

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

075187117

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

075185285 075185467 075187018 075187026 075187034 075187042 075187059 075187067 075187075 075187083  
075187091 075187109 075187125 075187133 075187141 075187158 075187166 075187174 075187182 075187190  
075187208 075187216 075187307 075187604 075187612 075187620 075187638 075187646 075187653 075187661  
075187679 075187687 075187695 075187703 075187711 075187729 075187737 075187745 075187752 075187760  
075187778 075187786 075187794 075187802 075216510

## MATERIAL SAFETY DATA SHEET

### ESTELITE FLOW QUICK High Flow

#### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME ESTELITE FLOW QUICK High Flow

PRODUCT USE Resin-based Dental Restorative Material. For dental professionals only.

SUPPLIER Tokuyama Dental America Inc. MANUFACTURER Tokuyama Dental Corporation  
Tel: (877) 378 3548 (Toll-Free) 38-9, Taitou 1-chome, Taitou-ku,  
Tokyo, Japan  
TEL: +81-3-3835-7201

CONTACT PERSON <http://www.tokuyama-dental.com/contact.htm>

EMERGENCY TELEPHONE

Washington  
National Capital Poison Center  
3201 New Mexico Avenue, Suite 310 Washington, DC 20016  
Telephone: +1 202 362 3867  
Emergency telephone: 1 800 222 1222  
Fax: +1 202 362 8377  
E-mail: [pc@poison.org](mailto:pc@poison.org)  
Web site: <http://www.poison.org>

San Francisco  
California Poison Control System  
at San Francisco General Hospital  
University of California San Francisco, Box 1369  
1001 Potrero Avenue, Bldg 5 Rm 2A21  
San Francisco, California 94143-1369  
Telephone: +1 415 643 3200  
Emergency telephone: 1 800 222 1222  
Fax: +1 415 502 6010  
E-mail: [coadmin@calpoison.org](mailto:coadmin@calpoison.org)  
Web site: <http://www.calpoison.org>

<http://www.who.int/ipcs/poisons/centre/en/>

#### 2 HAZARDS IDENTIFICATION

##### POTENTIAL HEALTH EFFECTS

##### INGESTION

Slightly irritating. DIGESTIVE SYSTEM.

##### SKIN CONTACT

Slightly irritating. May cause sensitization by skin contact.

##### EYE CONTACT

Slightly irritating.

#### 3 COMPOSITION/INFORMATION ON INGREDIENTS

| Name   | EC No.    | CAS-No.    | Content % |
|--|-----------|------------|-----------|
| bisphenol A di(2-hydroxy propoxy) dimethacrylate | 216-367-7 | 1565-94-2  | 10-30%    |
| camphorquinone                                   | 233-814-1 | 10373-78-1 | < 1%      |
| dibutyl hydroxy toluene                          | 204-881-4 | 128-37-0   | < 1%      |
| MEQUINOL   | 205-769-8 | 150-76-5   | < 1%      |
| triethylene glycol dimethacrylate                | 203-652-6 | 109-16-0   | 10-30%    |

#### 4 FIRST-AID MEASURES

##### GENERAL INFORMATION

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

## ESTELITE FLOW QUICK High Flow

### INHALATION

Move the exposed person to fresh air at once.

### INGESTION

Try to induce vomiting. Get medical attention if any discomfort continues.

### SKIN CONTACT

Wash the skin immediately with soap and water.

### 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. Contact physician if irritation persists.

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## 5 FIRE-FIGHTING MEASURES

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### EXTINGUISHING MEDIA

Fire can be extinguished using: Foam. Carbon dioxide or dry powder.

### SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapors.

### SPECIFIC HAZARDS

When heated and in case of fire, irritating vapours/gases may be formed.

### PROTECTIVE MEASURES IN FIRE

Wear full protective clothing.

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## 6 ACCIDENTAL RELEASE MEASURES

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### PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this material safety data sheet.

### SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers.

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## 7 HANDLING AND STORAGE

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### HANDLING

All handling to take place in well-ventilated area.

### STORAGE

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

### STORAGE CLASS

Chemical storage.

