

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

076342976

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

076342943

# MATERIAL SAFETY DATA SHEET

## 1. Identification of the Product and the Company

### 1.1 Product Name:

BeutiBond

### 1.2 Company /Undertaking identification

Manufacturer's Name: SHOFU INC.

Address: 11-Kamitakamatsu-Cho Fukunine Higashiyama ku Kyoto 605 ,JAPAN

Phone Number for Information: 81-75-561-1112

Signature of Preparer:

Date Prepared: 2008.10. 01

### 1.3 Emergency Telephone Number

81-75-561-1112

## 2. Composition/Information on Ingredients

Composition	Cas no.	%	Hazard type
Acetone	67-64-1	<50	F .Xi
BisGMA	1565-94-2	<20	
4MET	68183-31-3	<10	
TEGDMA	109-16-0	<5	
6MHPAc	141451-39-0	<5	
Pure water			
Others			

## 3. Hazardous Identification

3.1 Route of Entry: Inhalation: Possible Skin: Possible Ingestion: Possible

### 3.2 Health Hazard(Acute and Chronic)

Inhalation: Sore throat. Cough. Confusion. Headache. Dizziness.

Drowsiness. Nausea. Weakness.

skin: Dry skin.

Eyes: Redness. Pain. Blurred vision. Possible corneal damage.

Ingestion: Nausea. Vomiting (Further see Inhalation)

3.3 Carcinogenicity N/A

3.4 Hazard Designation: Highly Flammable preparation. Symbol is F  
Vapour/air mixture are explosive.

## 4. First Aid Measures

4.1 Eye contact : First rinse with plenty of water for several minutes, then take to a doctor

4.2 Skin contact : Wash immediately with soap and plenty of water.

4.3 Ingestion : Rinse mouth. Refer for medical attention.

4.4 Inhalation : Fresh air, rest. Refer for medical attention.

## 5. Fire-fighting Measures

5.1 Suitable Extinguishing Media: Powder, alcohol-resistant foam, Carbon dioxide.

5.2 Extinguishing Media Should not be used :

5.3 Special Exposure Hazards Arising: Irritation gases and fumes may emit.

5.4 Special Protective Equipment: Wear fire protective cloth and self-contained breathing apparatus if necessary.

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### 6. Accidental Release Measures

- 6.1 Personal Precautions:* See section 8.
- 6.2 Environmental Precautions:* Send to approved treatment/disposal company or dispose according to local, state and federal regulations.
- 6.3 Methods for Cleaning Up:* Wipe up and discard in a suitable container.

### 7. Handling And Storage

- 7.1 Handling:* Handle in a well ventilated place. Wear protective gloves, safety spectacles or face shield. (If necessary wear self-contained breathing apparatus.)  
Keep away from naked flames, sparks and sources of heat. No smoking.
- 7.2 Storage:* Store in a cool and dark fire proof area with container tightly closed.  
Separated from strong oxidants. (Keep refrigerated when not in use.)

### 8. Exposure Controls/Personal Protection

- 8.1 Exposure limits:* ACGIH TLV.  
Aceton [Cas No.67-64-1] 500ppm(TWA);750ppm(STEL)A4
- 8.2 Respiratory Protection:* Ventilation. Local exhaust.
- 8.3 Hand Protection:* Latex or rubber gloves
- 8.4 Eye Protection:* Safety spectacles
- 8.5 Skin Protection:* Not required (General working clothes.)

### 9. Physical And Chemical Properties

- 9.1 Appearance/Odour/pH* Pale yellow liquid with characteristic odor.
- 9.2 Boiling Point/Boiling Range:* N/A
- 9.3 Melting Point/Melting Range:* N/A
- 9.4 Flash point:* -15.0 °C(closed)
- 9.5 Auto flammability:* N/D
- 9.6 Explosive Properties:*
- 9.7 Oxidizing Properties:*
- 9.8 Vapour Pressure:* N/A
- 9.9 Relative Density:* 0.936 (water=1)
- 9.10 Solubility:* water solubility miscible

### 10. Stability And Reactivity

- 10.1 Condition to Avoid:* Visible light on liquid.  
Avoid excess heat, flame and other source of ignition.  
Separated from strong oxidants.
- 10.2 Materials to Avoid:* Strong oxidizing materials

### 11. Toxicological Information

- Effects of short-term exposure  
Inhalation of the vapor may cause headache and dizziness.
- Effects of long-term or repeated exposure  
Repeated or prolonged contact with skin may cause dermatitis.

### 12. Ecological Information

- The product should not be allowed to drain into sewers.

# MATERIAL SAFETY DATA SHEET

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**13. Disposal Conditions**

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Disposal in accordance with federal, state and local regulations.

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**14. Transport Information**

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UN Hazard Class:3/UN Packing Group: II  
UN NO.1090 (as Aceton)

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**15. Regulatory Information**

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**16. Other Information**

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Handling of this product exclusively by dental specialists according to instruction for use.



# SAFETY DATA SHEET

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

1.1 Product identifier

Trade Name:

**BeutiBond**

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 DENTAL CORPORATION**

Address: 1225 Stone Drive, San Marcos, CA 92078 USA

Toll Free: 1-800-827-4638

Phone: 760-736-3277

Fax: 760-736-3276

E-Mail: customer-service@shofu.com

Section in Charge: Quality Management & Regulatory Affairs

1.4 Emergency Telephone Number

For emergencies only. Call CHEMTREC: +1 703-741-5970 / 1-800-424-9300 (24 hours)

## SECTION 2. Hazards identification

2.1 GHS Classification

PHYSICAL HAZARDS

FLAMMABLE LIQUIDS

Category 2

HEALTH HAZARDS

ACUTE TOXICITY-ORAL

Category 4

SKIN CORROSION/IRRITATION

Category 2

EYE DAMAGE/IRRITATION

Category 2A

SENSITIZATION-RESPIRATORY

Category 1

SENSITIZATION-SKIN

Category 1

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE)

Category 3 (narcotic effects)

The thing without mention is out of a classification object. Or cannot classify it.

