

SAFETY DATA SHEET

ESTECM II PASTE A / B

1. Identification

Product identifier

Product name ESTECM II PASTE A / B

Recommended use of the chemical and restrictions on use

Application Adhesive resin cement. 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: (877) 378 3548 (Toll-Free)
Tel: (760) 942-7211
Fax: (760) 942-7212

Contact Person <http://www.tokuyama-dental.com/tdc/contact.html>

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 California Poison Control System - San Francisco Division
San Francisco General Hospital
Bldg 5 Rm 2A21, 1001 Potrero Ave, San Francisco
Emergency telephone number: +1 800 222 1222
E-mail address: coadmin@calpoison.org
<http://www.calpoison.org>

National Capital Poison Center
3201 New Mexico Ave, Ste 310, Washington DC
Emergency telephone number: +1 800 222 1222
Telephone number: +1 202 362 3867
Facsimile numer: +1 202 362 8377
E-mail address: pc@poison.org
<http://www.poison.org>

2. Hazard(s) identification

Classification of the substance or mixture

OSHA Regulatory Status This Product is Hazardous under the OSHA Hazard Communication Standard.

Physical hazards Not Classified

Health hazards Skin Irrit . 2 - H 315: Eye Irrit . 2A - H319: Skin Sens. 1 - H317: Carc.2 - H351

Environmental hazards Not Classified

Label elements

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Pictogram



Signal word	Warning
Hazard statements	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H351 Suspected of causing cancer.
Precautionary statements	P261 Avoid breathing vapors. P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing must 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. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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. P501 Dispose of contents/ container in accordance with local regulations.
Contains	POLY(OXY-1,2-ETHANEDIYL),.alpha.,.alpha.'-[(1-METHYLETHYLIDENE)DI-4,1-PHENYLENE]BIS[.omega.-[(2-METHYL-1-OXO-2-PROPENYL)OXY]-, TRIETHYLENE GLYCOL DIMETHACRYLATE, 2-PROPENOIC ACID, 2-METHYL-, (1-METHYLETHYLIDENE)BIS[4,1-PHENYLENEOXY(2-HYDROXY-3,1-PROPANEDIYL)] ESTER, BENZOYL PEROXIDE, ETHANOL, 2,2'-[(4-METHYLPHENYL)IMINO]BIS-
Other hazards	
Hazards not otherwise classified (HNOC)	Not applicable.

3. Composition/information on ingredients

Mixtures

BISPHENOL A POLYETHOXY DIMETHACRYLATE CAS number: 41637-38-1	10-30%
TRIETHYLENE GLYCOL DIMETHACRYLATE CAS number: 109-16-0	10-30%
2-PROPENOIC ACID, 2-METHYL-, (1-METHYLETHYLIDENE)BIS[4,1-PHENYLENEOXY(2-HYDROXY-3,1-PROPANEDIYL)] ESTER CAS number: 1565-94-2	1-5%
TITANIUM DIOXIDE CAS number: 13463-67-7	<1%

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BENZOYL PEROXIDE	<1%
CAS number: 94-36-0	
p-TOLYL DIETHANOLAMINE	<1%
CAS number: 3077-12-1	
N,N-DIMETHYL-p-TOLUIDINE	<1%
CAS number: 99-97-8	

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 and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.
Skin Contact	Wash skin thoroughly with soap and water. Take off contaminated clothing and wash it before reuse.
Eye contact	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

Most important symptoms and effects, both acute and delayed

Skin contact	Skin irritation. Allergic rash.
Eye contact	May cause severe eye irritation.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations.
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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Special hazards arising from the substance or mixture

Specific hazards	In case of fire, toxic gases may be formed.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapors. Keep up-wind to avoid fumes. Move containers from fire area if it can be done without risk. Containers close to fire should be removed or cooled with water. No smoking, sparks, flames or other sources of ignition near spillage.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

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Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage.

Environmental precautions

Environmental precautions Avoid 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. Keep combustible materials away from spillage. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses. Use only non-sparking tools.

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

7. Handling and storage

Precautions for safe handling

Usage precautions All handling should only take place in well-ventilated areas. Keep away from heat, sparks and open flame. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Take any precaution to avoid mixing with combustibles and reducing agents.

Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, direct sunlight, sparks and open flames. Store in a cool, dark place (0 - 10 °C, 32 - 50 ° F).

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

TITANIUM DIOXIDE

Long-term exposure limit (8-hour TWA): ACGIH 10 mg/m
A4

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m total dust

BENZOYL PEROXIDE

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m

A4

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

A4 = Not Classifiable as a Human Carcinogen.

Exposure controls

Appropriate engineering controls Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

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.