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## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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### PROTECTIVE EQUIPMENT



### ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

### HAND PROTECTION

Wear protective gloves.

### EYE PROTECTION

Wear approved safety goggles.

### OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of skin contact.

### HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & 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.

## ESTELITE FLOW QUICK High Flow

### 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE                      Paste  
 COLOR                              Yellow white  
 RELATIVE DENSITY              1.8  
 pH-VALUE, CONC. SOLUTION    7

### 10 STABILITY AND REACTIVITY

**STABILITY**  
 Stable under normal temperature conditions and recommended use.

**CONDITIONS TO AVOID**  
 Keep away from heat, sparks and open flame. Protect against direct sunlight.

**MATERIALS TO AVOID**  
 Strong oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS**  
 Toxic gases are generated when heated.

### 11 TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL INFORMATION**  
 No data on possible toxic effects have been found.

### 12 ECOLOGICAL INFORMATION

**ECOTOXICITY**  
 No data on possible environmental effects have been found.

### 13 DISPOSAL CONSIDERATIONS

**DISPOSAL METHODS**  
 Dispose of waste and residues in accordance with local authority requirements.

### 14 TRANSPORT INFORMATION

**TRANSPORT NOTES**                      Not regulated.

### 15 REGULATORY INFORMATION

**INVENTORIES**

| COMPONENT | CAN | US  | EU     | AUS | JAP | KOR | CHN | PHLP |
|-----------|-----|-----|--------|-----|-----|-----|-----|------|
| MEQUINOL  | No. | No. | EINECS |     |     |     |     |      |

| COMPONENT | TSCA 12(b) Export Notification |
|-----------|--------------------------------|
| MEQUINOL  | No.                            |

**US FEDERAL REGULATIONS**

| COMPONENT | SARA 302-TPQ | CERCLA-RQ  | SARA 313 |
|-----------|--------------|------------|----------|
| MEQUINOL  | Not Listed   | Not Listed | No.      |

**CLEAN AIR ACT**

| COMPONENT | CAA Accidental Release Prevention |
|-----------|-----------------------------------|
| MEQUINOL  | Not Listed                        |

### ESTELITE FLOW QUICK High Flow

US STATE REGULATIONS

| COMPONENT | CAS      | CA         | FL         | MA         | MN         | NJ         | PA         | RI         |
|-----------|----------|------------|------------|------------|------------|------------|------------|------------|
| MEQUINOL  | 150-76-5 | Not Listed | Not Listed | Not Listed | Not Listed | Not Listed | Not Listed | Not Listed |

REGULATORY REFERENCES

29 CFR 1910.1200(g) Federal Regulations (OSHA Standard).

**16 OTHER INFORMATION**

REVISION DATE 15/01/2013

DISCLAIMER

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.

Revision Date 08/05/2014

## SAFETY DATA SHEET

### ESTELITE $\Sigma$ QUICK

#### 1. IDENTIFICATION

|                            |  |
|----------------------------|--|
| <b>Product Name</b>        | ESTELITE $\Sigma$ QUICK  |
| <b>Identified uses</b>     | Resin-based Dental Restorative Material. For dental professionals only.  |
| <b>Supplier</b>            | Tokuyama Dental America Inc.<br>Tel: (877) 378 3548 (Toll-Free)  |
| <b>Contact Person</b>      | <a href="http://www.tokuyama-dental.com/contact.htm">http://www.tokuyama-dental.com/contact.htm</a>  |
| <b>Manufacturer</b>        | Tokuyama Dental Corporation<br>38-9, Taitou 1-chome, Taitou-ku, Tokyo<br>110-0016, Japan<br>TEL: +81-3-3835-2261   |
| <b>Emergency Telephone</b> | Washington<br>National Capital Poison Center<br>3201 New Mexico Avenue, Suite 310<br>Washington,<br>DC 20016<br>Telephone: +1 202 362 3867<br>Emergency telephone: +1 800 222 1222<br>Fax: +1 202 362 8377<br>E-mail: <a href="mailto:pc@poison.org">pc@poison.org</a><br>Web site: <a href="http://www.poison.org">http://www.poison.org</a><br><br>San Francisco<br>California Poison Control System<br>at San Francisco General Hospital<br>University of California San Francisco, Box 1369<br>1001 Potrero Avenue, Bldg 5 Rm 2A21<br>San Francisco, California 94143-1369<br>Telephone: +1 415 643 3200<br>Emergency telephone: +1 800 222 1222<br>Fax: +1 415 502 6010<br>E-mail: <a href="mailto:coadmin@calpoison.org">coadmin@calpoison.org</a><br>Web site: <a href="http://www.calpoison.org">http://www.calpoison.org</a><br><br><a href="http://www.who.int/ipcs/poisons/centre/en/">http://www.who.int/ipcs/poisons/centre/en/</a> |

