

|        |   | Printing date: April 30, 2024 |
|--------|---|-------------------------------|
| SECTIO | ON 1. Identification of the substance or mixture and of the sup   | oplier                        |
| 1.1    | Product identifier  |                               |
|        | Trade Name:   |                               |
|        | CERARESIN BOND "BOND I"   |                               |
| 1.2    | Relevant identified uses of the substance or mixture and uses adv | vised against                 |
|        | Relevant identified uses: Dental material                         | nood agamet                   |
|        | Uses advised against: No further data                             |                               |
| 1.2    | Details of the supplier of the safety date sheet                  |                               |
| 1.3    |   |                               |
|        | 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 Affair         | S                             |
| 1.4    | Emergency Telephone Number  |                               |
|        | For emergencies only. Call CHEMTREC: +1 703-741-5970              | / 1-800-424-9300 (24 hours)   |
|        |   |                               |
| SECTIO | ON 2. Hazards identification                                      |                               |
| 2.1    | GHS Classification  |                               |
|        | PHYSICAL HAZARDS  |                               |
|        | FLAMMABLE LIQUIDS C   | Category 2                    |
|        | HEALTH HAZARDS  | 0.1                           |
|        | ACUTE TOXICITY-ORAL   | Category 4                    |
|        |   | Category 2A                   |
|        |   |                               |
| 2.2    | Label elements  |                               |
|        | SYMBOL  |                               |
|        |   |                               |
|        | JAK I   |                               |
|        | i i   |                               |
|        | GHS02 GHS07   |                               |
|        | SIGNAL WORD: Danger   |                               |
|        | SIGNAL WORD. Danger   |                               |
|        |   |                               |
|        | HAZARD STATEMENTS   |                               |
|        | Highly flammable liquid and vapor.                                |                               |
|        | Harmful if swallowed.   |                               |
|        | Causes serious eye irritation.                                    |                               |
|        | PRECAUTIONARY STATEMENTS  |                               |
|        | [Prevention]  |                               |
|        | Do not handle until all safety precautions have been read a       | nd understood.                |
|        | Wear protective gloves and eye/face protection.                   |                               |
|        | Do not eat, drink or smoke when using this product.               |                               |
|        | Keep container tightly closed.                                    |                               |
|        |   |                               |



Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash hands thoroughly after handling. [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 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER/doctor if you feel unwell.

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 Ingredients and composition:

| Component             | CAS-No  | Weight % |
|-----------------------|---------|----------|
| Ethanol               | 64-17-5 | 90-99    |
| Silane coupling agent |         |          |
| 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. 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.



|                                   |   |                                  |                           |                           | BOND I<br>Printing date: April 30, 2024 |
|-----------------------------------|---|----------------------------------|---------------------------|---------------------------|---|
| SECTION 5. Fire-fighting measures |   |                                  |                           |                           |   |
| 5.1                               | Extinguishing N   | ledia:                           |                           |                           |   |
|                                   | Foam, Co  | O <sub>2</sub> , Powder, Dry sai | nd                        |                           |   |
| 5.2                               | Special hazard  | s arising from the s             | ubstance or mixture       | <b>:</b>                  |   |
|                                   | 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.        |                                  |                           |                           |   |
|                                   |   | p                                |                           |                           |   |
|                                   |   | al release measur                |                           |                           |   |
| 6.1                               | -   | utions, protective e             |                           | rgency procedures:        |   |
|                                   |   | ntact with eyes and              | SKIN.                     |                           |   |
| 6.2                               | Environmental   |                                  |                           |                           |   |
|                                   |   | low product to reac              | •••                       | or water bodies.          |   |
|                                   |   | low to enter the gro             |                           |                           |   |
| 6.3                               |   | aterial for containm             | -                         | lp:                       |   |
|                                   |   | and discard in a sta             | ible container.           |                           |   |
| 6.4                               | Reference to of   |                                  | <b>6</b> 1 11             |                           |   |
|                                   |   | ion 7 for information            | •                         |                           |   |
|                                   |   | ion 8 for information            |                           | ction equipment.          |   |
|                                   | See Sect  | ion 13 for disposal              | information.              |                           |   |
|                                   |   |                                  |                           |                           |   |
|                                   | ON 7. Handling  |                                  |                           |                           |   |
| 7.1                               | Precautions for   | -                                |                           |                           |   |
|                                   |   | a well ventilated p              |                           |                           |   |
| 7.0                               |   |                                  |                           | ces of heat. No smol      | king.                                   |
| 7.2                               |   | afe storage, includ              |                           |                           |   |
| 7.0                               |   | a cool and dark area             | a with container tigr     | ntly closed.              |   |
| 7.3                               | Specific end us   | · · /                            |                           |                           |   |
|                                   | No furthe   | r relevant informati             | on available.             |                           |   |
| SECTIO                            | ON 8. Exposure  | e controls/persona               | al protection             |                           |   |
| 8.1                               | Control parame  |                                  |                           |                           |   |
|                                   | Exposure limits   | :                                |                           |                           |   |
|                                   | Component   | ACGIH                            | NIOSH REL                 | OSHA PEL                  |   |
|                                   | Ethanol   | TWA 1000 ppm                     | TWA 1000 ppm              | TWA 1000 ppm              |   |
|                                   |   |                                  | (1900 mg/m <sup>3</sup> ) | (1900 mg/m <sup>3</sup> ) |   |
|                                   |   |                                  | , ,                       |                           |   |
| 8.2                               | Exposure contr  | ols:                             |                           |                           |   |
|                                   | Respiratory Protection: Not required (use protective gas mask for organic gas, if neces |                                  |                           |                           | anic 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.   |                                  |                           |                           |   |
|                                   |   | the pre                          | paration/the chemi        | cal mixture.              |   |



