SAFETY DATA SHEET ONE-UP BOND F Plus Bonding Agent A

1. Identification

Product identifier

Product name ONE-UP BOND F Plus Bonding Agent A

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. 2A - H319 Skin Sens. 1 - H317 STOT SE 3 - H335

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. H335 May cause respiratory irritation.

ONE-UP BOND F Plus Bonding Agent A

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P261 Avoid breathing vapour/ spray.

P264 Wash contaminated skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep 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.

P312 Call a POISON CENTRE/doctor if you feel unwell. P321 Specific treatment (see medical advice on this label).

P332+P313 If skin irritation occurs: Get medical advice/ attention.

P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337+P313 If eye irritation persists: Get medical advice/ attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/ container in accordance with local regulations.

3. Composition/information on ingredients

Mixtures

2-PROPENOIC ACID, 2-METHYL-, 2-HYDROXYETHYL ESTER, PHOSPHATE

30-60%

CAS number: 52628-03-2

POLY(OXY-1,2-ETHANEDIYL), α,α' -[(1-

METHYLETHYLIDENE)DI-4,1-PHENYLENE]BIS[ω-[(2-

METHYL-1-OXO-2-PROPENYL)OXY]-

CAS number: 41637-38-1

1-METHACRYLOXY-1,1-UNDECANECARBOXYLIC ACID

10-30%

10-30%

CAS number: 108362-85-2

METHYL METHACRYLATE

5-10%

CAS number: 80-62-6

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

0.1-1%

CAS number: 128-37-0

Composition comments

All percentages displayed expressed as weight/weight.

ONE-UP BOND F Plus Bonding Agent A

4. First-aid measures

Description of first aid measures

General information Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Inhalation Move affected person to fresh air at once. Get medical advice/attention if you feel unwell.

Ingestion Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any

discomfort continues.

Skin contact 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.

Eye contact 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.

Most important symptoms and effects, both acute and delayed

Inhalation Irritation of nose, throat and airway.

Ingestion Ingestion may cause severe irritation of the mouth, the esophagus and the gastrointestinal

Skin contact Skin irritation. Allergic rash.

Eye contact May cause severe eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes for the doctor 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.

Hazardous combustion

products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapours. Oxides of carbon.

Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapours.

for firefighters

Special protective equipment 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

ONE-UP BOND F Plus Bonding Agent A

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

Usage precautions

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 inhalation of vapours/spray and contact with skin and eyes.

Advice on general occupational hygiene

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

Storage precautions

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)

Specific end use(s)

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/m³ Short-term exposure limit (15-minute): ACGIH 100 ppm 410 mg/m³ A4, DSens

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

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m³ inhalable fraction and vapor

Α4

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

DSens = Dermal sensitizer.

Exposure controls

Appropriate engineering

controls

Provide adequate general and local exhaust ventilation. Use explosion-proof electrical, ventilating and lighting equipment.

Eye/face protection The following protection should be worn: Chemical splash goggles.

Hand protection Wear protective gloves.

Other skin and body

protection

Wear appropriate clothing to prevent any possibility of skin contact.

ONE-UP BOND F Plus Bonding Agent A

Hygiene measures 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.

Respiratory protection
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

Appearance Liquid

Colour Light (or pale) Yellow

Odour Characteristic
Odour threshold Not available.

pH (concentrated solution): < 7

Melting point Not available.

Initial boiling point and range Not available.

Flash point 33.0°C

Evaporation rate Not available.

Evaporation factor Not available.

Upper/lower flammability or

explosive limits

Not applicable.

Other flammability

Vapour pressure

Not available.

Vapour density

Not available.

Relative density 1.17

Solubility(ies)

Partition coefficient

Auto-ignition temperature

Decomposition Temperature

Viscosity

Not available.

Not available.

Not available.

Not available.

Oxidising properties

Not available.

Other information Not available.

10. Stability and reactivity

Reactivity May polymerize. See the other subsections of this section for further details.

Stability The product is flammable.

ONE-UP BOND F Plus Bonding Agent A

Possibility of hazardous

reactions

May polymerize.

Conditions to avoid Keep away from heat, sparks and open flame. Avoid exposure to high temperatures or direct

sunlight.

Materials to avoid Strong oxidizing agents.

Hazardous decomposition

products

Heating may generate the following products: Toxic gases or vapours.

11. Toxicological information

Information on toxicological effects

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

Acute toxicity - oral

Notes (oral LD₅₀) Not available.

Acute toxicity - dermal

Notes (dermal LD₅₀) Not available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not available.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Animal data Not available.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitization

Respiratory sensitization Not available.

Skin sensitization

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro

Not available.

Genotoxicity - in vivo

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.

Reproductive toxicity -

Not available.

development

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 3 - H335 May cause respiratory irritation.

ONE-UP BOND F Plus Bonding Agent A

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.

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

ONE-UP BOND F Plus Bonding Agent A

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

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 Not applicable. **Annex II of MARPOL 73/78**

4-- 11

and the IBC Code

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.

ONE-UP BOND F Plus Bonding Agent A

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

Revision 1

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. H335 May cause respiratory 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 replied 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.