



ALPHA
zero

SAFETY DATA SHEET

Product Name: **Alpha Zero Surfaces**

SDS Date: November 10th, 2023

1.Product

Product Name: Alpha Zero Surfaces

Manufacturer/Importer:

Name of company: Alpha Surfaces Pty Ltd.

Residence: 13-15 ENTERPRISE STREET, KUNDA PARK QUEENSLAND AUSTRALIA

Telephone: 07 5445 5183

2.Hazards Identification

2.1 Appearance/ Odor: Artificial Stone Surfaces with no odor.

The Alpha Zero Stone Surfaces, in its finished state as supplied, is classified as non-hazardous under normal conditions and does not pose any inhalation, ingestion, skin, or eye hazards. However, the generation of dust during cutting, grinding or machining processes may contain trace amounts of respirable crystalline silica particles capable of penetrating deep into the lungs upon inhalation. These particles have the potential to cause respiratory and

pulmonary damage. Individuals involved in such activities must adhere to health and safety guidelines and take necessary precautions prior to commencing work. Although this product contains less than 1% crystalline silica content, any inhaled dust should be considered detrimental to one's health.

Take necessary precautions - Use wet cutting method; Wear a Class P3 respirator; Refer to Section 8 of SDS for more detailed information.

2.2 Danger:



GHS08 (Health Hazard)
Category 1A (Carcinogenicity) (H350, H372, H334)



GHS07 (Health Hazard)
Category 3 (Respiratory tract irritation) (H319, H335)

HAZARD STATEMENTS:

H350: May cause CANCER (inhalation)

H372: Causes damage to organ (lungs) through prolonged and repeated exposure if inhaled

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

H319: May cause eye irritation

H335: May cause respiratory tract irritation

2.3 Potential Health Effects:

Acute Eye: Product in finished form does not present a health hazard via this route of entry. Dusts and flying particles generated during cutting, grinding and forming may cause irritation and injury.

Acute Skin: Dusts generated from this product may cause skin irritation.

Acute Inhalation: Dusts from this product may cause irritation to respiratory tract, nose, throat and lungs.

Acute ingestion: Not considered a potential health hazard via this route of entry. This product may cause gastrointestinal irritation if dusts are swallowed.

Aggravation of Pre-existing Conditions: Not Determined.

3. Hazardous Chemical Composition

The composition of this material includes amorphous material (glass sand and glass powder are not crystalline types of free oxides (silica), Polyester resin, Pigments.

Component		CAS#	%Composition	%Composition
Amorphous recycled glass	Glass sand/ Glass powder	65997-17-3	79-90	79-90
Unsaturated Polyester resin	UPR	26123-45-5	8-16	8-16
Pigments	TiO ₂	1317-80-2	≤1	0-2
	Fe ₂ O ₃	1332-37-2	≤1	
Additives	KH570	2530-85-0	≤1.8	1.6-3
	TBPO	3006-82-4	≤1.2	

Notes: Although no crystalline silica is added in the formula, <1% crystalline silica may be present due to contamination or chemical compound reactions during production.

4. First Aid Measures

Eye Exposure: Immediately flush eyes with copious amounts of water for a minimum of 15 minutes. Seek immediate medical attention if adverse effect occurs.

Skin Exposure: Wash skin with soap and water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Seek medical attention if adverse effect occurs.

Inhalation: Move person to fresh air. If necessary, use artificial respiration.

Ingestion: Rinse your mouth and make sure to drink plenty of water. If the material is swallowed, seek medical attention or advice.

5. Fire Fighting Measures

Artificial Stone Surface Products can be combusted only with difficulty. Decomposition products resulting from the polymer and pigments degrading at elevated temperatures include

various hydrocarbons, carbon dioxide, carbon monoxide and water. Fumes of metal oxides and mica particles could also be released.

Extinguishing Media: Water, Dry Chemical, CO₂, Foam.

Fire Fighting Instructions: Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus.

6. Accidental Release Measures

Cleanup and Disposal of Spill: Solid slabs can simply be gathered as necessary. If large amounts of dust or wastes are created by the cutting process, then vacuum or sweep up material avoiding dust generation by dampening spilled material with water to avoid airborne dust. Wear sufficient respiratory protection and protective clothing where necessary. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or local Waste Management Authority. Dispose of waste in accordance with local, state and federal regulations.

