SAFETY DATA SHEETS

This SDS packet was issued with item: 075185798

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).

075185756 075185764 075185772 075185780 075185806 075185814 075185822 075185830 075185848 075185855 075185863 075185871 075185889 075185897 075185905 075185913 075185921 075185939 075216510 075216536 075216544 075216551 075216569 075216577 075216585 075216593 075216619 075216627 075216635 075216643 075216650 075216668 075216676 075216684

$\begin{array}{l} \mbox{MATERIAL SAFETY DATA SHEET} \\ \mbox{ESTELITE } \Sigma \mbox{QUICK} \end{array}$

| PRODUCT NAME | ESTELITE Σ QUICK | | |
|---------------------|--|----------------------------|---|
| PRODUCT USE | Resin-based Dental Restorative Material. For | dental professionals only. | |
| SUPPLIER | Tokuyama Dental America Inc. M Tel: (877) 378 3548 (Toll-Free) | ANUFACTURER | Tokuyama Dental Corporation 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 Washing Telephone: +1 202 362 3867 Emergency telephone: 1 800 222 1222 Fax: +1 202 362 8377 E-mail: pc@poison.org Web site: http://www.poison.org | gton, DC 20016 | |
| | San Francisco California Poison Control System at San Francisco General Hospital University 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 Web site: http://www.calpoison.org | | |

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

2 HAZARDS IDENTIFICATION

INGESTION

POTENTIAL HEALTH EFFECTS

Slightly irritating. DIGESTIVE SYSTEM. SKIN CONTACT Slightly irritating. May cause sensitization by skin contact. EYE CONTACT Slightly irritating.

3 COMPOSITION/INFORMATION ON INGREDIENTS

| | 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% |

GENERAL INFORMATION

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

ESTELITE Σ QUICK

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/geses 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

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 Σ QUICK

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCEPasteCOLORYellow whiteRELATIVE DENSITY1.9pH-VALUE, CONC. SOLUTION7

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 | |
|---|--|
| · 가방방 가방방문 가장 같은 것 같아. 방문 가장 가장 이 것 같아. 이 이 것 같아요. 이 것 같아요. 이 것 같아. 가장 이 가장 있는 것 같아. 가장 가장 가장 가장 가장 가장 가장 가장 가장 | |

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

MEQUINOL

| COMPONENT | CAN | US | EU | AUS | JAP | KOR | СНМ | PHLP |
|------------------------|------|-----|----------|-----------------------|-----------|--------------|------|------|
| MEQUINOL | No. | No. | EINECS | | | | | |
| COMPONENT | | | | TSCA 1 | 2(b) Expo | ort Notifica | tion | |
| MEQUINOL | | | | No. | | | | |
| US FEDERAL REGULATIONS | | | | | | | | |
| COMPONENT | | | SARA 3 | 02-TPO | CERC | LA-RQ | SARA | 313 |
| MEQUINOL | | | Not List | ed | Not Li | sted | No. | |
| CLEAN AIR ACT | | | - | | | | | |
| COMPONENT | | | | 5 9 - 6 - 1 | | revention | · 1 | |

Not Listed

REVISION DATE 15/01/2013

ESTELITE Σ QUICK

US STATE REGULATIONS

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

REGULATORY REFERENCES

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

| 治療性疾機領域治療症状 人名斯特 网络纳莱尔特法 的过去分词 计分子 医子宫 网络拉马斯特拉马斯特拉马斯特拉马斯特拉马斯特拉马斯特拉马斯特拉马斯特 化乙烯基苯乙烯 化乙烯基乙烯 化乙烯基乙烯 | |
|---|---|
| | - |

REVISION DATE

15/01/2013

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.

Obtained by Global Safety Management, Inc. www.globalsafetynet.com (Tel: 1-813-435-5161)

SAFETY DATA SHEET ESTELITE FLOW QUICK

1. IDENTIFICATION

| Product Name | ESTELITE FLOW QUICK |
|---------------------|---|
| Identified uses | Resin-based Dental Restorative Material. For dental professionals only. |
| Supplier | Tokuyama Dental America Inc. Tel: (877) 378 3548 (Toll-Free) |
| 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 |
| 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 |
| | http://www.calpoison.org |
| | National Capital Poison Center |
| | 3201 New MexicoAve, Ste 310, Washington DC |
| | Emergency telephonenumber: 1 800 222 1222 |
| | Telephone number: +1 202362 3867 |
| | Facsimile numer: +1 202 362 8377 |
| | E-mailaddress: pc@poison.org |
| | http://www.poison.org |
| | |

2. HAZARD(S) IDENTIFICATION

| Appearance | Paste | |
|--------------------------|---------------------------|--|
| Color | Yellow white | |
| Odor | No information available. | |
| GHS Pictogram | | |
| | $\mathbf{\Lambda}$ | |
| | | |
| | | |
| | | |
| | | |
| Signal Word | Warning | |
| Hazard Statements | | |
| | H315 | Causes skin irritation. |
| | H317 | May cause an allergic skin reaction. |
| | H319 | Causes serious eye irritation. |
| Precautionary Statements | | |
| | P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| | P302+352 | IF ON SKIN: Wash with plenty of soap and water. |

| | P305+351+338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
|------------------------------------|-----------------------------------|---|
| | P501 | Dispose of contents/container in accordance with local regulations. |
| Contains | bisphenol A polyethoxy dimethac | rylate |
| | triethylene glycol dimethacrylate | |
| GHS Classification | | |
| | Physical and Chemical Hazards | Not classified. |
| | Human health | Skin Irrit. 2 - H315;Eye Irrit. 2 - H319;Skin Sens. 1 - H317 |
| | Environment | Not classified. |
| Hazard Not Otherwise Classified (H | NOC) | |

Not applicable.

