



# SAFETY DATA SHEET

## SECTION 1. Identification of the substance or mixture and of the supplier

- 1.1 Product identifier  
Trade Name:  
**ZirGloss**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against  
Relevant identified uses: Dental material  
Uses advised against: No further data
- 1.3 Details of the supplier of the safety data sheet  
Company/Undertaking identification  
Manufacturer's Name: **SHOFU INC.**  
Address: 11 Kamitakamatsu-cho, Fukuine, Higashiyama-ku, Kyoto 605-0983, JAPAN  
Phone: +81-75-561-1112  
Fax: +81-75-275-4795  
Section in Charge: Quality Assurance Section
- 1.4 Emergency Telephone Number  
+81-75-561-1112

## SECTION 2. Hazards identification

- 2.1 GHS Classification  
HEALTH HAZARDS
  - EYE DAMAGE/IRRITATION Category 1
  - CARCINOGENICITY Category 2
  - TOXIC TO REPRODUCTION Category 2
  - SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE)
    - Category 2 (liver)
    - Category 3 (respiratory tract irritation)
  - SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE)
    - Category 1 (respiratory system)

- 2.2 Label elements  
SYMBOL



GHS05 GHS07 GHS08

SIGNAL WORD Danger

### HAZARD STATEMENTS

- Causes serious eye damage.
- May cause respiratory irritation.
- Suspected of causing cancer.
- Suspected of damaging fertility or the unborn child.
- May cause damage to organs (liver).
- Causes damage to organs through prolonged or repeated exposure (respiratory system).



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## PRECAUTIONARY STATEMENTS

### [Prevention]

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

### [Response]

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

Get medical advice/attention if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### [Storage]

Keep tightly closed and store in an indoor cool dark place.

### [Disposal]

Dispose of contents and container in accordance with regulation.

## 2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

## SECTION 3. Composition/information on ingredients

### 3.1 Chemical characterization: Mixtures

### 3.2 Ingredients and composition:

Component	CAS-No	Weight %
Diamond powder	7782-40-3	30-40
Aluminum oxide	1344-28-1	30-40
Beeswax	8012-89-3	
Paraffin Wax	8002-74-2	1-10
Diethanolamine	111-42-2	< 1
Others	—	

### 3.3 Additional information: For the wording of the listed risk phrases refer to section 2

## SECTION 4. First-aid measures

### 4.1 Description of first aid measures

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Skin contact: Wash immediately with soap and plenty of water. If on skin, skin irritation, get medical advice/attention.

Ingestion: Rinse mouth. Get medical advice/attention if you feel unwell.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if necessary.



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4.2 Most important symptoms and effects, both acute and delayed  
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed  
No further relevant information available.

## SECTION 5. Fire-fighting measures

5.1 Extinguishing Media:

Water, Foam, CO<sub>2</sub>, Powder, Dry sand

5.2 Special hazards arising from the substance or mixture:

If it is not dangerous, the container is moved from the fire district.

Fire fighting operation should be done from upwind position, with wearing protective equipment.

5.3 Advice for firefighters:

Wear fire protective cloth and self-contained breathing apparatus, if necessary.

## SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Worker wears an appropriate protection tool.

6.2 Environmental Precautions:

It is exhausted to the river etc., and it is noted to the environment not to cause the influence.

6.3 Methods and material for containment and cleaning Up:

Wipe up and discard in a stable container.

6.4 Reference to other section:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## SECTION 7. Handling and storage

7.1 Precautions for safe handling:

Wear appropriate protective equipment such as protective eyeglasses and protective gloves. When handling indoors, ventilate thoroughly with a local exhaust system etc.

7.2 Conditions for safe storage, including any incompatibilities:

Keep tightly closed and store in an indoor cool dark place.

7.3 Specific end use(s):

No further relevant information available.

