

ResTec Silica Fume

Material Safety Data Sheet

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

1. IDENTIFICATION OF THE MATERIAL & SUPPLIER

Product Name: ResTec Silica Fume
Other Names: Silica (Silicon Dioxide); Micro Silica, Amorphous Fumed Silica
Recommended use: General building raw material additive / concrete additive
Company: Synergy Pigments Australia Pty. Ltd.
ABN 62 115 380 099
Address: 6/40 Oxleigh Drive
MALAGA WA 6090
Tel: 1300 655 853
Fax: 08 9249 7388

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 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 eyes. Quickly and gently blot and 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

Extinguishing Media:	N/A – 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:	N/A

6. ACCIDENTAL RELEASE MEASURES

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

7. HANDLING AND STORAGE

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

Exposure Standards:	2.0 mg/m ³ NOHSC TWA Silica (Amorphous) 0.1mg/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

Physical State:	Solid
Odour and appearance:	Odourless grey colour
Specific Gravity:	2.5
Bulk Density:	Approx. 610kg/M ³
pH:	7.0 (10wt% in distilled water)
Boiling/melting point:	>1800°C
Vapour pressure:	N/A
Vapour density:	N/A
Solubility:	Insoluble in water, soluble in concentrated acids and alkalis
VOC content:	None
Flash point:	N/A
Flammability:	N/A
Other properties:	Non explosive

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Toxicology information: No toxicity data is available for this specific product.

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.
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Effects of chronic (long term) exposure to product:	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.
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12. ECOLOGICAL INFORMATION

Environmental protection:	Not expected to create environmental hazard unless dumped in massive quantities.
Mobility:	Not available
Persistence/ Degradability:	Not available
Ecotoxicity:	Not available

13. DISPOSAL CONSIDERATIONS

Disposal procedures:	Due to possible leachability, approval from appropriate regulatory bodies is to be obtained for Silica Fume
Special precautions for landfill and incineration:	Not required

14. TRANSPORT INFORMATION

Not classified as Dangerous Goods for transport by Road and Rail	
UN Number:	Not allocated
UN Proper shipping name:	Not allocated
Class and subsidiary risk:	Not applicable
Packing Group:	Not applicable
Special precautions:	No restrictions known for transport procedures.
Hazchem Code:	None allocated

15. REGULATORY INFORMATION

Poisons schedule:	None allocated
Hazard Category:	Irritant

16. OTHER INFORMATION

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.