Auto-ignition temperature:

Explosive properties:

Oxidising properties:

Viscosity:

9.2 Other information:

Decomposition temperature:

No further relevant information available.

## SAFETY DATA SHEET

|   |  | -                                      | love material on consideration of the penetration   |  |  |  |
|---|--|--|---|--|--|--|
| times, rates of diffusion and the                       |  |  | fusion and the degradation.   |  |  |  |
|   | Material of gloves   |  |   |  |  |  |
| the materia<br>from manuf<br>preparation<br>glove mater |  |  | ection of the suitable gloves does not only depend on<br>erial, but also on further marks of quality and varies<br>anufacturer to manufacturer. As the product is a<br>tion of several substances, the resistance of the<br>aterial can not be calculated in advance and has<br>e to be checked prior to the application. |  |  |  |
|   | • Pene   | etration time of gl                    | ove material  |  |  |  |
|   | The exact break through time has to be found out by the manufacturer of the protective gloves and has to be  |  |   |  |  |  |
|   | observed.  |  |   |  |  |  |
|   | <ul> <li>For the permanent contact of a maximum of 15 minutes gloves made of<br/>the following methods are suitable.</li> </ul>  |  |   |  |  |  |
|   | the following materials are suitable:  |  |   |  |  |  |
|   | Butyl rubber, BR<br>Nitrile rubber, NBR  |  |   |  |  |  |
|   | Eye Protection: Safety goggles   |  |   |  |  |  |
|   |  | 9099.00                                |   |  |  |  |
| SECTION 9. Physical and chemical properties             |  |  |   |  |  |  |
| SECTI   | ON 9. Physical and chemic  | al properties                          |   |  |  |  |
| SECTI<br>9.1  | ON 9. Physical and chemic<br>Information on basic physic   |  | properties:   |  |  |  |
|   |  |  | properties:<br>Colorless transparent liquid with alcohol odor.  |  |  |  |
|   | Information on basic physic  |  | -   |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:   |  | Colorless transparent liquid with alcohol odor.   |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:<br>Odour threshold:   | al and chemical p                      | Colorless transparent liquid with alcohol odor.<br>Not determined.  |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:<br>Odour threshold:<br>pH:  | al and chemical p                      | Colorless transparent liquid with alcohol odor.<br>Not determined.<br>Not determined.   |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:<br>Odour threshold:<br>pH:<br>Melting point/freezing point:   | al and chemical p                      | Colorless transparent liquid with alcohol odor.<br>Not determined.<br>Not determined.<br>Not determined.  |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:<br>Odour threshold:<br>pH:<br>Melting point/freezing point:<br>Boiling point:   | al and chemical p                      | Colorless transparent liquid with alcohol odor.<br>Not determined.<br>Not determined.<br>Not determined.<br>≈ 80 °C   |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:<br>Odour threshold:<br>pH:<br>Melting point/freezing point:<br>Boiling point:<br>Flash point:   | al and chemical p                      | Colorless transparent liquid with alcohol odor.