#### 2. HAZARD(S) IDENTIFICATION

|                      |                           |
|----------------------|---------------------------|
| <b>Appearance</b>    | Paste                     |
| <b>Color</b>         | Yellow white              |
| <b>Odor</b>          | No information available. |
| <b>GHS Pictogram</b> |                           |



|                                 |   |  |
|---------------------------------|---|--|
| <b>Signal Word</b>              | Warning   |  |
| <b>Hazard Statements</b>        | H317  | May cause an allergic skin reaction.   |
| <b>Precautionary Statements</b> | P280<br>P302+352<br>P333+313<br>P501  | Wear protective gloves/protective clothing/eye protection/face protection.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Dispose of contents/container in accordance with local regulations. |
| <b>Contains</b>                 | bisphenol A di(2-hydroxy propoxy) dimethacrylate<br>triethylene glycol dimethacrylate |  |

## ESTELITE Σ QUICK

### GHS Classification

|                               |                     |
|-------------------------------|---------------------|
| Physical and Chemical Hazards | Not classified.     |
| Human health                  | Skin Sens. 1 - H317 |
| Environment                   | Not classified.     |

### Hazard Not Otherwise Classified (HNOC)

Not applicable.

### OSHA Regulatory Status

This Product is Hazardous under the OSHA Hazard Communication Standard.

### General Information

IF SWALLOWED: Slightly irritating. ( DIGESTIVE SYSTEM. ) May be slightly irritating to skin and eyes. May cause sensitization by skin contact.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

|  |        |
|--|--------|
| <b>bisphenol A di(2-hydroxy propoxy) dimethacrylate</b>                              | 10-30% |
| CAS No.: 1565-94-2                      EC No.: 216-367-7                            |        |
| GHS Classification<br>Skin Sens. 1 - H317; Aquatic Chronic 3 - H412                  |        |
| <b>camphorquinone</b>  | < 1%   |
| CAS No.: 10373-78-1                      EC No.: 233-814-1                           |        |
| GHS Classification<br>Not classified.  |        |
| <b>dibutyl hydroxy toluene</b>   | < 1%   |
| CAS No.: 128-37-0                      EC No.: 204-881-4                             |        |
| GHS Classification<br>Aquatic Chronic 1 - H410                                       |        |
| <b>MEQUINOL</b>  | < 1%   |
| CAS No.: 150-76-5                      EC No.: 205-769-8                             |        |
| GHS Classification<br>Acute Tox. 4 - H302; Eye Irrit. 2 - H319; Skin Sens. 1 - H317  |        |
| <b>triethylene glycol dimethacrylate</b>   | 5-10%  |
| CAS No.: 109-16-0                      EC No.: 203-652-6                             |        |
| GHS Classification<br>Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317 |        |

### 4. FIRST-AID MEASURES

## ESTELITE Σ QUICK

### Description of first aid measures

#### General Information

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

#### Inhalation

Move the exposed person to fresh air at once.

#### Ingestion

Try to induce vomiting. Get medical attention if any discomfort continues.

#### Skin Contact

Wash the skin immediately with soap and water.

#### 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. Contact physician if irritation persists.

### Most important symptoms and effects, both acute and delayed

#### Ingestion

Slightly irritating. ( DIGESTIVE SYSTEM. )

#### Skin Contact

Slightly irritating. May cause sensitization by skin contact.