7. Handling and Storage

Handling/Storage: Avoid breathing dust. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Good industrial hygiene practices should be followed when handling this material. Product is heavy and breakable; handle with care to avoid injury and prevent damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure standards *refer local state regulators

Ingredient	Reference	TWA		STEL	
		ppm	mg/m3	ppm	mg/m3
Calcium Oxide	SWA [AUS]	--	2	--	--
Calcium Oxide	SWA [PROPOSED]	--	1	--	--
Emery (dust) (a)	SWA [AUS]	--	10	--	--
Iron oxide fume (FE2O3) (as Fe)	SWA [AUS]	--	5	--	--
Magnesium Oxide (fume)	SWA [AUS]	--	10	--	--
Non-respirable fibres, inspirable dust	SWA [AUS]	--	2	--	--
Quartz (respirable dust)	SWA [AUS]	--	0.05	--	--
Quartz (respirable dust) (precautionary advice)	WorkSafe VIC	--	0.02	--	--
Synthetic mineral fibres, respirable fibres	SWA [AUS]	--	0.5f/ml	--	--
Titanium dioxide	SWA [AUS]	--	10	--	--
Titanium dioxide (a)	SWA [AUS]	--	10	--	--
Titanium dioxide (inhalable)	SWA [Proposed]	--	1	--	--

8.2 Engineering Controls

Avoid inhalation. Use in well-ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Wet cut, polish, sand, grind, or drill only. Maintain dust levels below the recommended exposure standard.

8.3 Personal Protective Equipment:

Eye/Face- If cutting or sanding with potential for dust generation, wear dust-proof goggles.

Hands- Wear PVC, rubber or cotton gloves when handling material to prevent skin contact.

Body- Not required under normal conditions of use.

Respiratory- Avoid uncontrolled dry cutting, sanding, polishing, grinding, or drilling, if alterations are unavoidable use a half face (negative pressure) mask with minimum P2/N95 particle respirator & tools which have water suppression & on tool dust extraction with H class rating. Consultation with relevant State Worksafe offices for further details is recommended.

9. Physical and Chemical Properties

Physical Appearance: Artificial Stone

Odor: None

pH: N/A

Specific Gravity: 2.2-2.5

Water Solubility: Insoluble

Flash Point: 490 °C

Melting Point: N/A

Boiling Point: N/A

Vapor Pressure: N/A

% Volatiles: N/A

Viscosity: N/A

10. Stability and Reactivity

Chemical Stability: The material is stable under normal conditions

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport **Conditions to Avoid:** Avoid contact with strong oxidizing agents.

Materials / Chemicals to Be Avoided: This product is incompatible with hydrofluoric acid. Silicate will dissolve in hydrofluoric acid and produce the corrosive gas silicon tetrafluoride.

Hazardous Decomposition Products: Upon decomposition, various hydrocarbons, carbon dioxide, carbon monoxide fumes, and water may be released.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

No acute or chronic effects are known from exposure to the intact product.

Primary Routes of Exposure: None for intact product. Inhalation and potential exposure to eyes, hands, lungs or other body parts if contact is made with dust emitted from the Fabrication Process.

Acute Effects: Breathing dust may cause acute mechanical respiratory irritation. Skin and eye contact may cause mechanical irritation.

Respiratory effects: Exposure to respirable crystalline particles of a very small size (< 10µm) may cause silicosis, an incurable, progressively disabling and sometimes fatal lung disease. Silica dust particles become trapped in lung tissue, causing inflammation and scarring and reducing the lungs' ability to take in oxygen. Symptoms of silicosis can include progressive shortness of breath, cough and fatigue. Safety measures including wet processing and the use of effective respiratory protection will reduce the burden of inhaled dust and prevent the disease

Carcinogenicity:

The following components are listed by GHS, IARC, NTP, OSHA or ACGIH as carcinogens.

Material	GHS	IARC	NTP	OSHA	ACGIH
Silica, Crystalline (quartz and cristobalite)	Carcinogen - Cat 1A	Group 1 carcinogenic to humans	Known to be a carcinogen	Yes regulates as carcinogen	A2 suspected human carcinogen

Sensitization: No respiratory sensitizing effects known

Mutagenicity: No Data

Reproductive Effects: No Data

Developmental Effects: No Data

12. Ecological Information

Environmental Fate: Not Determined

Environmental Toxicity: Not Determined

13. Disposal Considerations

Waste Disposal Method: Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose in accordance with federal, state and local requirements.

14. Transportation Information

Not classified as dangerous in the meaning of transport regulations

15. Regulatory Information

U.S. Federal Regulations

TSCA Inventory Status: In compliance with TSCA Inventory requirements for commercial purposes.

16. Other Information

National Fire Protection Association NFPA(R) and Hazardous Materials Identification System (HMIS)

Hazard Ratings:

Health Hazard: 1

Flammability: 0

Reactivity: 0

Key Legend Information:

IDLH- Immediately Dangerous to Life and Health

N/A- Not Applicable

PEL- Permissible Exposure Limit

ND- Not Determined

TWA- Time Weighted Average

GHS- Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH- American Conference of Governmental

STEL- Short Term Exposure Limit

NTP- National Toxicology Program

OSHA- Occupational Safety and Health Administration

TLV- Threshold Limit Value

IARC- International Agency for Research on Cancer

The data 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.