.1 |
| | Iron Oxide (Magnetite) | 1309-38-2 | <3.0 |
| | CaMg Carbonate (Dolomite) | 16389-88-1 | >1.1 |

4. FIRST AID MEASURES

Eye contact: Avoid contact with the eyes. Quickly and gently blot or brush away any dry powder. Irrigate with large amounts of water for at least 15-20 minutes. Seek immediate medical attention.

Skin Contact: Continuously flush contaminated area with lukewarm, gently flowing water for at least 15-20 minutes. Remove contaminated clothing and wash before reuse or discard. If symptoms develop seek immediate medical attention.

Inhalation: Remove person to fresh air and seek immediate medical attention.

Oral ingestion: Wash out mouth with water and drink 1-2 glasses (240-300ml) of water. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

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| Extinguishing Media: | Not applicable - Product is non-combustible. |
| Specific Hazards: | In contact with extinguishing water, an alkaline solution is produced which can cause irritation. |
| Precautions for Fire-Fighters: | Fire fighters should wear full protective clothing and self contained breathing apparatus. |
| Hazchem Code: | Not applicable. |

6. ACCIDENTAL RELEASE MEASURES

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| Emergency Procedures: Methods and materials for containment and clean up: | Prevent spillage from entering storm water and sewer drains. Use dry clean up procedures and avoid generating dust. Increase ventilation and wear full protective clothing and sufficient respiratory protection. Vacuum device or shovel suitable for clean up. Place waste material in plastic or metal drums with tightly sealed lids for disposal. |
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7. HANDLING AND STORAGE

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| Handling: | Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in well ventilated area and avoid contact with incompatible materials. |
| Storage: | Product should be stored in dry, moderate environment, and protected from water or cold damage. Store away from foodstuff containers. Keep in sealed containers until product is required. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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| Exposure standards: | 2.0 mg/m ³ NOHSC TWA Silica (Amorphous) 0.1 mg/m ³ NOHSC TWA Silicon Dioxide Iron Oxide Not listed CaMG Carbonate (Dolomite) Not listed Recommendation: Keep exposure to dust as low as practicable. |
| Other information: | Repeated exposure to aerosol dusts may lead to silicosis, a serious lung disease. The onset of silicosis is usually slow and lung damage may occur even when no symptoms or signs of ill health have occurred. Exposure to respirable aerosol dusts contained in the product must be prevented to avoid the risk of lung disease. |
| Eng. Controls: | Use in well ventilated areas. Maintain air concentrations below exposure standards. |
| Personal Protective | It is recommended that the user wear rubber gloves, a class P1 or P2 particulate respirator or equivalent dust mask, fitted correctly, when not in well ventilated areas, tight fitting safety goggles, and impervious full length clothing that protects the skin from contact. Additional safety precautions may include, eyewash station, shower facility, and ventilation sufficient in volume and distribution to maintain dust exposure below recommended levels. |

9. PHYSICAL AND CHEMICAL PROPERTIES

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| Physical State: | Solid |
| Odour and appearance: | Odourless grey colour |
| Specific Gravity | Average 2.21 |
| Bulk Density | Approx. 610kg/M ³ |
| pH | 7.0 (10wt% in distilled water) |
| Boiling/melting point: | >1800°C |
| Vapour pressure: | Not applicable |
| Vapour density: | Not applicable |
| Solubility: | Insoluble in water, soluble in concentrated acids and alkalis |
| VOC Content: | None |
| Flash Point: | Not applicable |
| Flammability: | Not applicable |
| Other properties: | Non explosive |

10. STABILITY AND REACTIVITY

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| Chemical Stability: | Products are chemically stable. |
| Conditions to avoid: | Protect from water. |
| Incompatible materials: | Products are incompatible with hydrofluoric acid (HF). |
| Hazardous decomposition: | Products will not decompose into hazardous by-products and it will not polymerise. |
| Hazardous reactions: (SiF ₄) | Reacts with hydrofluoric acid (HF) to produce toxic, gaseous silicon tetrafluoride |

11. TOXICOLOGICAL INFORMATION

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| Toxicology Information: | No toxicity data is available for these specific products |
| Effects of Acute(short term) exposure to products: | Not a primary skin irritant, various severities of irritations are possible on prolonged, repeated or occluded contact. Ingredients may also irritate or cause burning sensation to eyes, nose and throat and may cause abdominal discomfort. |
| Effects of Chronic (long term) exposure to products: | Exposure to dust can cause perforation of the nasal septum. Prolonged exposed ingredients in these products can cause lung and respiratory damage. Excess inhalation of aerosol dust may result in respiratory disease, including Silicosis, pneumoconiosis and pulmonary fibrosis. |

12. ECOLOGICAL INFORMATION

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| Environ. Protection: | Not expected to create environmental hazard unless dumped in massive quantities. |
| Mobility: | Not available |
| Persistence/ Degradability: | Not available |
| Mobility: | Not available |
| Ecotoxicity: | Not available |

13. DISPOSAL CONSIDERATIONS

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| Disposal Procedures: | Due to possible leachability, approval from appropriate regulatory bodies is to be obtained for Silica Fume. |
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Special precautions**For landfill and****Incineration:** Non required

14. TRANSPORT INFORMATION

Not classified as Dangerous Goods for transport by Road and Rail.

UN Number: Non allocated**UN Proper shipping name:** Non allocated**Class and subsidiary risk:** Not applicable**Packing Group:** Not applicable**Special precautions for user:** No restrictions known for transport procedures.**Hazchem Code:** None allocated

15. REGULATORY INFORMATION

Poisons schedule: None allocated**Hazard Category:** Irritant

16. OTHER INFORMATION

MSDS prepared by the Technical Services Department : Issued December 2009.

The information in this 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 given is based on technical data that we believe to be reliable at the time of issuing the MSDS. Because conditions of use are outside our control, it is the responsibility of the user to verify safety data for combinations with other materials, or for the use in specific processes, and to verify waste disposal requirements.

www.ecotecsilicafume.com