

# SAFETY DATA SHEET

## ESTELITE BULK FILL Flow

### 1. Identification

#### Product identifier

**Product name** ESTELITE BULK FILL Flow

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

**Application** Resin-based dental restorative material. 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  
<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  
<http://www.poison.org>

### 2. Hazard(s) identification

#### Classification of the substance or mixture

**Physical hazards** Not Classified

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

**Environmental hazards** Not Classified

#### Label elements

##### Pictogram



**Signal word** Warning

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<b>Hazard statements</b>	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.
<b>Precautionary statements</b>	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. P261 Avoid breathing vapor/ spray. P501 Dispose of contents/ container in accordance with local regulations.
<b>Contains</b>	BISPHENOL A DI(2-HYDROXY PROPOXY) DIMETHACRYLATE, TRIETHYLENE GLYCOL DIMETHACRYLATE, (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYLOXY-2,1-ETHANEDIYL) BISMETHACRYLATE, 2-(2H-BENZOTRIAZOL-2-YL)-p-CRESOL
<b>Other hazards</b>	
<b>Hazards not otherwise classified (HNOC)</b>	Not applicable.

### 3. Composition/information on ingredients

#### Mixtures

<b>BISPHENOL A DI (2-HYDROXY PROPOXY) DIMETHACRYLATE</b>	<b>10-30%</b>
CAS number: 1565-94-2	
<b>TRIETHYLENE GLYCOL DIMETHACRYLATE</b>	<b>10-30%</b>
CAS number: 109-16-0	
<b>(1-METHYLETHYLIDENE) BIS (4,1-PHENYLENEOXY-2,1-ETHANEDIYLOXY-2,1-ETHANEDIYL) BISMETHACRYLATE</b>	<b>5-10%</b>
CAS number: 41637-38-1	
<b>TITANIUM DIOXIDE</b>	<b>&lt;1%</b>
CAS number: 13463-67-7	
<b>2-(2H-BENZOTRIAZOL-2-YL)-p-CRESOL</b>	<b>&lt;1%</b>
CAS number: 2440-22-4	
<b>MEQUINOL</b>	<b>&lt;1%</b>
CAS number: 150-76-5	

### 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.

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<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.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. 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

<b>General information</b>	No information available.
<b>Skin contact</b>	Skin irritation. Allergic rash.
<b>Eye contact</b>	May cause severe eye irritation.

### Indication of immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	No specific recommendations.
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## 5. Fire-fighting measures

### Extinguishing media

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

### Special hazards arising from the substance or mixture

<b>Specific hazards</b>	Irritating gases or vapors.
<b>Hazardous combustion products</b>	No known hazardous decomposition products.

### Advice for firefighters

<b>Protective actions during firefighting</b>	Avoid breathing fire gases or vapors.
<b>Special protective equipment for firefighters</b>	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** No specific recommendations.

### Methods and material for containment and cleaning up

**Methods for cleaning up** Absorb in vermiculite, dry sand or earth and place into containers. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation.

**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.

### Conditions for safe storage, including any incompatibilities

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<b>Storage precautions</b>	Store in a cool, dark place (0-25°C, 32-77°F). Keep away from heat, direct sunlight, sparks and open flames.
<b>Storage class</b>	Chemical storage.
<b><u>Specific end uses(s)</u></b>	
<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

#### Control parameters

#### Occupational exposure limits

##### MEQUINOL

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m<sup>3</sup>

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

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

##### TITANIUM DIOXIDE

Long-term exposure limit (8-hour TWA): ACGIH 10 mg/m<sup>3</sup>  
A4

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m<sup>3</sup> total dust

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

OSHA = Occupational Safety and Health Administration.

**Ingredient comments** TITANIUM DIOXIDE: Due to the physical nature of this product, it is unlikely that inhalation of powder/dust will occur.

#### 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 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>	Paste
<b>Color</b>	Yellow-white, translucent yellow
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not applicable.

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<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.
<b>Upper/lower flammability or explosive limits</b>	Not applicable.
<b>Other flammability</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	1.65
<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>Oxidizing properties</b>	Not available.
<b>Other information</b>	Not available.

### 10. Stability and reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
<b>Possibility of hazardous reactions</b>	Not known.
<b>Conditions to avoid</b>	Keep away from heat, sparks and open flame. Protect against direct sunlight.
<b>Materials to avoid</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Heating may generate the following products: Toxic gases or vapors.

### 11. Toxicological information

#### Information on toxicological effects

<b>Toxicological effects</b>	No data on possible toxic effects have been found.
<b>Route of entry</b>	See section 4. Titanium dioxide (TiO <sub>2</sub> ) is kneaded in the product, it does not exist as respirable particles. Due to the physical nature of this product, it is unlikely that inhalation of powder/dust will occur.

## ESTELITE BULK FILL Flow

### 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

**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. Some ingredients are listed in the National Toxicology Program (NTP) Report on Carcinogens, or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, or by OSHA. See "Toxicological information on ingredients" shown below.

### 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.

### Toxicological information on ingredients.

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

#### 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.

## ESTELITE BULK FILL Flow

### 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.

### 12. Ecological Information

#### Toxicity

**Acute toxicity - fish** Not available.

**Acute toxicity - aquatic invertebrates** Not available.

**Acute toxicity - aquatic plants** Not available.

**Chronic toxicity - fish early life stage** Not available.

**Short term toxicity - embryo and sac fry stages** Not available.

**Chronic toxicity - aquatic invertebrates** 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.

### 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.

## ESTELITE BULK FILL Flow

### 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

Not applicable.

**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**

*MEQUINOL*

Not listed.

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

Not listed.

*TITANIUM DIOXIDE*

Not listed.

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

*MEQUINOL*

Not listed.

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

Not listed.

#### **SARA Extremely Hazardous Substances EPCRA Reportable Quantities**

*MEQUINOL*

Not listed.

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

Not listed.

#### **SARA 313 Emission Reporting**



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*MEQUINOL*

No.

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

No.

### CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

*MEQUINOL*

Not listed.

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

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

*MEQUINOL*

Not listed.

*TITANIUM DIOXIDE*

Not listed.

### US State Regulations

#### California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed or exempt.

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

None of the ingredients are listed or exempt.

#### California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

#### California Directors List of Hazardous Substances

*MEQUINOL*

Present.

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

Present.

#### Massachusetts "Right To Know" List

*MEQUINOL*

Present.

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

Present.

*TITANIUM DIOXIDE*

Not listed.

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### Rhode Island "Right To Know" List

*MEQUINOL*

Present.

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

Present.

*TITANIUM DIOXIDE*

Not listed.

### Minnesota "Right To Know" List

*MEQUINOL*

Present.

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

Present.

*TITANIUM DIOXIDE*

Not listed.

### New Jersey "Right To Know" List

*MEQUINOL*

Present.

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

Present.

*TITANIUM DIOXIDE*

Not listed.

### Pennsylvania "Right To Know" List

*MEQUINOL*

Present.

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

Present.

*TITANIUM DIOXIDE*

Not listed.

## 16. Other information

<b>Training advice</b>	There is a specific duty on the importer/user/distributor of the substances and mixtures to ensure that the workers have received appropriate training and refresher training.
<b>Revision date</b>	12/30/2016
<b>Revision</b>	2
<b>Hazard statements in full</b>	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.