SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name ESTECEM II Plus PASTE A/B

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses [Medical Device] Adhesive resin cement. For dental professionals only.

1.3. Details of the supplier of the safety data sheet

Supplier

Tokuyama Dental Italy S.r.l.

Via Chizzalunga, 1,

36066 Sandrigo, Vicenza, Italy

TEL: +39-0444-659650 FAX: +39-0444-750345

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

1.4. Emergency telephone number

Emergency telephone Regional Medicines and Poisons Information Centre NI,

Pharmacy Department

Royal Hospital Suite, Grosvenor Road, Belfast

Emergency telephone: 844 892 0111 Telephone: +44 28 90 63 2032 Fax: +44 28 90 24 8030

E-mail address: nirdic.nirdic@belfasttrust.hscni.net

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

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

Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

Precautionary statements P261 Avoid breathing vapours.

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

P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P501 Dispose of contents/ container in accordance with local regulations.

Contains (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYLOXY-2,1-

 $\label{eq:continuous} ETHANEDIYL) \ BISMETHACRYLATE, 2,2'-ETHYLENEDIOXYDIETHYL \ DIMETHACRYLATE, \\ (1-METHYLETHYLIDENE) BIS[4,1-PHENYLENEOXY(2-HYDROXY-3,1-PROPANEDIYL)]$

BISMETHACRYLATE, BENZOYL PEROXIDE, 2,2'-[(4-

METHYLPHENYL)IMINO]BISETHANOL

Supplementary precautionary

statements

P264 Wash contaminated skin thoroughly after handling.

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

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

5-15%

1-5%

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

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

Endocrine disrupting properties: Not known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

SILICA-ZIRCONIA FILLER	60-80%

CAS number: EC number / REACH Registration No.: 910-388-1 / 01-2119860534-36-0000

Classification: Substance not classified as hazardous

(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-

2,1-ETHANEDIYLOXY-2,1-ETHANEDIYL) BISMETHACRYLATE

Classification: Skin Irrit.2 - H315, Eye Irrit.2 - H319, Skin Sens.1 - H317, STOT SE 3 - H335

2,2'-ETHYLENEDIOXYDIETHYL DIMETHACRYLATE 5-15%

CAS number: 109-16-0 EC number: 203-652-6

Classification: Skin Irrit.2 - H315, Eye Irrit.2 - H319, Skin Sens.1 - H317

(1-METHYLETHYLIDENE)BIS[4,1-PHENYLENEOXY

(2-HYDROXY-3,1-PROPANEDIYL)] BISMETHACRYLATECAS number: 1565-94-2 EC number: 216-367-7

Classification: Skin Sens.1 - H317, Aquatic Chronic 3 - H412

SILICON DIOXIDE 1-5%

CAS number: 112945-52-5 EC number.: 601-216-3
Classification: Substance not classified as hazardous

TITANIUM DIOXIDE <1%

Classification: Acute Tox. 4 - H332

BENZOYL PEROXIDE <1%

CAS number: 94-36-0 EC number: 202-327-6

Classification: Org. Perox. B - H241, Eye Irrit. 2 - H319, Skin Sens. 1 - H317

2,6-DI-tert-BUTYL-p-CRESOL <0.1%

CAS number: 128-37-0 EC number: 204-881-4

Classification: Aquatic Chronic 1 H410 (M Factor(Chronic) =1)

MEQUINOL <0.1%

CAS number: 150-76-5 EC number: 205-769-8

Classification: Acute Tox. 4- H302, Eye Irrit. 2 - H319, Skin Sens. 1 - H317

1,1-(1,1-DIMETHYL-3-METHYLENE-1,3-PROPANEDIYL)BISBENZENE

<0.1%

CAS number: 6362-80-7 EG number: 228-846-8

Classification: Acute Tox.4- H302, Skin Sens. 1 - H317, STOT.RE. 2- H373,

Agatic Acute. 1-H400, (M Factor(Acute)=10), Agatic Chronic. 1-H410, (M Factor(Chronic)=1)

Voluntary Discloure according to ISO4049:2019

Contains no non-classified vPvB substances.

Contains no non-classified substances with a Union workplace exposure limit.

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. 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.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact Skin irritation. Allergic rash.

Eye contact May cause severe eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. 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

vapours.

5.3. Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapours. 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. No smoking, Personal precautions

sparks, flames or other sources of ignition near spillage.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. 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.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. 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.

7.2. Conditions for safe storage, including any incompatibilities

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

smoking. Protect from sunlight. Store at temperatures between 0°C/32°F and 10°C/50°F.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

TITANIUM DIOXIDE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

BENZOYL PEROXIDE

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³

WEL = Workplace Exposure Limit

8.2. Exposure controls

Appropriate engineering

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.

Skin protection Wear protective gloves.

Other skin and body

protection

controls

Wear appropriate clothing to prevent any possibility of skin contact.

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 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

8.3 Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Paste

Colour Clear , white to brown

Odour Characteristic

Odour 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.

Vapour pressure

Not available.

Vapour 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.

Oxidising properties Not available.

9.2. Other information

Other information Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product. See the other subsections

of this section for further details.

10.2. Chemical stability

Stability Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

Not known.

10.4. Conditions to avoid

Conditions to avoid Keep away from heat, sparks and open flame. Protect against direct sunlight.

10.5. Incompatible materials

Materials to avoid Flammable/combustible materials. Strong reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition

products

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

vapours. Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Routes of exposure Skin, Eyes, Ingestion, Inhalation, Health effects: See section 4.2.

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 sensitisation

Respiratory sensitisation Not available.

Skin sensitisation

Skin sensitisation 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 -

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.

Aspiration hazard

Aspiration hazard Not available.

TITANIUM DIOXIDE

Acute toxicity - inhalation

ATE inhalation 1.5

(dusts/mists mg/l)

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.

11.2 Other information

Route(s) of entry Skin, Eyes, Ingestion, Inhalation, Health effects: See section 4.2.

Endocrine disrupting properties: Not known.

SECTION 12: Ecological Information

12.1. Toxicity

Acute toxicity - fish Not available.

Acute toxicity - aquatic Not available.

invertebrates

Acute toxicity - aquatic plants Not available.

12.2. Persistence and degradability

Persistence and degradability No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility No information available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This product does not contain any substances classified as PBT or vPvB.

assessment

12.6 Endocrine disrupting properties

Endocrine disrupting properties: Not known.

12.7. Other adverse effects

Other adverse effects Not known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methodsDispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

SECTION 14: Transport information

General Not regulated.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 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 legislation (EC) No 1907/2006 (REACH).

(EC) No 1272/2008 (CLP).

(EU) No 2015/830. Directive 93/42/EEC

Medical devices as defined in Directive 93/42/EEC and which are invasive or used in direct physical contact with the human body, are exempted from the provisions of Regulation (EC) No 1272/2008 (CLP/GHS), usually if they are in the finished state and intended for the final user. The product is classified according to the CLP regulation.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Classification procedures

Skin Irrit. 2 - H315: Calculation method. Skin Sens. 1 - H317: Calculation method.

according to Regulation (EC)

1272/2008

Eye Irrit. 2 - H319: Calculation method.

Training advice Ensure operatives are trained to minimise exposure. Only trained personnel should use this

material.

Revision comments

Date of First Issue 01/11/2020

Date of Revision 01/10/2021

Revision (UK)

Hazard statements in full H241 Heating may cause a fire or explosion.

H301 Toxic if swallowed.

H311 Toxic in contact with skin. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic if inhaled. H332 Harmful if inhaled.

H335 May cause respiratory irritation. H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

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.