## SECTION 8. Exposure controls/personal protection

8.1 Control parameters:

Exposure limits:

Aluminum oxide;

ACGIH TLV-TWA 10 mg/m<sup>3</sup>

Paraffin Wax;

ACGIH TLV-TWA 2 mg/m<sup>3</sup> (hume)

Diethanolamine;

ACGIH TWA 0.2 ppmIFV 1mg/m<sup>3</sup>IFV Skin



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- 8.2 Exposure controls:
- Respiratory Protection: Dust mask
- Skin Protection: Hand Protection  
Not required.
- Eye Protection: Safety goggles

## SECTION 9. Physical and chemical properties

- 9.1 Information on basic physical and chemical properties:
- Appearance/Odor/Colour: Light gray solid.
- Odour threshold: Not determined.
- pH: Not determined.
- Melting point/freezing point: Not determined.
- Boiling point: Not determined.
- Flash point: Not determined.
- Evaporation rate: Not determined.
- Flammability (solid, gas): Not applicable.
- Upper/lower flammability or explosive limits: Not determined.
- Vapour pressure: Not determined.
- Vapour density: Not determined.
- Relative density: Not determined.
- Solubility: water solubility Insoluble.
- Partition coefficient (n-octanol/water): Not determined.
- Auto-ignition temperature: Not determined.
- Decomposition temperature: Not determined.
- Viscosity: Not determined.
- Explosive properties: Not applicable.
- Oxidising properties: Not applicable.
- 9.2 Other information:  
No further relevant information available.

## SECTION 10. Stability and reactivity

- 10.1 Reactivity:  
No further relevant information available.
- 10.2 Chemical stability:  
Stable under normal temperatures and pressures.
- 10.3 Possibility of hazardous reactions:  
No dangerous reactions known.
- 10.4 Condition to Avoid:  
No further relevant information available.
- 10.5 Incompatible materials:  
No further relevant information available.
- 10.6 Hazardous Decomposition Products:  
None under normal conditions of storage and use.



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## SECTION 11. Toxicological information

### 11.1 Information on toxicological effects:

Acute toxicity:	Aluminum oxide;	Oral	rat	LD50	> 5000 mg/kg
	Paraffin Wax;	Oral	rat	LD50	> 5000 mg/kg
		Dermal	rabbit	LD50	> 3600 mg/kg
	Diethanolamine;	Oral	rat	LD50	> 2000 mg/kg
		Dermal	rabbit	LD50	130000 mg/kg

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Eye damage/irritation: Eye Dam. 1; H318 Causes serious eye damage.

Sensitization to the respiratory tract:

Based on available data, the classification criteria are not met.

Skin sensitization: Based on available data, the classification criteria are not met.

Germ cell mutagenicity/Genotoxicity:

Based on available data, the classification criteria are not met.

Carcinogenicity: Carc. 2; H351 Suspected of causing cancer.

Reproductive toxicity: Repr. 2; H361 Suspected of damaging fertility or the unborn child.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure):

STOT SE 2; H371 May cause damage to organs (liver).

STOT SE 3; H335 May cause respiratory irritation.

Specific target organ toxicity (repeated exposure):

STOT RE 1; H372 Causes damage to organs through prolonged or repeated exposure (respiratory system).

Aspiration hazard: Based on available data, the classification criteria are not met.

### 11.2 Information on other hazards:

No further relevant information available.

## SECTION 12. Ecological information

### 12.1 Toxicity:

No further relevant information available.

### 12.2 Persistence and degradability:

No further relevant information available.

### 12.3 Bioaccumulative potential:

No further relevant information available.

### 12.4 Mobility in soil:

No further relevant information available.

### 12.5 Results of PBT and vPvB assessment:

Not applicable.

### 12.6 Other adverse effects:

No further relevant information available.

## SECTION 13. Disposal considerations

### 13.1 Waste treatment methods:

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



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## SECTION 14. Transport information

14.1 UN number:	Void
14.2 UN proper shipping name:	Void
14.3 Transport hazard class(es):	Void
14.4 Packing group:	Void
14.5 Environmental hazards:	No further relevant information available.
14.6 Special precautions for user:	Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.

## SECTION 15. Regulatory information

Follow all regulations in your country.

## SECTION 16. Other information

This product is intended for use by dental professionals (instrument/material).

NFPA ratings for USA (scale 0-4)

Paraffin Wax;



Health = 1  
Fire = 1  
Reactivity = 0

HMIS-Ratings (Scale 0-4)

Paraffin Wax;

Health Hazard	1
Fire Hazard	1
Reactivity	0

Health = 1  
Fire = 1  
Reactivity = 0

Relevant phrases:

- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H371 May cause damage to organs (liver).
- H372 Causes damage to organs through prolonged or repeated exposure (respiratory system).

Abbreviations and acronyms:

- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative