

# SAFETY DATA SHEET

## ONE-UP BOND F Plus Bonding Agent B

### 1. Identification

#### Product identifier

**Product name** ONE-UP BOND F Plus Bonding Agent B

#### Recommended use of the chemical and restrictions on use

**Restriction on use** Dental Adhesive. For dental professionals only.

#### Details of the supplier of the safety data sheet

**Supplier** Tokuyama Dental America, Inc.  
740 Garden View CT., Suite 200 Encinitas, CA 92024 U.S.A.  
Tel: +1-760-942-7211  
Fax: +1-760-942-7212

**Contact person** <http://www.tokuyama-dental.com/tdc/contact.htm>

**Manufacturer** Tokuyama Dental Corporation  
38-9, Taitou 1-chome, Taitou-ku, Tokyo  
110-0016, Japan  
TEL: +81-3-3835-2261  
FAX: +81-3-3835-2265

#### Emergency telephone number

**Emergency telephone** Tokuyama Dental America, Inc. Tel: +1-760-942-7211  
Days and hours of operation : 9:00-17:00(PST/PDT), Weekdays, except national holidays in US.  
Language: English only.

### 2. Hazard identification

#### Classification of the substance or mixture

**WHMIS Regulatory Status** This product has been classified according to the hazard criteria of the Hazardous Product Regulations and the SDS contains all required information.

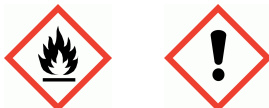
**Physical hazards** Flam. Liq. 3 - H226

**Health hazards** Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

**Environmental hazards** Not Classified

#### Label elements

##### Pictogram



**Signal word** Warning

**Hazard statements** H226 Flammable liquid and vapour.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.

## ONE-UP BOND F Plus Bonding Agent B

<b>Precautionary statements</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P240 Ground and bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use non-sparking tools.</p> <p>P243 Take action to prevent static discharges.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P501 Dispose of contents/ container in accordance with local regulations.</p>
---------------------------------	---

### 3. Composition/information on ingredients

#### Mixtures

<b>2-PROPENOIC ACID, 2-METHYL-, 2-HYDROXYETHYL ESTER</b> CAS number: 868-77-9	<b>30-60%</b>
<b>METHYL METHACRYLATE</b> CAS number: 80-62-6	<b>5-10%</b>
<b>2-PROPENOIC ACID, 2-METHYL-, 2-(DIMETHYLAMINO)ETHYL ESTER</b> CAS number: 2867-47-2	<b>1-5%</b>
<b>2,6-DI-t-BUTYL-4-METHYLPHENOL</b> CAS number: 128-37-0	<b>0.1-1%</b>

**Composition comments** All percentages displayed expressed as weight/weight.

### 4. First-aid measures

#### Description of first aid measures

<b>General information</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Inhalation</b>	Move affected person to fresh air at once.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.

## ONE-UP BOND F Plus Bonding Agent B

<b>Skin contact</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists after washing.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

**Most important symptoms and effects, both acute and delayed**

<b>Ingestion</b>	Ingestion may cause severe irritation of the mouth, the esophagus and the gastrointestinal tract.
<b>Skin contact</b>	Skin irritation. Allergic rash.
<b>Eye contact</b>	May cause severe eye irritation.

**Indication of any immediate medical attention and special treatment needed**

<b>Notes for the doctor</b>	Treat symptomatically.
-----------------------------	------------------------

**5. Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing media** Extinguish with the following media: Foam. Carbon dioxide or dry powder.

**Specific hazards arising from the hazardous product**

**Specific hazards** Irritating gases or vapours. The product is flammable.

**Advice for firefighters**

**Protective actions during firefighting** Avoid breathing fire gases or vapours.

**Special protective equipment for firefighters** Wear chemical protective suit.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet.

**Environmental precautions**

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground.

**Methods and material for containment and cleaning up**

**Methods for cleaning up** Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Use non-sparking tools. Earth container and transfer equipment to eliminate sparks from static electricity. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses.

**Reference to other sections**

**Reference to other sections** For waste disposal, see Section 13.

**7. Handling and storage**

**Precautions for safe handling**

## ONE-UP BOND F Plus Bonding Agent B

<b>Usage precautions</b>	Keep away from heat, sparks and open flame. All handling should only take place in well-ventilated areas. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Static electricity and formation of sparks must be prevented. Storage tanks and other containers must be earthed. Take precautionary measures against static discharges. Avoid spilling. Avoid contact with skin, eyes and clothing.
<b>Advice on general occupational hygiene</b>	Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes wet or contaminated. Wash contaminated clothing before reuse.

**Conditions for safe storage, including any incompatibilities**

<b>Storage precautions</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid exposure to high temperatures or direct sunlight. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at temperatures between 0°C/32°F and 10°C/50°F.
----------------------------	--

**Specific end use(s)**

<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.
----------------------------	---

**8. Exposure Controls/personal protection**

**Control parameters**

**Occupational exposure limits**

**METHYL METHACRYLATE**

Long-term exposure limit (8-hour TWA): ACGIH 50 ppm 205 mg/m<sup>3</sup>  
 Short-term exposure limit (15-minute): ACGIH 100 ppm 410 mg/m<sup>3</sup>  
 A4, DSens

**2,6-DI-t-BUTYL-4-METHYLPHENOL**

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m<sup>3</sup> inhalable fraction and vapor  
 A4

ACGIH = American Conference of Governmental Industrial Hygienists.  
 A4 = Not Classifiable as a Human Carcinogen.  
 DSens = Dermal sensitizer.

