

SAFETY DATA SHEETS

This SDS packet was issued with item:

075190376

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).

075190301 075190319 075190327 075190335 075190343 075190350 075190368 075190384 075190392 075190400

075190418 075190426 075190434 075190483 075190491 075190509 075190517 075190525 075190533 075190541

REVISION DATE 15/01/2013

MATERIAL SAFETY DATA SHEET

ESTELITE OMEGA

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

PRODUCT NAME ESTELITE OMEGA
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>
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 National Capital Poison Center
 3201 New Mexico Avenue, Suite 310 Washington, DC 20016
 Telephone: +1 202 362 3867
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 Fax: +1 202 362 8377
 E-mail: pc@poison.org
 Web site: <http://www.poison.org>

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 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
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 Fax: +1 415 502 6010
 E-mail: 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 | 5-10% |

4 FIRST-AID MEASURES

GENERAL INFORMATION

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

ESTELITE OMEGA

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.

5 FIRE-FIGHTING MEASURES

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.

6 ACCIDENTAL RELEASE MEASURES

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.

7 HANDLING AND STORAGE

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.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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 OMEGA

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Paste
 COLOR Yellow white , Translucent Yellow
 RELATIVE DENSITY 1.9
 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 |

REVISION DATE 15/01/2013

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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 OMEGA

1. Identification

Product identifier

Product name ESTELITE OMEGA

Recommended use of the chemical and restrictions on use

Restriction on use 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: +1-760-942-7211
Fax: +1-760-942-7212

Contact person <http://www.tokuyama-dental.com/tdc/contact.htm>

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 Tokuyama Dental America, Inc. Tel: +1-760-942-7211
Days and hours of operation : 9:00-17:00(PST/PDT), Weekdays, except national holidays in US.
Language: English only.

2. Hazard identification

Classification of the substance or mixture

WHMIS Regulatory Status This product has been classified according to the hazard criteria of the Hazardous Product Regulations and the SDS contains all required information.

Physical hazards Not Classified

Health hazards Skin Sens. 1 - H317

Environmental hazards Not Classified

Label elements

Pictogram



Signal word Warning

Hazard statements H317 May cause an allergic skin reaction.

ESTELITE OMEGA

| | |
|---------------------------------|---|
| Precautionary statements | <p>P261 Avoid breathing dust.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P501 Dispose of contents/ container in accordance with local regulations.</p> |
|---------------------------------|---|

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% |
| 2-PROPENOIC ACID, 2-METHYL-, 1,2-ETHANEDIYLBIS(OXY-2,1-ETHANEDIYL) ESTER CAS number: 109-16-0 | 5-10% |
| BICYCLO[2.2.1]HEPTANE-2,3-DIONE, 1,7,7-TRIMETHYL-, (±)- CAS number: 10373-78-1 | <0.1% |
| TITANIUM DIOXIDE (TiO₂) CAS number: 13463-67-7 | <0.1% |
| PHENOL, 4-METHOXY- CAS number: 150-76-5 | <0.1% |
| 2,6-DI-<i>t</i>-BUTYL-4-METHYLPHENOL CAS number: 128-37-0 | <0.1% |

Composition comments All percentages displayed expressed as weight/weight.

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. |
| Inhalation | Due to the physical nature of this product, exposure by this route is unlikely. |
| Ingestion | Try to induce vomiting. Get medical attention if any discomfort continues. |
| Skin contact | Remove contaminated clothing. Wash skin thoroughly with soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse. |
| Eye contact | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists after washing. |

Most important symptoms and effects, both acute and delayed

ESTELITE OMEGA

Skin contact Allergic rash.

Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

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

Specific hazards arising from the hazardous product

Specific hazards Irritating gases or vapours.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours.

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 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

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 at temperatures between 0°C/32°F and 25°C/77°F. Keep away from heat, sparks and open flame. Protect from sunlight.

