

## SAFETY DATA SHEETS

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

075187190

**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 075187117 075187125 075187133 075187141 075187158 075187166 075187174 075187182  
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.

# SAFETY DATA SHEET

## ESTELITE Σ QUICK

### 1. Identification

#### Product identifier

**Product name** ESTELITE Σ QUICK

#### 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  
E-mail address: [coadmin@calpoison.org](mailto: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 number: +1 202 362 8377  
E-mail address: [pc@poison.org](mailto: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 Sens. 1 - H317

**Environmental hazards** Not Classified

#### Label elements

**ESTELITE Σ QUICK****Pictogram****Signal word**

Warning

**Hazard statements**

H317 May cause an allergic skin reaction.

**Precautionary statements**

P261 Avoid breathing dust.  
 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.  
 P321 Specific treatment (see medical advice on this label).  
 P333+P313 If skin irritation or rash occurs: 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**

2-PROPENOIC ACID, 2-METHYL-, (1-METHYLETHYLIDENE)BIS[4,1-PHENYLENEOXY(2-HYDROXY-3,1-PROPANEDIYL)] ESTER, TRIETHYLENE GLYCOL DIMETHACRYLATE, p-METHOXYPHENOL

**3. Composition/information on ingredients****Mixtures**

2-PROPENOIC ACID, 2-METHYL-, (1-METHYLETHYLIDENE)BIS[4,1-PHENYLENEOXY(2-HYDROXY-3,1-PROPANEDIYL)] ESTER CAS number: 1565-94-2	10-30%
TRIETHYLENE GLYCOL DIMETHACRYLATE CAS number: 109-16-0	5-10%
2,6-DI-tert-BUTYL-p-CRESOL CAS number: 128-37-0 M factor (Chronic) = 1	<1%
p-METHOXYPHENOL CAS number: 150-76-5	<1%
TITANIUM DIOXIDE CAS number: 13463-67-7	< 0.1%

**4. First-aid measures****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.

## ESTELITE Σ QUICK

**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** Allergic rash.

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

**Notes for the doctor** No specific recommendations.

## 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

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

**Hazardous combustion products** No known hazardous decomposition products.

### Advice for firefighters

**Protective actions during firefighting** Avoid breathing fire gases or vapors.

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

**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

**Storage precautions** Store in a cool and well-ventilated place. Store at temperatures between 0°C/25°F and 32°C/77°F. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid exposure to high temperatures or direct sunlight.

### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.



## ESTELITE Σ QUICK

### 8. Exposure Controls/personal protection

#### Control parameters

#### Occupational exposure limits

##### 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

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

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

A4, A4, A4

##### p-METHOXYPHENOL

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

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

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

##### TITANIUM DIOXIDE

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

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

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

A4, A4, A4

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

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

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.

#### 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 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

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	Yellow-white
Odor	Not available.
Odor threshold	Not available.
pH	pH (concentrated solution): 7
Melting point	Not available.
Initial boiling point and range	Not available.

## ESTELITE Σ QUICK

Flash point	Not available.
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not available.
Vapor pressure	Not available.
Vapor 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 explosive.
Oxidizing properties	Not available.
Other information	Not available.

### 10. Stability and reactivity

Reactivity	May polymerize. See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	Not known.
Conditions to avoid	Keep away from heat, sparks and open flame. Protect against direct sunlight.
Materials to avoid	Strong oxidizing agents.
Hazardous decomposition products	Heating may generate the following products: Toxic gases or vapors.

### 11. Toxicological information

#### Information on toxicological effects

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

#### 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

## ESTELITE Σ QUICK

<b>Notes (inhalation LC<sub>50</sub>)</b>	Not available.
<b><u>Skin corrosion/irritation</u></b>	
<b>Skin corrosion/irritation</b>	Not available.
<b>Animal data</b>	Not available.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Not available.
<b><u>Respiratory sensitization</u></b>	
<b>Respiratory sensitization</b>	Not available.
<b><u>Skin sensitization</u></b>	
<b>Skin sensitization</b>	Sensitizing.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Not available.
<b>Genotoxicity - in vivo</b>	Not available.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	Based on available data the classification criteria are not met.
<b>IARC carcinogenicity</b>	Some of the ingredients are listed or exempt.
<b>NTP carcinogenicity</b>	Some of the ingredients are listed or exempt.
<b>OSHA Carcinogenicity</b>	None of the ingredients are listed.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Not available.
<b>Reproductive toxicity - development</b>	Not available.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	Not available.
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	Not available.
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	Not available.
<b><u>Toxicological information on ingredients.</u></b>	

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

#### Carcinogenicity

<b>IARC carcinogenicity</b>	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<b>NTP carcinogenicity</b>	Reasonably anticipated to be a human carcinogen.
<b>OSHA Carcinogenicity</b>	Not listed.

### TITANIUM DIOXIDE

#### Acute toxicity - inhalation

<b>ATE inhalation (dusts/mists mg/l)</b>	1.5
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## ESTELITE Σ QUICK

### 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** No data available.

**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.

### 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.

**UN No. (IMDG)** N/A

**UN No. (ICAO)** N/A

**UN No. (DOT)** N/A

**ESTELITE Σ QUICK****UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

Not applicable.

**IMDG Class**

Not applicable.

**ICAO class/division**

Not applicable.

**Transport labels**

No transport warning sign required.

**Packing group**

Not applicable.

**IMDG packing group**

Not applicable.

**ICAO packing group**

Not applicable.

**Environmental hazards****Environmentally Hazardous Substance**

No.

**Special precautions for user**

Not applicable.

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

**US Federal Regulations****SARA (311/312) Hazard Categories**

Acute

**US State Regulations****California Proposition 65 Carcinogens and Reproductive Toxins***TITANIUM DIOXIDE***California Directors List of Hazardous Substances***2,6-DI-tert-BUTYL-p-CRESOL**p-METHOXYPHENOL***Massachusetts "Right To Know" List***2,6-DI-tert-BUTYL-p-CRESOL**p-METHOXYPHENOL**TITANIUM DIOXIDE*

## ESTELITE Σ QUICK

### Rhode Island "Right To Know" List

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

*p-METHOXYPHENOL*

*TITANIUM DIOXIDE*

### Minnesota "Right To Know" List

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

*p-METHOXYPHENOL*

*TITANIUM DIOXIDE*

### New Jersey "Right To Know" List

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

*p-METHOXYPHENOL*

*TITANIUM DIOXIDE*

### Pennsylvania "Right To Know" List

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

*p-METHOXYPHENOL*

*TITANIUM DIOXIDE*

## 16. Other information

<b>Training advice</b>	Ensure operatives are trained to minimize exposure. Only trained personnel should use this material.
<b>Revision comments</b>	Revised formulation.
<b>Revision date</b>	7/20/2017
<b>Revision</b>	2
<b>Hazard statements in full</b>	H317 May cause an allergic skin reaction.

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.