Revision Date 03/13/2015 Revision 1

SAFETY DATA SHEET PALFIQUE ESTELITE LV Low-Flow

1. IDENTIFICATION

Contact Person

Product Name PALFIQUE ESTELITE LV Low-Flow

Identified uses Resin-based Dental Restorative Material. For dental professionals only.

Supplier Tokuyama Dental America Inc. Tel: (877) 378 3548 (Toll-Free)

http://www.tokuyama-dental.com/contact.htm

Manufacturer Tokuyama Dental Corporation

38-9, Taitou 1-chome, Taitou-ku, Tokyo

110-0016, Japan TEL: +81-3-3835-2261

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 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 Web site: http://www.calpoison.org

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

2. HAZARD(S) IDENTIFICATION

Appearance Paste

Color Yellow white

Odor No information available.

GHS Pictogram



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 di(2-hydroxy propoxy) dimethacrylate

bisphenol A polyethoxy dimethacrylate

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 (HNOC)

Not applicable.

OSHA Regulatory Status

This Product is Hazardous under the OSHA Hazard Communication Standard.

General Information

May cause irritation to the respiratory system. 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.

bisphenol A di(2-hydroxy propoxy) dimethacrylate

< 1%

CAS No.: 1565-94-2 EC No.: 216-367-7

GHS Classification

Skin Sens. 1 - H317; Aquatic Chronic 3 - H412

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; Skin 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

N,N-DIMETHYL-PARA-TOLUIDINE < 1%

CAS No.: 99-97-8 EC No.: 202-805-4

GHS Classification

Acute Tox. 3 - H301; Acute Tox. 3 - H311; Acute Tox. 3 - H331; STOT RE 2 - H373; Aquatic Chronic 3 - H412

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

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

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.

7

Initial boiling point and boiling range

Not available

Melting point (°C)

Not available.

Relative density

Not available.

Vapor density (air=1)

Not available.

Vapor pressure

Not available. **Evaporation rate**

Not available.

pH-Value, Conc. Solution

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

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.

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

Ecotoxicity

No data on possible environmental effects have been found.

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 ClassNo classification noted.

DOT Hazard Label

N. DOTALLA

No DOT label requirement noted

IMDG ClassNot applicable.ICAO ClassNot 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 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 Notes

Not applicable.

15. REGULATORY INFORMATION

Regulatory Status (US)

This Product is Hazardous under the OSHA Hazard Communication Standard. California Proposition 65. Warning: N, N-DIMETHYL-PARA-TOLUIDINE This product contains a chemical known to the State of California to cause cancer.

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

The following ingredients are listed.

N, N-DIMETHYL-PARA-TOLUIDINE; Known to the State of California to cause cancer.

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)

bisphenol A di(2-hydroxy propoxy) dimethacrylate

camphorquinone

dibutyl hydroxy toluene

MEQUINOL

N, N-DIMETHYL-PARA-TOLUIDINE

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

Revision Comments

Revision Date 03/13/2015

Revision

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.