2.2 Label elements

SYMBOL



GHS02

GHS07

GHS08

SIGNAL WORD Danger

HAZARD STATEMENTS

Highly flammable liquid and vapor



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Harmful if swallowed  
Causes skin irritation  
May cause an allergic skin reaction  
Causes serious eye irritation  
May cause allergy or asthma symptoms or breathing difficulties if inhaled  
May cause drowsiness and dizziness

## PRECAUTIONARY STATEMENTS

[Prevention]

Do not handle until all safety precautions have been read and understood.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Keep container tightly closed.  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.

[Response]

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
IF ON SKIN or hair: Take off immediately all contaminated clothing. Rinse skin with water or shower.  
If skin irritation or rash occurs: Get medical advice/attention.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

[Storage]

Store container tightly closed in cool/well-ventilated 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 Description: Mixture of substances listed below with nonhazardous additions.

3.3 Dangerous components:

Acetone [Cas.No.67-64-1]	40-50 %
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Other components:

Bis-GMA [Cas No.1565-94-2]	10-15 %
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TEGDMA [Cas No.109-16-0]	
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Phosphonic acid monomer  
Carboxylic acid monomer  
Water  
Others

3.4 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. If eye irritation persists, get 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 and seek medical advice if necessary.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptom concerning breath goes out, call a POISON CENTER or doctor.

### 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:

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

### 5.2 Special hazards arising from the substance or mixture:

Easily flammable liquid in room temp.

Fire may produce irritating, corrosive and/or toxic gases.

### 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:

Avoid contact with eyes and skin.

### 6.2 Environmental Precautions:

Send to approved treatment/disposal company or dispose according to local, state and federal regulations.

### 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:

Handle in a well ventilated place.

Keep away from open flames, sparks and sources of heat. No smoking.



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- 7.2 Conditions for safe storage, including any incompatibilities:  
 Store in a cool and dark area with container tightly closed.  
 Separated from strong oxidants.(Keep refrigerated when not in use.)
- 7.3 Specific end use(s):  
 No further relevant information available.

## SECTION 8. Exposure controls/personal protection

### 8.1 Control parameters:

Exposure limits:

	ACGIH	NIOSH	OSHA-Final PELs
Acetone	500 ppm TWA 750 ppm STEL	250 ppm TWA (590mg/m <sup>3</sup> TWA) 2500 ppm IDLH	1000 ppm TWA 2400 mg/m <sup>3</sup> TWA

### 8.2 Exposure controls:

Respiratory Protection:

Not required (use protective gas mask for organic gas, if necessary)

Skin Protection:

Hand Protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

- Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Butyl rubber, BR  
Nitrile rubber, NBR

Eye Protection: Safety goggles

## SECTION 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance/Odor/Colour:	Pale yellow liquid with characteristic odor.
Odour threshold	Not determined.
pH	Not determined.
Melting point/freezing point	Not determined.





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Boiling Point:	Not determined.
Flash point:	-15.0 °C (closed)
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:	0.94 (water=1)
Solubility: water solubility	Soluble
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:

Excessive heat (high temperature), open flames, ignition source, and exposure to sunlight.

### 10.5 Incompatible materials:

Strong oxidizing materials.

### 10.6 Hazardous Decomposition Products:

None under normal conditions of storage and use.

## SECTION 11. Toxicological information

### 11.1 Information on toxicological effects:

Acute toxicity:	Acute Tox. 4; H302 Harmful if swallowed.			
Acetone;	Oral	rat	LD50	> 5800 mg/kg
	Dermal	rabbit	LD50	> 7400 mg/kg
	Inhalation	rat	LC50	32000 ppm/4H (75.8 mg/L)
Skin corrosion/irritation:	Skin Irrit. 2; H315 Causes skin irritation.			
Eye damage/irritation:	Eye Irrit. 2A; H319 Causes serious eye irritation.			
Sensitization to the respiratory tract:	Resp. Sens. 1; H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.			
Skin sensitization:	Skin Sens. 1; H317 May cause an allergic skin reaction.			



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Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.  
Carcinogenicity: Based on available data, the classification criteria are not met.  
Reproductive toxicity: Based on available data, the classification criteria are not met.  
Effects on or via lactation: Lack of data.  
Specific target organ toxicity (single exposure): STOT SE 3; H336 May cause drowsiness or dizziness.  
Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.  
Aspiration hazard: Based on available data, the classification criteria are not met.

## SECTION 12. Ecological information

- 12.1 Toxicity:  
Acetone:  
Fish toxicity: Fathead minnow; LC50/96H >100mg/L
- 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.

## SECTION 14. Transport information

- 14.1 UN number: 1090  
14.2 UN proper shipping name: Acetone, solution  
14.3 Transport hazard class(es): 3 Flammable liquids.  
14.4 Packing group: II  
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 informati

Follow all regulations in your country.



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## SECTION 16. Other information

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

NFPA ratings for USA (scale 0-4)

Acetone;



Health = 1  
Fire = 3  
Reactivity = 0

Relevant HMIS-Ratings (Scale 0-4)

Acetone;

Health Hazard	1
Fire Hazard	3
Reactivity	0

Health = 1  
Fire = 3  
Reactivity = 0

Relevant phrases:

- H225 Highly flammable liquid and vapour.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H336 May cause drowsiness or dizziness.

Abbreviations and acronyms:

- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative