



# SAFETY DATA SHEET

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FL-BOND II  
ETCHANT  
Printing date: June 28, 2016

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

- 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 DENTAL GmbH  
Address: Am Brüll 17, 40878 Ratingen, Germany  
Phone: +49 (0) 2102-8664-0  
Fax: +49 (0) 2102-8664-64  
E-Mail: info@shofu.de  
Section in Charge: Quality Management & Regulatory Affairs
- 1.4 Emergency Telephone Number  
+49-2102-8664-53 (SHOFU DENTAL GmbH) 24 hours / 7 days

## SECTION 2. Hazards identification

- 2.1 Classification of the substance or mixture  
CLASSIFICATION (EC 1272/2008)  
Skin Irrit. 2            H315            Causes skin irritation.  
Eye Irrit. 2            H319            Causes serious eye irritation.
- 2.2 Label elements  
LABEL IN ACCORDANCE WITH (EC) NO.1272/2008



GHS05

HAZARD-DETERMINING COMPONENTS OF LABELLING

Phosphoric acid

SIGNAL WORD

Danger

HAZARD STATEMENTS

H315            Causes skin irritation.  
H319            Causes serious eye irritation.

PRECAUTIONARY STATEMENTS

P260            Do not breathe dust/fume/gas/mist/vapour s/spray.  
P264            Wash hands thoroughly after handling.  
P280            Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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P303+P361+P353

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P363

Wash contaminated clothing before reuse.

P304+P340

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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 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: 7664-38-2 5-10 %

EINECS: 231-633-2

Skin Irrit. 2; H315, Eye Irrit. 2; H319

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. Get medical advice/attention.

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:

This product is not flammable.

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- Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture:  
Formation of toxic gases is possible during heating or in case of fire.
- 5.3 Advice for firefighters:  
No special measures required.

## SECTION 6. Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:  
Avoid eye and skin contact.
- 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.

## SECTION 7. Handling and storage

- 7.1 Precautions for safe handling:  
Avoid contact with skin and eyes.  
Local dust extraction measures are recommended.
- 7.2 Conditions for safe storage, including any incompatibilities:  
Store under normal dry conditions. Keep containers closed.  
Keep out of reach of children.
- 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 2004]    | TLV: 1 mg/m <sup>3</sup> (TWA), 3 mg/m <sup>3</sup> (STEL) |
| NIOSH REL:      | TWA 1 mg/m <sup>3</sup> , ST 3 mg/kg                       |
| OSHA PEL:       | TWA 1 mg/m <sup>3</sup>                                    |
| [DFG 2005]      | MAK: (Inhalable fraction) 2 mg/m <sup>3</sup>              |
- 8.2 Exposure controls
- Respiratory Protection: Not required.
- 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.

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

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The product has moderate acidity and reacts with a base intensely.

## 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.

## SECTION 11. Toxicological information

### 11.1 Information on toxicological effects:

Acute toxicity:	Phosphoric acid;				
	Oral	rat	LD50	1530 mg/kg	
	Dermal	rabbit	LD50	2740 mg/kg	

Skin corrosion/irritation: Skin Irrit. 2; H315 Causes skin irritation.

Eye damage/irritation: Eye Irrit. 2; H319 Causes serious eye irritation.

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.

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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: 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 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.

## SECTION 16. Other information

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

Relevant phrases:

H315 Causes skin irritation.  
H319 Causes serious eye irritation.

Abbreviations and acronyms:

EINECS: European Inventory of Existing Commercial Chemical Substances  
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