#### Eye Contact

Slightly Irritating.

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

#### Notes To The Physician

CAUTION! First aid personnel must be aware of own risk during rescue! Wear suitable protective clothing.

## 5. FIRE-FIGHTING MEASURES

#### Auto Ignition Temperature (°C)

Not available.

#### Flammability Limit - Lower(%)

Not available.

#### Flammability Limit - Upper(%)

Not available.

#### Flash point (°C)

Not available.

#### Extinguishing Media

Fire can be extinguished using: Foam. Carbon dioxide or dry powder.

#### Specific Hazards

When heated and in case of fire, irritating vapors/gases may be formed.

#### Special Fire Fighting Procedures

Avoid breathing fire vapors.

#### Protective Equipment For Fire-Fighters

Wear full protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

#### Personal Precautions

Wear protective clothing as described in Section 8 of this material safety data sheet.

#### Environmental Precautions

Do not allow to enter drains, sewers or watercourses.

#### Spill Clean Up Methods

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers.

#### Reference to other sections

For personal protection, see section 8.

## 7. HANDLING AND STORAGE

#### Handling

All handling to take place in well-ventilated area.



## ESTELITE Σ QUICK

### Storage

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

### Storage Class

Chemical storage.

### Specific end use(s)

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| COMPONENT               | STD   | TWA (8-hrs) |                     | STEL (15 min) |  | Notes |
|-------------------------|-------|-------------|---------------------|---------------|--|-------|
| dibutyl hydroxy toluene | ACGIH |             | 2 mg/m <sup>3</sup> |               |  | A4    |

ACGIH=American Conference of Governmental Industrial Hygienists.

A4: Not Classifiable as a Human Carcinogen.

### Protective Equipment



### Engineering Measures

Provide adequate general and local exhaust ventilation.

### Respiratory Equipment

In case of inadequate ventilation use suitable respirator.

### Hand Protection

Wear protective gloves.

### Eye Protection

Wear approved safety goggles.

### Other 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 & 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |                           |
|--|---------------------------|
| <b>Appearance</b>                              | Paste                     |
| <b>Color</b>                                   | Yellow white              |
| <b>Odor</b>                                    | No information available. |
| <b>Solubility</b>                              | No information available. |
| <b>Initial boiling point and boiling range</b> | Not available.            |
| <b>Melting point (°C)</b>                      | Not available.            |
| <b>Relative density</b>                        | 1.9                       |
| <b>Vapor density (air=1)</b>                   | Not available.            |
| <b>Vapor pressure</b>                          | Not available.            |
| <b>Evaporation rate</b>                        | Not available.            |
| <b>pH-Value, Conc. Solution</b>                | 7                         |
| <b>pH-Value, Diluted Solution</b>              | Not available.            |
| <b>Viscosity</b>                               | Not available.            |

## ESTELITE Σ QUICK

**Decomposition temperature (°C)**

Not available.

**Odour Threshold, Lower**

Not available.

**Odour Threshold, Upper**

Not available.

**Flash point**

Not available.

**Auto Ignition Temperature (°C)**

Not available.

**Flammability Limit - Lower(%)**

Not available.

**Flammability Limit - Upper(%)**

Not available.

**Partition Coefficient**

(N-Octanol/Water)

Not available.

**Explosive properties**

Not available.

**Other Flammability**

Not available.

**Oxidising properties**

Not available.

### 10. STABILITY AND REACTIVITY

**Reactivity**

May polymerise.

**Stability**

Stable under normal temperature conditions and recommended use.

Hazardous reactions:

Not available.

**Conditions To Avoid**

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

**Materials To Avoid**

Strong oxidizing agents.

**Hazardous Decomposition Products**

Toxic gases are generated when heated.

### 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:**

Not available.

**Skin Corrosion/Irritation:**

Slightly irritating.

**Serious eye damage/irritation:**

Slightly Irritating.

**Respiratory or skin sensitisation:****Respiratory sensitisation**

Not available.

**Skin sensitisation**

May cause sensitization by skin contact.

**Germ cell mutagenicity:**

Not available.

