SAFETY DATA SHEET

(according to 1907/2006/EC, Article 31)

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade Name:

HI DENSE "POWDER"

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

1.3 Application of the substance/the preparation

Dental material

1.4 Details of the supplier of the safety date 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

1.5 Emergency Telephone Number

+49-2102-866410 (SHOFU DENTAL GmbH)

2. Hazards identification

Classification of the substance or mixture

CLASSIFICATION (67/548)

Xi; Irritating

R41: Risk of serious damage to eyes.

N;

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION (EC 1272/2008)

Eye Dam. 1	H318	Causes serious eye damage.
Aquatic Acute 1	H400	Very toxic to aquatic life.
Aquatic Chronic 1	H410	Very toxic to aquatic life with long lasting effects.

LABEL IN ACCORDANCE WITH (EC) NO.1272/2008

GHS05 GHS09

HAZARD-DETERMINING COMPONENTS OF LABELLING

Tartaric acid

Silver

SIGNAL WORD

Danger

HAZARD STATEMENTS

H318 Causes serious eye damage.

(Contd. on page2)

(Contd. of page1)

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P391 Collect spillage.
P305+P351+P338
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container in accordance with local/regional/national/international regulation (to be specified).

OTHER HAZARDS

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

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:

Cas: 87-69-4 EINECS: 201-766-0	Tartaric acid	0.5-5 %
	Xi; R41	
	Eye Dam. 1 H318	
Cas: 7440-22-4 EINECS: 231-131-3	Silver	< 20 %
	N; R50/53	
	Aquatic Acute 1 H400, Aquatic Chronic 1 H410	

3.4 Additional information: For the wording of the listed risk phrases refer to section 2.

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 flesh air and keep at rest in a position comfortable for breathing. If symptom concerning breath goes out, call a POISON CENTER to 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.

(Contd. on page3)

(Contd. of page2)

5. Fire-fighting measures

5.1 Extinguishing Media:
The product is not flammable.

5.2 Special hazards arising from the substance or mixture:
Burning produces irritating, toxic and obnoxious fumes.

5.3 Advice for firefighters:
Wear suitable respiratory equipment when necessary.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
Avoid contact with eyes and skin. Do not breathe dust.

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 suitable 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.

7. Handling and storage

7.1 Precautions for safe handling:
Handle in a well ventilated area. Avoid prolonged inhalation.

7.2 Conditions for safe storage, including any incompatibilities:
Store in a cool and dry conditions with lid tightly closed.

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

8. Exposure controls/personal protection

8.1 Control parameters:

Exposure limits	Silver [Cas No. 7440-22-4]
	ACGIH Threshold Limit Value (TLV): 0.1 mg/ml (TWA), dust and fume

8.2 Exposure controls:

Respiratory Protection:	
	Dust mask(may be)
Hand Protection:	Latex or rubber gloves
Eye Protection:	Safety goggles (May be required)
Skin Protection:	Not required. General protective overalls.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance/Odor/Colour:	Grey odorless powder
Boiling Point:	Not determined.
Relative Density:	≈ 2.5 (water=1)

(Contd. on page4)

(Contd. of page3)

Solubility: water solubility Very slightly soluble

9.2 Other information

No further relevant information available.

10. Stability and reactivity

10.1 Reactivity:

No further relevant information available.

10.2 Chemical stability:

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions:

No further relevant information available.

10.4 Condition to Avoid:

Avoid direct sunlight and high temperature.

10.5 Incompatible materials:

No further relevant information available.

10.6 Hazardous Decomposition Products:

None under normal conditions of storage and use.

11. Toxicological information

11.1 Information on toxicological effects:

Silver: Oral LD 50 > 2000 mg/kg (Rat)

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.

13. Disposal considerations

13.1 Waste treatment methods:

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

14. Transport information

14.1 UN number: Void

14.2 UN proper shipping name: Void

14.3 Transport hazard class(es): Void

(Contd. on page5)

(Contd. of page4)

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.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

- EU REGULATIONS: See Section 2
- Other regulations, limitations and prohibitive regulations:
  The product is a medical device according to the EC-directive 93/42/EEC.

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

16. 16.Other information

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

SAFETY DATA SHEET

(according to 1907/2006/EC,Article 31)

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade Name:

HI DENSE "LIQUID"

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

1.3 Application of the substance/the preparation

Dental material

1.4 Details of the supplier of the safety date 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

1.5 Emergency Telephone Number

+49-2102-866410 (SHOFU DENTAL GmbH)

2. Hazards identification

Classification of the substance or mixture

CLASSIFICATION (67/548)

Not applicable.

CLASSIFICATION (EC 1272/2008)

Not applicable.

LABEL IN ACCORDANCE WITH (EC) NO.1272/2008

Void

HAZARD-DETERMINING COMPONENTS OF LABELLING

SIGNAL WORD

Void

HAZARD STATEMENTS

Void

PRECAUTIONARY STATEMENTS

Void

OTHER HAZARDS

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

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: Void

Copolymer of acrylic acid and tricarboxylic acid (Water solution)

3.4 Additional information: For the wording of the listed risk phrases refer to section 2.

(Contd. on page2)

(Contd. of page1)

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. Get medical advice/attention.

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

5. Fire-fighting measures

5.1 Extinguishing Media:

Powder, Alcohol-resistant foam, Carbon dioxide

5.2 Special hazards arising from the substance or mixture:

No further relevant information available.

5.3 Advice for firefighters:

No special measures required.

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 suitable 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.

7. Handling and storage

7.1 Precautions for safe handling:

Avoid inhaling and contact with eyes and skin.

Keep away from ignition sources and separate from strong oxidizer.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a cool and dry place out of direct sunlight and source of ignition.

Separated from organic peroxide. Keep containers closed.

7.3 Specific end use(s):

No further relevant information available

(Contd. on page3)

(Contd. of page2)

8. Exposure controls/personal protection

8.1 Control parameters:
Not further data; see item 7.

8.2 Exposure controls:
Respiratory Protection:
Local exhaust

Hand Protection:	Latex or rubber gloves
Eye Protection:	Safety goggles (May be required)
Skin Protection:	Not required. General protective overalls.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance/Odor/Colour:	Colorless viscous liquid with perceptible odor.
Boiling Point:	105 °C
Flash point:	Not determined.
Relative Density:	≈ 1.18 (water=1)
Solubility: water solubility	Soluble

9.2 Other information
No further relevant information available.

10. Stability and reactivity

10.1 Reactivity:
No further relevant information available.

10.2 Chemical stability:
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions:
No dangerous reactions known.

10.4 Condition to Avoid:
Avoid direct sunlight and high temperature.

10.5 Incompatible materials:
No further relevant information available.

10.6 Hazardous Decomposition Products:
None under normal conditions of storage and use.

11. Toxicological information

11.1 Information on toxicological effects:
No further relevant information available.

12. Ecological information

12.1 Toxicity:
No further relevant information available.

12.2 Persistence and degradability:
No further relevant information available.

(Contd. on page4)

(Contd. of page3)

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.

13. Disposal considerations

13.1 Waste treatment methods:
Dispose of contents/container to in accordance with local/regional/national/international regulations.

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.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

- EU REGULATIONS: See Section 2
- Other regulations, limitations and prohibitive regulations:
  The product is a medical device according to the EC-directive 93/42/EEC.

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

16. Other information

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