<br>Not determined.<br>Not determined.<br>≈ 80 °C<br>16 °C (closed)  |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:<br>Odour threshold:<br>pH:<br>Melting point/freezing point:<br>Boiling point:<br>Flash point:<br>Evaporation rate:  | al and chemical p                      | Colorless transparent liquid with alcohol odor.<br>Not determined.<br>Not determined.<br>$\approx 80 \ ^{\circ}C$<br>16 $^{\circ}C$ (closed)<br>Not determined.   |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:<br>Odour threshold:<br>pH:<br>Melting point/freezing point:<br>Boiling point:<br>Flash point:<br>Evaporation rate:<br>Flammability (solid, gas):  | al and chemical p                      | Colorless transparent liquid with alcohol odor.<br>Not determined.<br>Not determined.<br>$\approx 80 \ ^{\circ}C$<br>16 $^{\circ}C$ (closed)<br>Not determined.<br>Not applicable.  |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:<br>Odour threshold:<br>pH:<br>Melting point/freezing point:<br>Boiling point:<br>Flash point:<br>Evaporation rate:<br>Flammability (solid, gas):<br>Upper/lower flammability or   | al and chemical p                      | Colorless transparent liquid with alcohol odor.<br>Not determined.<br>Not determined.<br>≈ 80 °C<br>16 °C (closed)<br>Not determined.<br>Not applicable.<br>Not determined.   |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:<br>Odour threshold:<br>pH:<br>Melting point/freezing point:<br>Boiling point:<br>Flash point:<br>Evaporation rate:<br>Flammability (solid, gas):<br>Upper/lower flammability or<br>Vapour pressure:   | al and chemical p                      | Colorless transparent liquid with alcohol odor.<br>Not determined.<br>Not determined.<br>≈ 80 °C<br>16 °C (closed)<br>Not determined.<br>Not applicable.<br>Not determined.<br>Not determined.  |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:<br>Odour threshold:<br>pH:<br>Melting point/freezing point:<br>Boiling point:<br>Flash point:<br>Evaporation rate:<br>Flammability (solid, gas):<br>Upper/lower flammability or<br>Vapour pressure:<br>Vapour density:                      | al and chemical p                      | Colorless transparent liquid with alcohol odor.<br>Not determined.<br>Not determined.<br>≈ 80 °C<br>16 °C (closed)<br>Not determined.<br>Not applicable.<br>Not determined.<br>Not determined.<br>Not determined.   |  |  |  |
|   | Information on basic physic<br>Appearance/Odor/Colour:<br>Odour threshold:<br>pH:<br>Melting point/freezing point:<br>Boiling point:<br>Flash point:<br>Evaporation rate:<br>Flammability (solid, gas):<br>Upper/lower flammability or<br>Vapour pressure:<br>Vapour density:<br>Relative density: | al and chemical p<br>explosive limits: | Colorless transparent liquid with alcohol odor.<br>Not determined.<br>Not determined.<br>≈ 80 °C<br>16 °C (closed)<br>Not determined.<br>Not applicable.<br>Not determined.<br>Not determined.<br>Not determined.<br>Not determined.<br>0.8 (water=1)   |  |  |  |

Not determined.

Not determined.

Not determined.

Not applicable.

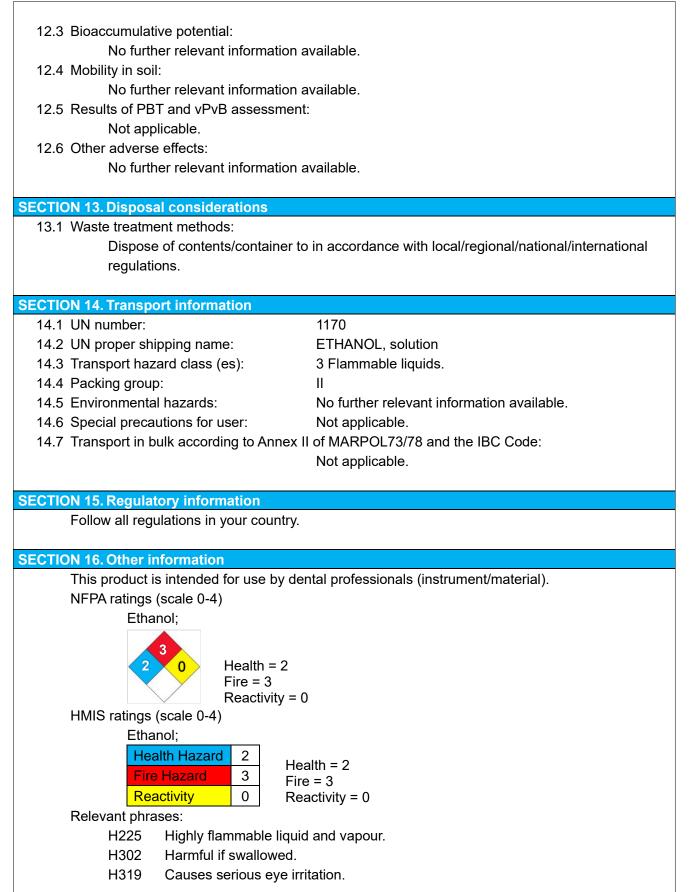
Not applicable.



