

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/06/2016

Reviewed on 06/06/2016

1 Identification

- **Product Identifier**
- **Trade name: Silicon Carbide Sandblasting Abrasive**
- **Relevant identified uses of the substance or mixture and uses advised against:**
Sandblasting applications.
- **Product Description** Silicon carbide sandblasting abrasive.
- **Application of the substance / the mixture:** Industry specific application.
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
Rayzist Photomask, Inc.
955 Park Center Drive, Vista, CA 92081
Phone (760) 727-8185
FAX (760) 727-2986
www.rayzist.com
- **Emergency telephone number:** Billy Willis (760) 212-3583

2 Hazard(s) Identification

- **Classification of the substance or mixture:**



GHS08 Health hazard

Carc. 1B H350 May cause cancer.



GHS07

STOT SE 3 H335 May cause respiratory irritation.

- **Label elements:**
- **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS07



GHS08

- **Signal word:** Danger
- **Hazard-determining components of labeling:**
Silicon carbide
Silicon Dioxide
- **Hazard statements:**
H350 May cause cancer.
H335 May cause respiratory irritation.
- **Precautionary statements:**
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

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P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Unknown acute toxicity:**

97.8 % of the mixture consists of component(s) of unknown toxicity.

· **Classification system:**· **NFPA ratings (scale 0 - 4)**· **HMS-ratings (scale 0 - 4)**

HEALTH	0	Health = *0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

· **Hazard(s) not otherwise classified (HNOC):** None known**3 Composition/Information on Ingredients**· **Chemical characterization: Mixtures**· **Description:** Mixture: consisting of the following components.· **Dangerous Components:**

409-21-2	Silicon carbide ⚠ STOT SE 3, H335	90-99%
7631-86-9	Silicon Dioxide ⚠ Carc. 1B, H350; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	≤ 2.5%

· **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

*** 4 First-Aid Measures**· **Description of first aid measures:**· **After inhalation:**

Remove to fresh air. Dust in throat and nasal passages should clear spontaneously. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Generally the product does not irritate the skin.

Wash with soap and water.

If skin irritation occurs, consult a doctor.

· **After eye contact:**

Flush immediately with copious amounts of water. Do not rub eyes. Seek medical attention if irritation persists.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting without medical advice.

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If vomiting does occur, repeat fluid administration

If swallowed and symptoms occur, consult a doctor.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

5 Fire-Fighting Measures

· **Extinguishing media:**

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards arising from the substance or mixture:** No further relevant information available.

· **Advice for firefighters:**

· **Protective equipment:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

* 6 Accidental Release Measures

· **Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.

Avoid formation of dust.

Ensure adequate ventilation.

Avoid contact with skin, eyes and clothing.

· **Environmental precautions:** Do not allow product to reach sewage system or any water system.

· **Methods and material for containment and cleaning up:**

Powder and fragments should be cleaned up using a method that will avoid the generation of dust in the workplace atmosphere. The use of a vacuum cleaner fitted with an exhaust air filter fine enough to trap the dust is recommended.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

· **Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

* 7 Handling and Storage

· **Handling**

· **Precautions for safe handling:**

Avoid creating and breathing dust/fume/gas/mist/vapors/spray.

Ensure good ventilation/exhaustion at the workplace.

Store in cool, dry place in tightly closed receptacles.

Avoid contact with skin, eyes and clothing

· **Information about protection against explosions and fires:** Avoid dust formation

· **Conditions for safe storage, including any incompatibilities:**

· **Storage**

· **Requirements to be met by storerooms and receptacles:**

Store in a cool, dry place in tightly closed receptacles.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Store in dry conditions.

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Keep receptacle tightly sealed.

- **Specific end use(s):** No further relevant information available.

* 8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.

- **Control parameters:**

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

- **Components with occupational exposure limits:**

409-21-2 Silicon carbide

PEL	Long-term value: 15* 5** mg/m ³ fibrous dust: *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV	Long-term value: 10* 3** mg/m ³ fibrous dust:0.1 f/cc; nonfibrous:*inh.,**resp.

7631-86-9 Silicon Dioxide

ACGH	Short-term value: 3 mg/m ³ Long-term value: 10 mg/m ³
IDLH	Short-term value: 3000 mg/m ³ Long-term value: 4 E mg/m ³ IDLH: Immediately dangerous to life or health
TWA	Short-term value: 6 mg/m ³ Long-term value: 4 E mg/m ³

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

- **Exposure controls:**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Use adequate exhaust ventilation to prevent inhalation of dust particles.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

- **Breathing equipment:**



Suitable respiratory protective device recommended.

- **Protection of hands:** Not required.

- **Material of gloves:** Not required.

- **Penetration time of glove material:** Not applicable.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Not required.