**Exposure controls**

<b>Appropriate engineering controls</b>	Provide adequate general and local exhaust ventilation. Use explosion-proof electrical, ventilating and lighting equipment.
<b>Eye/face protection</b>	The following protection should be worn: Chemical splash goggles.
<b>Hand protection</b>	Wear protective gloves.
<b>Other skin and body protection</b>	Wear appropriate clothing to prevent any possibility of skin contact.
<b>Hygiene measures</b>	When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Wash contaminated clothing before reuse.
<b>Respiratory protection</b>	No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

**9. Physical and Chemical Properties**

**Information on basic physical and chemical properties**

<b>Appearance</b>	Liquid
-------------------	--------

## ONE-UP BOND F Plus Bonding Agent B

<b>Colour</b>	Yellow
<b>Odour</b>	Characteristic
<b>Odour threshold</b>	Not available.
<b>pH</b>	pH (concentrated solution): 7
<b>Melting point</b>	Not available.
<b>Initial boiling point and range</b>	Not available.
<b>Flash point</b>	29.5°C
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	Not available.
<b>Other flammability</b>	Not available.
<b>Vapour pressure</b>	Not available.
<b>Vapour density</b>	Not available.
<b>Relative density</b>	1.23
<b>Solubility(ies)</b>	Not available.
<b>Partition coefficient</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition Temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not available.
<b>Oxidising properties</b>	Not available.
<b>Other information</b>	Not available.

### 10. Stability and reactivity

<b>Reactivity</b>	May polymerize. See the other subsections of this section for further details.
<b>Stability</b>	The product is flammable.
<b>Possibility of hazardous reactions</b>	May polymerize.
<b>Conditions to avoid</b>	Keep away from heat, sparks and open flame. Avoid exposure to high temperatures or direct sunlight.
<b>Materials to avoid</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Heating may generate the following products: Toxic gases or vapours.

### 11. Toxicological information

#### Information on toxicological effects

## ONE-UP BOND F Plus Bonding Agent B

**Routes of exposure** Skin , Eyes , Ingestion , Inhalation , Health effects: See section 4.

**Acute toxicity - oral**

**Notes (oral LD<sub>50</sub>)** Not available.

**Acute toxicity - dermal**

**Notes (dermal LD<sub>50</sub>)** Not available.

**Acute toxicity - inhalation**

**Notes (inhalation LC<sub>50</sub>)** Not available.

**Skin corrosion/irritation**

**Animal data** Irritating to skin.

**Serious eye damage/irritation**

**Serious eye damage/irritation** May cause severe eye irritation.

**Skin sensitization**

**Skin sensitization** May cause an allergic skin reaction.

**Germ cell mutagenicity**

**Genotoxicity - in vitro** Not available.

**Carcinogenicity**

**Carcinogenicity** Not available.

**IARC carcinogenicity**

Some of the ingredients are listed or exempt.

**NTP carcinogenicity**

Some of the ingredients are listed or exempt.

**Reproductive toxicity**

**Reproductive toxicity - fertility** Not available.

**Specific target organ toxicity - single exposure**

**STOT - single exposure** Irritating to respiratory system.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** Not available.

**Aspiration hazard**

**Aspiration hazard** Not available.

**Toxicological information on ingredients**

**METHYL METHACRYLATE**

**Carcinogenicity**

**IARC carcinogenicity** IARC Group 3 Not classifiable as to its carcinogenicity to humans.

**2,6-DI-t-BUTYL-4-METHYLPHENOL**

**Carcinogenicity**

**IARC carcinogenicity** IARC Group 3 Not classifiable as to its carcinogenicity to humans.

**NTP carcinogenicity**

Reasonably anticipated to be a human carcinogen.

**12. Ecological Information**

**Toxicity** No data available.

# ONE-UP BOND F Plus Bonding Agent B

## Ecological information on ingredients

### 2,6-DI-t-BUTYL-4-METHYLPHENOL

#### Chronic aquatic toxicity

M factor (chronic) 1

#### Persistence and degradability

Persistence and degradability No data available.

#### Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

#### Mobility in soil

Mobility No information available.

#### Other adverse effects

Other adverse effects Not known.

### 13. Disposal considerations

#### Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### 14. Transport information

#### UN number

UN No. (TDG) 1133

UN No. (IMDG) 1133

UN No. (ICAO) 1133

UN No. (DOT) UN1133

#### UN proper shipping name

Proper shipping name (TDG) ADHESIVES, containing flammable liquid

Proper shipping name (IMDG) ADHESIVES, containing flammable liquid

Proper shipping name (ICAO) ADHESIVES, containing flammable liquid

Proper shipping name (DOT) Adhesives, a containing flammable liquid

#### Transport hazard class(es)

DOT class 3

DOT hazard label 3

TDG class 3

TDG label(s) 3

IMDG class 3

ICAO class/division 3

## ONE-UP BOND F Plus Bonding Agent B

### DOT transport label



### Transport labels



### Packing group

TDG packing group	III
IMDG packing group	III
ICAO packing group	III
DOT packing group	III

### Environmental hazards

#### Environmentally hazardous substance/marine pollutant

No.

### Special precautions for user

EmS F-E, S-D

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## 15. Regulatory information

**Regulatory References** According to WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR) Hazardous Products Regulations - SOR/2015-17. Transportation of Dangerous Goods Regulations - SOR/2015-100.

## 16. Other information

**Training advice** Ensure operatives are trained to minimize exposure. Only trained personnel should use this material.

**Revision comments** This is the first issue.

**Revision date** 2018-06-20

**Hazard statements in full** H226 Flammable liquid and vapour.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.

The information which is contained in this document is based on available data. However, as such has been obtained from various sources, including independent laboratories, it is given without warranty or representation that is complete, accurate and can be relied upon. Tokuyama Dental Corp. has not attempted to conceal in any way the deleterious aspects of the product listed herein, but makes no warranty as to such information.