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Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower. Do not smoke in work area. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Paste
Color	Clear, white to brown
Odor	Characteristic
Odor threshold	Not available.
pH	Not available.
Melting point	Not available.
Initial boiling point and range	Not available.
Flash point	Not applicable.
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not determined.
Solubility(ies)	Not available.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidizing properties	Not available.
Other information	Not available.

10. Stability and reactivity

Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable under the prescribed storage conditions.

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Possibility of hazardous reactions	Not known.
Conditions to avoid	Keep away from heat, sparks and open flame. Protect against direct sunlight.
Materials to avoid	Flammable/combustible materials. Strong reducing agents.
Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Carbon monoxide (CO). Carbon dioxide (CO ₂).

11. Toxicological information

Information on toxicological effects

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

Notes (oral LD₅₀) Not available.

Notes (dermal LD₅₀) Not available.

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.

OSHA Carcinogenicity None of the ingredients are listed.

Reproductive toxicity

Reproductive toxicity - fertility Not available.

Reproductive toxicity - development Not available.

Specific target organ toxicity - single exposure

STOT - single exposure Not available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not available.

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Aspiration hazard

Aspiration hazard Not available.

Toxicological information on ingredients.

TITANIUM DIOXIDE

Carcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

NTP carcinogenicity Reasonably anticipated to be a human carcinogen.

OSHA Carcinogenicity Not listed.

BENZOYL PEROXIDE

Carcinogenicity

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

NTP carcinogenicity Reasonably anticipated to be a human carcinogen.

OSHA Carcinogenicity Not listed.

N,N-DIMETHYL-p-TOLUIDINE

Acute toxicity - oral

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

12. Ecological Information

Toxicity

Acute toxicity - fish Not available.

Acute toxicity - aquatic invertebrates Not available.

Acute toxicity - aquatic plants Not available.

Persistence and degradability

Persistence and degradability No data available.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient Not available.

Mobility in soil

Mobility No information available.

Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Other adverse effects

Other adverse effects Not known.

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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

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

UN Number

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class(es)

Not applicable.

Packing group

Not applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Avoid exposure to high temperatures or direct sunlight. Keep away from heat, sparks and open flame. Protect against physical damage and/or friction. Take appropriate measures to prevent load shifting. Keep away from food, drink and animal feeding stuffs.

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

15. Regulatory information

Regulatory Status This Product is Hazardous under the OSHA Hazard Communication Standard.

Regulatory References 29 CFR 1910. 1200(g) Federal Regulations (OSHA Standard).

International Regulations

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

TITANIUM DIOXIDE

Not listed.

BENZOYL PEROXIDE

Not listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

TITANIUM DIOXIDE

Not listed.

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BENZOYL PEROXIDE

Not listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

TITANIUM DIOXIDE

Not listed.

BENZOYL PEROXIDE

Not listed.

SARA 313 Emission Reporting

TITANIUM DIOXIDE

Not listed.

BENZOYL PEROXIDE

1.0 %

CAA Accidental Release Prevention

TITANIUM DIOXIDE

Not listed.

BENZOYL PEROXIDE

Not listed.

FDA - Essential Chemical

None of the ingredients are listed or exempt.

FDA - Precursor Chemical

None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories

Acute

OSHA Highly Hazardous Chemicals

TITANIUM DIOXIDE

Not listed.

BENZOYL PEROXIDE

Threshold Quantity: 7500 lbs

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

TITANIUM DIOXIDE (air borne, unbound particles of respirable size)

Known to the State of California to cause cancer.

BENZOYL PEROXIDE

Not listed.

N,N-DIMETHYL-p-TOLUIDINE

Known to the State of California to cause cancer.

California Air Toxics "Hot Spots" (A-I)

TITANIUM DIOXIDE

Not listed.

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BENZOYL PEROXIDE

Present.

California Directors List of Hazardous Substances

TITANIUM DIOXIDE

Not listed.

BENZOYL PEROXIDE

Present.

Massachusetts "Right To Know" List

TITANIUM DIOXIDE

Present.

BENZOYL PEROXIDE

Present.

Rhode Island "Right To Know" List

TITANIUM DIOXIDE

Present.

BENZOYL PEROXIDE

Present.

Minnesota "Right To Know" List

TITANIUM DIOXIDE

Present.

BENZOYL PEROXIDE

Present.

New Jersey "Right To Know" List

TITANIUM DIOXIDE

Present.

BENZOYL PEROXIDE

Present.

Pennsylvania "Right To Know" List

TITANIUM DIOXIDE

Present.

BENZOYL PEROXIDE

Present.

16. Other information

Revision comments

Revision date 3/7/2018

Revision 2

Hazard statements in full H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.

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