| <b>SECTION 10. Stability and reacti</b>    | vity   |         |              |                                   |  |
|--|--|---------|--------------|-----------------------------------|--|
| 10.1 Reactivity:                           | 10.1 Reactivity:   |         |              |                                   |  |
| No further relevant i                      | No further relevant information available.   |         |              |                                   |  |
| 10.2 Chemical stability:                   | 0.2 Chemical stability:  |         |              |                                   |  |
| Stable under norma                         | I temperatures and   | pressur | es.          |                                   |  |
| 10.3 Possibility of hazardous re           | actions:   |         |              |                                   |  |
| No dangerous react                         | ions known.  |         |              |                                   |  |
| 10.4 Condition to Avoid:                   |  |         |              |                                   |  |
| Excessive heat (hig                        | n temperature), ope  | n flame | s, ignition  | source, and exposure to sunlight. |  |
| 10.5 Incompatible materials:               |  |         |              |                                   |  |
| Strong oxidizing ma                        |  |         |              |                                   |  |
| 10.6 Hazardous Decompositior               | Products:  |         |              |                                   |  |
| None under normal                          | conditions of storag   | e and u | ise.         |                                   |  |
|  |  |         |              |                                   |  |
| SECTION 11. Toxicological infor            |  |         |              |                                   |  |
| 11.1 Information on toxicologica           |  |         |              |                                   |  |
| Acute toxicity:                            | Acute Tox. 4; H30  | 2 Harm  | ful if swall | owed.                             |  |
|  | Ethanol;   |         |              |                                   |  |
|  | -  | rat     | LD50         | 5 5                               |  |
|  |  | rat     | LC50         | 20000 ppm/10H                     |  |
| Skin corrosion/irritation:                 |  |         |              | fication criteria are not met.    |  |
| Eye damage/irritation:                     | Eye Irrit. 2A; H319  | Cause   | s serious    | eye irritation.                   |  |
| Sensitization to the respira               | -  | 1 - 4 - | 41           |                                   |  |
|  |  |         |              | fication criteria are not met.    |  |
| Skin sensitization:                        | ,  |         |              |                                   |  |
| Germ cell mutagenicity/Ge                  | -  |         | <u> </u>     | Gention oritopic and motionst     |  |
| Carcinegenieitu                            |  | e dala, | the classi   | fication criteria are not met.    |  |
| Carcinogenicity:                           |  |         |              |                                   |  |
|  | ACGIH-A4; Not classifiable as a human carcinogen.  |         |              |                                   |  |
| Reproductive toxicity:                     | [DFG 2004] MAK; Carcinogen category: 5   |         |              |                                   |  |
|  | Reproductive toxicity: Based on available data, the classification criteria are not met.<br>Effects on or via lactation: Lack of data. |         |              |                                   |  |
|  | Specific target organ toxicity (single exposure):  |         |              |                                   |  |
|  | Based on available data, the classification criteria are not met.  |         |              |                                   |  |
| Specific target organ toxic                | Specific target organ toxicity (repeated exposure):  |         |              |                                   |  |
|  | Based on available data, the classification criteria are not met.  |         |              |                                   |  |
| Aspiration hazard:                         |  |         |              | fication criteria are not met.    |  |
| 11.2 Information on other haza             |  | o data, |              |                                   |  |
| No further relevant information available. |  |         |              |                                   |  |
|  |  |         |              |                                   |  |
| SECTION 12. Ecological information         |  |         |              |                                   |  |
| 12.1 Toxicity:                             |  |         |              |                                   |  |
| No further relevant i                      | nformation available   | Э.      |              |                                   |  |
| 12.2 Persistence and degradat              | 12.2 Persistence and degradability:  |         |              |                                   |  |

No further relevant information available.







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