Specific end use(s)

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

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

TITANIUM DIOXIDE (TiO₂)

ESTELITE OMEGA

Long-term exposure limit (8-hour TWA): ACGIH 10 mg/m³

A4

PHENOL, 4-METHOXY-

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

2,6-DI-t-BUTYL-4-METHYLPHENOL

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m³ inhalable fraction and vapor

A4

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

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. It is recommended that chemical-resistant, impervious gloves are worn. |
| 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. 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

| | |
|---|-----------------------------------|
| Appearance | Paste |
| Colour | Yellow-white , Translucent Yellow |
| Odour | Not available. |
| Odour threshold | Not available. |
| pH | pH (concentrated solution): 7 |
| Melting point | Not available. |
| Initial boiling point and range | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Upper/lower flammability or explosive limits | Not available. |
| Other flammability | Not available. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | 1.9 |
| Solubility(ies) | Not available. |

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| | |
|----------------------------------|----------------|
| Partition coefficient | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition Temperature | Not available. |
| Viscosity | Not available. |
| Explosive properties | Not available. |
| Oxidising 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 | May polymerize. |
| 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 vapours. |

11. Toxicological information

Information on toxicological effects

| | |
|--|---|
| Routes of exposure | Skin , Eyes , Ingestion , Health effects: See section 4. Inhalation : Titanium dioxide (TiO ₂) is kneaded in the product, it does not exist as respirable particles. Due to the physical nature of this product, exposure by this route is unlikely. |
| <u>Acute toxicity - oral</u> Notes (oral LD₅₀) | Not available. |
| <u>Acute toxicity - dermal</u> Notes (dermal LD₅₀) | Not available. |
| <u>Acute toxicity - inhalation</u> Notes (inhalation LC₅₀) | Not available. |
| <u>Skin corrosion/irritation</u> Skin corrosion/irritation | Not available. |
| <u>Serious eye damage/irritation</u> Serious eye damage/irritation | Not available. |
| <u>Respiratory sensitization</u> Respiratory sensitization | Not available. |
| <u>Skin sensitization</u> Skin sensitization | May cause an allergic skin reaction. |
| <u>Germ cell mutagenicity</u> | |

ESTELITE OMEGA

| | |
|--|---|
| Genotoxicity - in vitro | Not available. |
| Genotoxicity - in vivo | Not available. |
| <u>Carcinogenicity</u> | |
| Carcinogenicity | Not available. |
| IARC carcinogenicity | Some of the ingredients are listed or exempt. |
| NTP carcinogenicity | Some of the ingredients are listed or exempt. |
| <u>Reproductive toxicity</u> | |
| Reproductive toxicity - fertility | Not available. |
| Reproductive toxicity - development | Not available. |
| <u>Specific target organ toxicity - single exposure</u> | |
| STOT - single exposure | Not available. |
| <u>Specific target organ toxicity - repeated exposure</u> | |
| STOT - repeated exposure | Not available. |
| <u>Aspiration hazard</u> | |
| Aspiration hazard | Not available. |

Toxicological information on ingredients**TITANIUM DIOXIDE (TiO₂)****Carcinogenicity**

| | |
|-----------------------------|--|
| IARC carcinogenicity | IARC Group 2B Possibly carcinogenic to humans. |
| NTP carcinogenicity | Reasonably anticipated to be a human carcinogen. |

2,6-DI-t-BUTYL-4-METHYLPHENOL**Carcinogenicity**

| | |
|-----------------------------|--|
| IARC carcinogenicity | IARC Group 3 Not classifiable as to its carcinogenicity to humans. |
| NTP carcinogenicity | Reasonably anticipated to be a human carcinogen. |

12. Ecological Information

Toxicity No data available.

Ecological information on ingredients**2,6-DI-t-BUTYL-4-METHYLPHENOL****Chronic aquatic toxicity**

M factor (chronic) 1

Persistence and degradability

Persistence and degradability No data available.

Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

ESTELITE OMEGA

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, TDG).

UN number

UN No. (International) Not applicable.

UN proper shipping name

Proper shipping name (International) Not applicable.

Transport hazard class(es)

Transport Labels (International) Not applicable.

Packing group

Packing group (International) Not applicable.

Environmental hazards

Environmentally hazardous substance/marine pollutant
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 References According to WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR) Hazardous Products Regulations - SOR/2015-17. Transportation of Dangerous Goods Regulations - SOR/2015-100.

16. Other information

Training advice 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.

Revision comments This is the first issue.

ESTELITE OMEGA

| | |
|----------------------------------|---|
| Revision date | 2018-06-20 |
| Revision | 1 |
| Hazard statements in full | 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.