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Form:	Semi-friable, medium density, silicon carbide abrasive
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Color:	Black
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· Odor:	Odorless
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· Odor threshold:	Not determined.
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· pH-value:	Not applicable.
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· **Change in condition**

Melting point/Melting range:	Not determined.
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Boiling point/Boiling range:	Not determined.
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· Flash point:	None
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· Flammability (solid, gaseous):	Not determined.
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· Ignition temperature:	Not determined.
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· Decomposition temperature:	Not determined.
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· Auto igniting:	Product is not self-igniting.
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· Danger of explosion:	Product does not present an explosion hazard.
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· **Explosion limits:**

Lower:	Not applicable.
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Upper:	Not applicable.
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· Vapor pressure:	Not applicable.
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· Density @ 20 °C (68 °F):	3.2 g/cm ³ (26.704 lbs/gal)
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· Relative density:	Not determined.
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· Vapor density:	Not applicable.
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· Evaporation rate:	Not applicable.
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· **Solubility in / Miscibility with:**

Water:	Insoluble.
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· Partition coefficient (n-octanol/water):	Not determined.
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· **Viscosity:**

Dynamic:	Not applicable.
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Kinematic:	Not applicable.
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· **Solvent content:**

Organic solvents:	0.0 %
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Solids content:	100.0 %
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· Other information:	No further relevant information available.
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10 Stability and Reactivity

· Reactivity:	No further relevant information available.
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· Chemical stability:	Stable under normal conditions.
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· Thermal decomposition / conditions to be avoided:	No decomposition if used according to specifications.
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· Possibility of hazardous reactions:	No dangerous reactions known.
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- **Conditions to avoid:** Moisture.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

* 11 Toxicological Information

- **Information on toxicological effects:** The toxicity of this product is unknown.
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
7631-86-9 Silicon Dioxide		
Oral	LD50	10000 mg/kg (rat) (OECD 401)
Dermal	LD50	5000 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/4 h	>140->2000 mg/l (rat) (OCED 403) Maximum attainable concentration, mortality does not appear. 10000 mg/l (Zebra fish) (OECD 203)

- **Primary irritant effect:**
- **On the skin:** No irritating effect.
- **On the eye:** No irritating effect.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
- **Carcinogenic categories:**
- **IARC (International Agency for Research on Cancer):**
Group 1 - Carcinogenic to humans
Group 2A - Probably carcinogenic to humans
Group 2B - Possibly carcinogenic to humans
Group 3 - Not classifiable as to its carcinogenicity to humans
Group 4 - Probably not carcinogenic to humans

7631-86-9	Silicon Dioxide	3
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· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

12 Ecological Information

- **Toxicity:**
- **Aquatic toxicity:**

7631-86-9 Silicon Dioxide	
EC50	>1000 mg/l (daphnia) (OECD 202)

- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

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- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

*** 13 Disposal Considerations**

- **Waste treatment methods:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings**
- **Recommendation:**
Dispose of as unused product.
Disposal must be made according to official regulations.

*** 14 Transport Information**

- **UN-Number:**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:**
- **DOT, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

· Section 355 (extremely hazardous substances):
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None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):
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7429-90-5 Aluminium

· TSCA (Toxic Substances Control Act):

All ingredients are listed or exempt from listing.
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· California Proposition 65:

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:
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None of the ingredients are listed.

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· Chemicals known to cause reproductive toxicity for males:		
None of the ingredients are listed.		
· Chemicals known to cause developmental toxicity:		
None of the ingredients are listed.		
· New Jersey Right-to-Know List:		
409-21-2	Silicon carbide	
7440-21-3	Silicon	
7429-90-5	Aluminium	
· New Jersey Special Hazardous Substance List:		
7440-21-3	Silicon	F3
7429-90-5	Aluminium	F3, R1
· Pennsylvania Right-to-Know List:		
409-21-2	Silicon carbide	
7440-21-3	Silicon	
7631-86-9	Silicon Dioxide	
7429-90-5	Aluminium	
· Pennsylvania Special Hazardous Substance List:		
7429-90-5	Aluminium	E
· Carcinogenic categories:		
· EPA (Environmental Protection Agency):		
None of the ingredients are listed.		
· TLV (Threshold Limit Value established by ACGIH):		
409-21-2	Silicon carbide	A2
7429-90-5	Aluminium	A4
· NIOSH-Ca (National Institute for Occupational Safety and Health):		
None of the ingredients are listed.		

· **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms:**

GHS07 GHS08

· **Signal word:** Danger· **Hazard-determining components of labeling:**Silicon carbide
Silicon Dioxide· **Hazard statements:**H350 May cause cancer.
H335 May cause respiratory irritation.· **Precautionary statements:**P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P271 Use only outdoors or in a well-ventilated area.

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Trade name: **Silicon Carbide Sandblasting Abrasive**

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P405 Store locked up.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- **Date of preparation / last revision:** 06/06/2016 / -

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety
 OSHA: Occupational Safety & Health
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
 Carc. 1B: Carcinogenicity – Category 1B
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

- *** Data compared to the previous version altered.**

SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106