



# SAFETY DATA SHEET

page 1/6  
FL BOND II  
ETCHANT

Printing date: September 3, 2019

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

- 1.1 Product identifier  
Trade Name:  
**FL BOND II "ETCHANT"**
- 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
- |                           |             |
|---------------------------|-------------|
| ACUTE TOXICITY-ORAL       | Category 4  |
| SKIN CORROSION/IRRITATION | Category 1A |
| EYE DAMAGE/IRRITATION     | Category 1  |

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

- 2.2 Label elements  
SYMBOL



GHS05 GHS07

SIGNAL WORD Danger

### HAZARD STATEMENTS

Harmful if swallowed  
Causes severe skin burns and eye damage

### PRECAUTIONARY STATEMENTS

[Prevention]  
Do not handle until all safety precautions have been read and understood.  
Wear protective gloves and eye/face protection.  
Do not breathe dust/mist/vapors.  
Do not eat, drink or smoke when using this product.  
Wash hands thoroughly after handling.

Version Number 8

Revision date: September 3, 2019



# SAFETY DATA SHEET

page 2/6  
FL BOND II  
ETCHANT  
Printing date: September 3, 2019

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

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

Immediately call a POISON CENTER/doctor.

[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:

Phosphoric acid [Cas No.7664-38-2] 5-10 %

Other component:

Water

Fumed silica

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

This product is not flammable.



# SAFETY DATA SHEET

- 5.1 Extinguishing Media:  
No further relevant information available.
- 5.2 Special hazards arising from the substance or mixture:  
No further relevant information available.
- 5.3 Advice for firefighters:  
No special measures required.

## 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:  
Avoid contact with skin and eyes.  
Avoid prolonged inhalation.
- 7.2 Conditions for safe storage, including any incompatibilities:  
Store under normal dry conditions. Keep containers closed.
- 7.3 Specific end use(s):  
No further relevant information available.

## SECTION 8. Exposure controls/personal protection

- 8.1 Control parameters:  
Exposure limits: Phosphoric acid;  

[ACGIH 2014]	TLV-TWA	1 mg/m <sup>3</sup>
	TLV-STEL	3 mg/m <sup>3</sup>

  
Silica;  

[ACGIH 2011]	TLV-TWA	10 mg/m <sup>3</sup>
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- 8.2 Exposure controls:  
Respiratory Protection:  
Dust mask  
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.



# SAFETY DATA SHEET

page 4/6  
FL BOND II  
ETCHANT  
Printing date: September 3, 2019

- 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:	Odorless blue-colored jelly
Odour threshold	Not determined.
pH	Not determined.
Melting point/freezing point	Not determined.
Boiling Point:	≈ 100 °C
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:	≈ 1.0 (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.



# SAFETY DATA SHEET

- 10.3 Possibility of hazardous reactions:  
No dangerous reactions known.
- 10.4 Condition to Avoid:  
Sunlight, heat, contact with incompatible materials.
- 10.5 Incompatible materials:  
Alkaline substance, Metals
- 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.
- |                       |        |      |                  |
|-----------------------|--------|------|------------------|
| Phosphoric acid; Oral | rat    | LD50 | 1250 mg/kg       |
| Dermal                | rabbit | LD50 | 2740 mg/kg       |
| Inhalation            | rat    | LC50 | > 0.85 mg/L (4H) |
- Skin corrosion/irritation: Skin Corr. 1A ; H314 Causes severe skin burns and eye damage.
- Eye damage/irritation: Eye Dam. 1; H314 Causes severe skin burns and 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: 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):  
Based on available data, the classification criteria are not met.
- 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:  
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.



# SAFETY DATA SHEET

page 6/6  
FL BOND II  
ETCHANT  
Printing date: September 3, 2019

## 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: 1805  
14.2 UN proper shipping name: Phosphoric acid, solution  
14.3 Transport hazard class(es): 8 Corrosive substances  
14.4 Packing group: III  
14.5 Environmental hazards: No further relevant information available.  
14.6 Special precautions for user: Warning: Corrosive substances.  
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.

## SECTION 16. Other information

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

NFPA ratings for USA (scale 0-4)

Phosphoric acid;



Health = 3  
Fire = 0  
Reactivity = 0

Relevant HMIS-Ratings (Scale 0-4)

Phosphoric acid;

Health Hazard	3
Fire Hazard	0
Reactivity	0

Health = 3  
Fire = 0  
Reactivity = 0

Relevant phrases:

- H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.

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