## ESTELITE Σ QUICK

### Carcinogenicity:

#### **IARC Carcinogenicity**

Butylated hydroxytoluene (BHT) : IARC Group 3 Not classifiable as to its carcinogenicity to humans.

#### **NTP - Carcinogenicity**

Not listed.

#### **OSHA - Carcinogenicity**

Not listed.

### Reproductive Toxicity:

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:

#### **Viscosity**

Not available.

## 12. ECOLOGICAL INFORMATION

### **Toxicity**

No data available.

### **Degradability**

No data available.

### **Bioaccumulative potential**

No data available on bioaccumulation.

### **Partition coefficient**

Not available.

### **Mobility:**

No information available.

### **Results of PBT and vPvB assessment**

This product does not contain any PBT or vPvB Substances.

### **Other adverse effects**

Not known.

## 13. DISPOSAL CONSIDERATIONS

### **Disposal Methods**

Dispose of waste and residues in accordance with local authority requirements.

## 14. TRANSPORT INFORMATION

|                                 |                                |
|---------------------------------|--------------------------------|
| <b>General</b>                  | Not regulated.                 |
| <b>UN No. (DOT/TDG)</b>         | N/A                            |
| <b>UN No. (IMDG)</b>            | N/A                            |
| <b>UN No. (ICAO)</b>            | N/A                            |
| <b>DOT Proper Shipping Name</b> | Not applicable.                |
| <b>DOT Hazard Class</b>         | No classification noted.       |
| <b>DOT Hazard Label</b>         | No DOT label requirement noted |
| <b>IMDG Class</b>               | Not applicable.                |

## ESTELITE Σ QUICK

|   |                                     |
|---|-------------------------------------|
| <b>ICAO Class</b>   | Not applicable.                     |
| <b>Transport Labels</b>   | No transport warning sign required. |
| <b>DOT Pack Group</b>   | Not applicable.                     |
| <b>IMDG Pack Group</b>  | Not applicable.                     |
| <b>Air Pack Group</b>   | Not applicable.                     |
| <b>Environmentally Hazardous Substance/Marine Pollutant</b>                           | No.                                 |
| <b>Special precautions for user</b>   | Not applicable.                     |
| <b>Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes</b> | Not applicable.                     |

### 15. REGULATORY INFORMATION

#### **Regulatory Status (US)**

This Product is Hazardous under the OSHA Hazard Communication Standard.

#### **Regulatory References**

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

#### **US Federal Regulations**

##### **SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

None of the ingredients are listed.

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

None of the ingredients are listed.

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

None of the ingredients are listed.

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

None of the ingredients are listed.

##### **CAA Accidental Release Prevention**

None of the ingredients are listed.

##### **SARA (311/312) Hazard Categories**

Acute

##### **OSHA Highly Hazardous Chemicals**

None of the ingredients are listed.

#### **US State Regulations**

##### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed.

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

None of the ingredients are listed.

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

None of the ingredients are listed.

##### **Massachusetts "Right To Know" List**

The following ingredients are listed.

dibutyl hydroxy toluene

MEQUINOL

##### **Rhode Island "Right To Know" List**

The following ingredients are listed.

dibutyl hydroxy toluene

MEQUINOL

##### **Minnesota "Right To Know" List**

The following ingredients are listed.

dibutyl hydroxy toluene

MEQUINOL

##### **New Jersey "Right To Know" List**

The following ingredients are listed.

## ESTELITE Σ QUICK

dibutyl hydroxy toluene  
MEQUINOL

### **Pennsylvania "Right To Know" List**

The following ingredients are listed.

dibutyl hydroxy toluene  
MEQUINOL

### **International Inventories**

#### **EU - EINECS/ELINCS**

All ingredients are listed or exempt.

#### **Canada – DSL/NDSL**

All ingredients are listed or exempt.

#### **US - TSCA**

All ingredients are listed or exempt.

#### **US – TSCA 12(b) Export Notification**

None of the ingredients are listed.

## 16. OTHER INFORMATION

### **Revision Comments**

This is first issue.

### **Revision Date**

08/05/2014

### Disclaimer

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.