

# SAFETY DATA SHEET

## ESTELITE ASTERIA

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

#### 1.1. Product identifier

Product name ESTELITE ASTERIA

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

Identified uses Resin-based dental restorative material. 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](mailto: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.

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<b>Precautionary statements</b>	<p>P261 Avoid breathing vapours.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</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>P501 Dispose of contents/ container in accordance with local regulations.</p>
<b>Contains</b>	<p>(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYLOXY-2,1-ETHANEDIYL) BISMETHACRYLATE, 2,2'-ETHYLENEDIOXYDIETHYL DIMETHACRYLATE, (1-METHYLETHYLIDENE)BIS[4,1-PHENYLENEOXY(2-HYDROXY-3,1-PROPANEDIYL)] BISMETHACRYLATE, 2-(2H-BENZOTRIAZOL-2-YL)-p-CRESOL</p>
<b>Supplementary precautionary statements</b>	<p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</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>P362+P364 Take off contaminated clothing and wash it before reuse.</p>

## 2.3. Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYLOXY-2,1-ETHANEDIYL) BISMETHACRYLATE</b>	<b>10-20%</b>
CAS number: 41637-38-1                      EC number: 609-946-4	
<b>Classification</b>	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
STOT SE 3 - H335	
<b>2,2'-ETHYLENEDIOXYDIETHYL DIMETHACRYLATE</b>	<b>1-5%</b>
CAS number: 109-16-0                      EC number: 203-652-6	
<b>Classification</b>	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
<b>(1-METHYLETHYLIDENE)BIS[4,1-PHENYLENEOXY(2-HYDROXY-3,1-PROPANEDIYL)] BISMETHACRYLATE</b>	<b>&lt;2%</b>
CAS number: 1565-94-2                      EC number: 216-367-7	
<b>Classification</b>	
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	

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<b>TITANIUM DIOXIDE</b>	<b>&lt;1%</b>
CAS number: 13463-67-7	EC number: 236-675-5
<b>Classification</b> Tox. 4 - H 332 Carc. 2 - H351	
<b>DL-BORNANE-2,3-DIONE</b>	<b>&lt;1%</b>
CAS number: 10373-78-1	EC number: 233-814-1
<b>Classification</b> Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335	
<b>2-(2H-BENZOTRIAZOL-2-YL)-p-CRESOL</b>	<b>&lt;1%</b>
CAS number: 2440-22-4	EC number: 219-470-5
<b>Classification</b> Skin Sens. 1 - H317 Aquatic Chronic 3 - H412	
<b>2,6-DI-tert-BUTYL-p-CRESOL</b>	<b>&lt;1%</b>
CAS number: 128-37-0	EC number: 204-881-4
M factor (Chronic) = 1	
<b>Classification</b> Aquatic Chronic 1 - H410	
<b>MEQUINOL</b>	<b>&lt;1%</b>
CAS number: 150-76-5	EC number: 205-769-8
<b>Classification</b> Acute Tox. 4 - H302 Eye Irrit. 2 - H319 Skin Sens. 1 - H317	

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

### SECTION 4: First aid measures

#### 4.1. 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>	Try to induce vomiting. Get medical attention if any discomfort continues.
<b>Skin contact</b>	Wash skin thoroughly with soap and water. Take off contaminated clothing and wash it before reuse.

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**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 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.

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

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

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

### 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. Collect and place in suitable waste disposal containers and seal securely.

### 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.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in a cool, dark place (0-25°C, 32-77°F). Keep away from heat, direct sunlight, sparks and open flames.

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**Storage class** Chemical storage.

## 7.3. Specific end use(s)

**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/m<sup>3</sup> respirable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> inhalable dust

##### **2,6-DI-tert-BUTYL-p-CRESOL**

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

### 8.2. Exposure controls

**Appropriate engineering controls** Provide adequate general and local exhaust ventilation.

**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.

**Hygiene measures** Do not smoke in work area. Wash hands 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. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

**Respiratory protection** No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

## **SECTION 9: Physical and Chemical Properties**

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Paste
<b>Colour</b>	Yellow-white, translucent yellow
<b>Odour</b>	Characteristic.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Technical impossibility to obtain the data.
<b>Melting point</b>	Not available.
<b>Initial boiling point and range</b>	Not available.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not available.
<b>Evaporation factor</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.

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Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.9
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.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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### 10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not known.
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### 10.4. Conditions to avoid

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

Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
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### 10.6. Hazardous decomposition products

Hazardous decomposition products	Heating may generate the following products: Toxic gases or vapours.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Routes of exposure	Skin , Eyes , Ingestion , Inhalation , Health effects: See section 4.2.
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#### Acute toxicity - oral

Notes (oral LD <sub>50</sub> )	Not available.
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#### Acute toxicity - dermal

Notes (dermal LD <sub>50</sub> )	Not available.
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### Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) 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.

### 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.

## SECTION 12: Ecological Information

### 12.1. Toxicity

Acute toxicity - fish Not available.

Acute toxicity - aquatic invertebrates Not available.

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

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**Mobility** No information available.

## 12.5. Results of PBT and vPvB assessment

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

## 12.6. Other adverse effects

**Other adverse effects** Not known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

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

## SECTION 14: Transport information

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

### 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

**Transport in bulk according to** Not applicable.

**Annex II of MARPOL 73/78**

**and the IBC Code**

## 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.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information



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<b>Classification procedures according to Regulation (EC) 1272/2008</b>	Skin Irrit. 2 - H315: Calculation method. Skin Sens. 1 - H317: Calculation method. Eye Irrit. 2 -H319: Calculation method.
<b>Training advice</b>	Ensure operatives are trained to minimise exposure. Only trained personnel should use this material.
<b>Revision comments</b>	
<b>Revision date</b>	15/09/2018
<b>Revision</b>	4
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H351 Suspected of causing cancer. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

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