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

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

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

Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

Precautionary statements

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.

Contains

BISPHENOL A DI(2-HYDROXY PROPOXY) DIMETHACRYLATE, TRIETYLENE GLYCOL

DIMETHACRYLATE, (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-

ETHANEDIYLOXY-2,1-ETHANEDIYL) BISMETHACRYLATE, 2-(2H-BENZOTRIAZOL-2-YL)-

p-CRESOL

Other hazards

Hazards not otherwise classified (HNOC)

Not applicable.

3. Composition/information on Ingredients

Mixtures

BISPHENOL A DI(2-HYDROXY PROPOXY)

10-30%

DIMETHACRYLATE

CAS number: 1565-94-2

TRIETYLENE GLYCOL DIMETHACRYLATE

10-30%

CAS number: 109-16-0

(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYLOXY-2,1-ETHANEDIYL) BISMETHACRYLATE

5-10%

CAS number: 41637-38-1

2-(2H-BENZOTRIAZOL-2-YL)-p-CRESOL

<1%

CAS number: 2440-22-4

MEQUINOL

<1%

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.

Inhalation Move affected person to fresh air at once.

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

Skin Contact Wash skin thoroughly with soap and water.

Eye contact 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

General information No information available.

Skin contact Skin irritation. Allergic rash.

Eye contact May cause severe eye irritation.

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 Irritating gases or vapors.

Hazardous combustion No known hazardous decomposition products.

products

Advice for firefighters

Protective actions during Avoid breathing fire gases or vapors.

firefighting

for firefighters

Special protective equipment 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

Storage precautions 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 uses(s)

Specific end use(s) 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/m3

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

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

A4

TITANIUM DIOXIDE

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

A4

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ 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

Appearance Paste

Color Yellow-white, translucent yellow

Odor Not available.

Odor threshold Not available.

pH Not applicable.

Melting point Not available.

Initial boiling point and range Not available.

Flash point Not applicable.

Evaporation rate Not available.

Evaporation factor Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or

explosive limits

Not applicable.

Not available.

Other flammability Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density 1.65

Solubility(ies) Not available.

Partition coefficient Not available.

Auto-ignition temperature Not available.

Viscosity Not available.

Explosive properties Not available.

Oxidizing properties Not available.

Other information Not available.

10. Stability and reactivity

Decomposition Temperature

Reactivity There are no known reactivity hazards associated with this product.

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

Toxicological effects No data on possible toxic effects have been found.

Route of entry See section 4.Titanium dioxide (TiO2) 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.

Acute toxicity - oral

Notes (oral LD_∞)

Not available.

Acute toxicity - dermal

Notes (dermal LD₅₀)

Not available.

Acute toxicity - inhalation

Notes (inhalation LC∞)

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.

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

Not available.

invertebrates

Acute toxicity - aquatic plants Not available.

Chronic toxicity - fish early life Not available.

stage

Short term toxicity - embryo

Not available.

and sac fry stages

Not available.

Chronic toxicity - aquatic

invertebrates

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.

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 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).

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

| 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. |
| |
| None of the ingredients are listed or exempt. California Air Toxics "Hot Spots" (A-II) |
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MEQUINOL

No.

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

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 date 5/30/2016

Revision

Hazard statements in full H315 Causes skin irritation.

1

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.