



SAFETY DATA SHEET. 01/09/2016

SYNERGY PIGMENTS SILICA FUME ADDITIVE FOR CONCRETE.

1. Identification of the Substance / Mixture and Supplier

Products Included: Synergy Silica Fume

Recommended Use: Additive for concrete

Molecular Formula: SiO₂

Physical Properties: Fine, coloured powder and odourless. Insoluble in water.

Supplier: Synergy Pigments Australia Pty Ltd.

ACN: 115 380 099

Address: 33c McDowell St Welshpool 6106

Telephone: 1300 655 853

Facsimile: (08) 8423 0263

Email : info@oxide.com.au

2. Hazards Identification

Hazard Category: classified as hazardous according to NOHSC criteria

Risk Phrases: R36/37/38 irritating to eye, skin, respiratory system

R43 May cause sensitisation to the skin

Safety Phases: S22 Do not breath in dust

S24/25 Avoid contact with skin and eyes

S26 Wash with soap and water after contact

S28 Do not wash residue into drains

S36/37/39 Wear protective clothing eye and face protection

3. Composition/Information on Ingredients.

<u>Chemical Identity</u>	<u>CAS No.</u>	<u>Proportion</u>
Amorphous silica	69012-64-2	>88.00
Crystalline silica	14808-60-7	Less than 0.1%
Iron Oxide (magnetite)	1309-38-2	Less than 2%
CaMag Carbonite (dolomite)	16389-88-1	Less than 2%

4. First Aid Information.

Ingestion: If swallowed and patient is conscious, wash out mouth with water and drink several glasses of water. **DO NOT** induce vomiting.
DO NOT give anything by mouth to an unconscious patient.
Seek medical attention.

Eye: Immediately flush with fresh water for at least 15 minutes. Ensure adequate flushing by separating eyelids with fingers.
Seek immediate medical attention.

Skin: Wash thoroughly with soapy water. Remove contaminated clothing and footwear and wash before reuse or storage.

Inhalation: Move immediately to fresh air and if necessary apply artificial

respiration. Give oxygen if patient has difficulty breathing.
First Aid Facilities Eyewash should be available in the workplace.
Advice to Doctor: Treat symptomatically.

5. Fire Fighting Measures.

Fire/Explosion hazard The product is not combustible.
Fire Fighting Advice Ensure use of SCBA apparatus and full protective equipment to avoid contact with potential of metal fumes.
Extinguishing Media Water, dry chemical, carbon dioxide or appropriate foam according to the surrounding fire.
Decomposition Products: May include metal fumes in smoke, carbon monoxide and dioxide (from small component organic compounds)

6. Accidental Release Measures.

Spillage and Disposal: Ensure protective overalls, gloves and safety goggles are worn by cleanup personnel. Approved respirators to be worn if required.
Carefully sweep spillage together, to allow collection.
Avoid raising dust.
Collect spillage into appropriately labelled containers for storage, awaiting reuse, or dispose via the local waste facilities as per the required legislation.
Thoroughly wash the area with water to complete.

7. Handling and Storage.

Safe Handling: Store product in dry area in original packaging
Information: Ensure all containers are sealed when not in use.
Refer to product label.

8: Exposure Controls **Personal Protection**

Exposure Limit : TWA 2.0 Mg/m³ silica amorphous 0.1 Mg/m³ silica dioxide

Recommendations: Keep exposure to dust to a minimum

Engineering Controls : All work with pigments should be carried out in manner to minimise exposure to dust and skin contact. When handling iron oxide pigments, use local mechanical ventilation or extraction in areas where dust could escape into the work environment. Follow the instructions on the packaging. Work areas should be cleaned by wet sweeping or vacuum. If generated dust cannot be avoided follow personal protection recommendations.

Personal Protection

Skin: Wear protective clothing and impervious boots.
Wash skin thoroughly after handling with soap and water.

	Wash work clothing regularly and separately from other clothing. Use barrier creams where needed.
Eyes:	Safety Glasses with side shields or safety goggles
Respiratory:	In dusty environments use a filter mask AS1715 and AS1716 (Class P1 or P2) and tight fitting goggles (AS/NZS 1336). Use only respirators that bear the Australian Standards mark and are fitted correctly.
Ventilation:	Local dust extraction and collection may be used, if necessary, to control airborne dust levels
Flammability:	Non-flammable. Does not support combustion of other materials.

9 :Physical and Chemical Properties

Appearance: Powder
Odour: No odour
pH: Not applicable
Freezing/Melting Point: >1000°C
Vapour Pressure: Not applicable
Specific Gravity: 2.2 g/cm³ approx
PH Range: 6 to 8
Flash Point: Not applicable
Solubility: Soluble in acid.
Solubility in Water: Approximately 1%
Flammability Limits: Not Flammable

10 : Stability and Reactivity

Chemical Stability : Product is considered stable
Reactivity : refer section 7
Hazardous reactions : none under normal conditions
Conditions to avoid : refer section 7
Hazardous Decomposition Products : None in normal conditions
Incompatible materials : Hydrofluoric acid
Hazardous reaction : Reacts with Hfl Hydrofluoric acid to produce toxic gas silicon tetrafluoride

11. Toxicological Information.

No adverse health effects are expected if the product is handled in accordance with this Safety Data Sheet and the product label.

Symptoms which may arise if the product is mishandled are:

Acute Effects

Ingestion: May cause gastrointestinal upset with nausea , vomiting and diarrhoea.
Eye: May cause irritation to the cornea with resulting redness and pain to the eye. Physical damage may occur due to particulate matter.
Skin: May cause mild irritation to the skin with prolonged contact.
Inhalation: If dust inhaled may cause irritation to the throat and respiratory tract resulting in coughing and shortness of breath.
 May also cause metal fume fever, chills, cough and chest pain.
Chronic Effects Long term exposure to iron has resulted in mottling of the lungs, Sclerosis. This is considered a benign pneumoconiosis and does not ordinarily cause significant physiological impairment.

Toxicology: Long term eye exposure may stain eyes and leave “rust rings”.
No data available.
No known carcinogenic, mutagenic or reproductive – developmental effects, but it is considered that these materials have not been thoroughly researched.
Iron oxide dust exposed to lab animals has been shown to remain in the lungs, but did not result in the development of lung cancer.

12. Ecological Information.

Ecotoxicity: Avoid contaminating waterways.
Persistence and Degradability Generally persistent and low degradability
Mobility Low mobility in landfill

13. Disposal Considerations.

Dispose of the product in approved chemical land fill as per local regulations.
Ensure containers are effectively cleared of product and disposed as per local regulations. Take precautions to avoid dust during disposal.

14. Transport Information.

Transport is done in bag/ bulk form by rail , road sea or air

UN Number: none

Proper Shipping Number: none

Class/ Subsidiary Risk: none

Packing Group: none

Hazchem Code: none

15. Regulatory information

Australian Legislation: Irritant Hazardous according to NOHSC (Worksafe Australia) criteria

16 Other Information

For further information on this product Call 1300 655 853

Please note: The precautions and advice provided may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable legislation. No statement made in this data sheet shall be construed as permission, a recommendation or authorisation given or implied to practice any patented invention without a valid licence. The company named in this document will not be responsible for any damage or injury resulting from abnormal use of the material from any failure to adhere to recommendations, or from hazards inherent in the nature of the material.

End of SDS