OSHA Regulatory Status

This Product is Hazardous under the OSHA Hazard Communication Standard.

General Information

IF SWALLOWED: Slightly irritating. (DIGESTIVE SYSTEM.) This chemical may cause skin/eye irritation. May cause sensitization by skin contact.

| 3. COMPOSITION/INFORMATION | ON INGREDIENTS | |
|---|-------------------------------------|--------|
| | | |
| 1,6-bis(methacrylethyloxycarbonylamino) | trimethylhexane (UDMA) | 1-5% |
| | | |
| CAS No.: 72869-86-4 | EC No.: 276-957-5 | |
| | | |
| GHS Classification | | |
| Not classified. | | |
| 2,2'-(METHYLIMINO)DIETHANOL | | < 1% |
| | | - 176 |
| CAS No.: 105-59-9 | EC No.: 203-312-7 | |
| | | |
| | | |
| GHS Classification Eye Irrit. 2 - H319 | | |
| | | |
| bisphenol A polyethoxy dimethacrylate | | 10-30% |
| | | |
| CAS No.: 41637-38-1 | EC No.: 609-946-4 | |
| | | |
| GHS Classification | | |
| Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Sk | in Sens. 1 - H317; STOT SE 3 - H335 | |
| camphorquinone | | < 1% |
| | | |
| CAS No.: 10373-78-1 | EC No.: 233-814-1 | |
| | | |
| | | |
| GHS Classification Not classified. | | |
| | | |

| dibutyl hydroxy toluene | | < 1% | | | |
|---|-------------------|-------|--|--|--|
| CAS No.: 128-37-0 | EC No.: 204-881-4 | | | | |
| GHS Classification Aquatic Chronic 1 - H410 | | | | | |
| MEQUINOL | | < 1% | | | |
| CAS No.: 150-76-5 | EC No.: 205-769-8 | | | | |
| GHS Classification Acute Tox. 4 - H302; Eye Irrit. 2 - H319; Skin Sens. 1 - H317 | | | | | |
| triethylene glycol dimethacrylate | | 5-10% | | | |
| CAS No.: 109-16-0 | EC No.: 203-652-6 | | | | |
| GHS Classification | | | | | |

Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317

4. FIRST-AID MEASURES

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.

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/m3 | | | 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

| Appearance | Paste |
|---|---|
| Color | Yellow white |
| Odor | No information available. |
| Solubility | No information available. |
| Initial boiling point and boiling range | I. Construction of the second s |
| Not available. | |
| Melting point (°C) | |
| Not available. | |
| Relative density | 1.8 |
| Vapor density (air=1) | |
| Not available. | |
| Vapor pressure | |
| Not available. | |
| Evaporation rate | |
| Not available. | |
| pH-Value, Conc. Solution | 7 |
| pH-Value, Diluted Solution | |
| Not available. | |
| Viscosity | |
| Not available. | |
| 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 | |
| Stationia historiago | |

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.

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

| General | Not regulated. | | | |
|---|-------------------------------------|--|--|--|
| UN No. (DOT/TDG) | N/A | | | |
| UN No. (IMDG) | N/A | | | |
| UN No. (ICAO) | N/A | | | |
| DOT Proper Shipping Name | Not applicable. | | | |
| DOT Hazard Class No classification noted. | | | | |
| DOT Hazard Label No DOT label requirement noted | | | | |
| IMDG Class | Not applicable. | | | |
| ICAO Class | Not applicable. | | | |
| Transport Labels | | | | |
| | No transport warning sign required. | | | |
| DOT Pack Group | Not applicable. | | | |
| IMDG Pack Group | Not applicable. | | | |
| Air Pack Group | Not applicable. | | | |
| Environmentally Hazardous Subst No. | tance/Marine Pollutant | | | |
| Special precautions for user | Not applicable. | | | |

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes

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. dibutyl hydroxy toluene MEQUINOL

Pennsylvania "Right To Know" List

The following ingredients are listed. dibutyl hydroxy toluene MEQUINOL

International Inventories

EU - EINECS/ELINCS

The following ingredients are listed. 1, 6-bis(methacrylethyloxycarbonylamino)trimethylhexane (UDMA) 2, 2'-(METHYLIMINO)DIETHANOL camphorquinone dibutyl hydroxy toluene MEQUINOL triethylene glycol dimethacrylate **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**

16. OTHER INFORMATION

| Revision Comments | | | | |
|-------------------|--|--|--|--|
| 08/13/2017 | | | | |
| 2 | | | | |
| | | | | |

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 information.