



Safety Data Sheet

Safety Data Sheet (in compliance with 29 CFR Part 1200 and 29 CFR Part 1020)

Document Number: SDS 067.004
Date Revised: 03/14/24

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier:

Trade Name (as labeled): Light Cure Orthodontic Bonding Resin
Product Form: Mixture
Part/Item Number: 208-01XX

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:

Recommended Use: Orthodontic Bonding Resin
Restrictions on Use: None

1.3 Details of the Supplier of the Safety Data Sheet:

Manufacturer/Supplier Name: Dental Technologies, Inc.
Manufacturer/Supplier Address: 6901 N. Hamlin Avenue
 Lincolnwood, IL 60712
Manufacturer/Supplier Telephone Number: 800-835-0885 or 847-677-5500 (Product Information)
Email address: info@dentaltech.com

1.4 Emergency Telephone Number:

Emergency Contact Telephone Number: Chemtrec
 800-424-9300 (USA)
 001-703-527-3887 (Outside USA)

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture:

Classification: The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies. This material is not considered hazardous to health.

GHS Classification:		
Health	Environmental	Physical
Skin Irritant 2 (H315) Eye Irritant 2A (H319) Skin Sensitizer 1 (H317)	Not Hazardous	No Physical Hazards

EU Classification: Irritant (Xi), R22, R36/37/38, R43

2.2 Label Elements:

Hazard pictograms (GHS-US)



GHS07

Signal Word: Danger

Hazard Phrases	Precautionary Phrases
H315 – Causes skin irritation H319 – Causes serious eye irritation H317 – May cause an allergic skin reaction	P280 – Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 – If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 – If eye irritation persists: Get medical advice/attention P302+P352 – If on skin: Wash with plenty of soap and water. P332+P313 – If SKIN irritation occurs: Get medical advice/attention P273 – Avoid release to the environment. P501 – Dispose of contents and container in accordance with local and national regulations.

2.3 Other Hazards: None known.**2.4 Unknown acute toxicity (GHS-US):** No data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances: Not Applicable**3.2 Mixture:**

Hazardous Components	C.A.S. #	Classification	WT %
2-Propenoic acid, 2-methyl-,(1-methylethylidene)bis{4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester	1565-94-2	Skin Irrit. 3, H316 Eye Irrit. 2B, H320	45-70%
Poly(oxy-1,2-ethanediyl), alpha,alpha'-((1-methylethylidene)di-4,1-phenylene)bis(omega-((2-methyl-1-oxo-2-propen-1-yl)oxy)-	41637-38-1	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Skin Sens. 1, H317 STOT (SE) Respiratory Tract 3, H335	5-10%
2-Propenoic acid, 2-methyl-, (tetrahydro-2-furanyl)methyl ester	2455-24-5	Flammable Liquid 4, H227 Skin Sens. 1, H317 Eye Irrit. 2B, H320 STOT (SE) Respiratory Tract 3, H335 Repr. Tox. 2, H361	15-35%
2-Hydroxyethyl methacrylate	868-77-9	Skin Sens. 1B, H317 Eye Irrit. 2B, H320	5-10%
2-Propenoic acid, 2-methyl-, 1,1'-(2-ethyl-2-(((2-methyl-1-oxo-2-propen-1-yl)oxy)methyl)-1,3-propanediyl) ester	3290-92-4	Acute aquatic tox. 2, H401 Chronic aquatic tox. 2, H411	1-5%
2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester	2867-47-2	Flammable Liquid 4, H227 Acute Tox., Oral 4, H302 Acute Tox., Dermal 4, H312 Skin Corrosion 1, H314	1-5%

		Serious Eye Damage 1, H318 Skin Sens. 1, H317 Repr. Tox. 2, H361 Acute aquatic tox. 3, H402	
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The exact concentrations are being withheld as a trade secret.

Refer to Section 16 for the full text of the GHS and EU Classifications.

4. FIRST AID MEASURES

4.1 Description of First Aid Measures:

Eye	Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention, if irritation persists.
Skin	Wash with soap and water.
Inhalation	No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.
Ingestion	Do not induce vomiting, seek medical attention.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed:

Not expected to present a significant hazard under anticipated conditions of normal use. May cause eye irritation.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed:

Not applicable.

Note to Physicians (Treatment, Testing, and Monitoring): Not applicable.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media: Please see Fire Fighting Equipment under Section 5.3.





5.2 Special Hazards Arising from the Substance or Mixture:

Not determined.

5.3 Advice for Fire-Fighters:

Fire Fighting Procedures:	Cool fire exposed containers with water spray.
Precautions for Fire Fighters:	Firefighters should wear full emergency equipment and approved positive pressure self-containing breathing apparatus.

Recommended Protective Equipment for Fire Fighters:



EYES/FACE	HANDS	RESPIRATORY	THERMAL
			

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Avoid contact with skin, eyes or clothing. Wear appropriate protective clothing as described in Section 8.

Recommended Personal Protective Equipment for Containment and Clean-up:

EYES/FACE	HANDS	RESPIRATORY	SKIN
			

6.2 Environmental Precautions:

Prevent entry into sewers and waterways. Report releases as required by local, state, and national authorities. Avoid contact with skin, eyes or clothing. Wear appropriate protective clothing as described in Section 8.

6.3 Methods and Material for Containment and Cleaning up:

Wipe up with cloth, soap and water.

6.4 Reference to Other Sections:

Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Avoid contact with the eyes, skin and clothing. Wear protective clothing and equipment as described in Section 8. Use only with adequate ventilation. Wash thoroughly after handling.



7.2 Conditions for Safe Storage, Including Any Incompatibilities:

See product labeling. Keep container closed to prevent contamination.

7.3 Specific End Use (s): Orthodontic Bonding Adhesive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters: No additional information available.

8.2 Exposure Controls:			
Appropriate Engineering Controls: None required under normal product handling conditions.			
Individual Protection Measures (PPE) Specific Eye/face Protection: Wear eye protection. Specific Skin Protection: Wear suitable protective clothing and gloves. Specific Respiratory Protection: None should be needed under normal use. Specific Thermal Hazards: None required.			
Recommended Personal Protective Equipment			
EYES/FACE	HANDS	RESPIRATORY	SKIN
			

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:

Physical state:	Homogeneous Viscous Liquid	Relative density:	1.10-1.12g/cc @25°C/77°F
Color:	Pale Yellow	Explosive limits:	Not determined
Odor:	Fruity ester-like	Vapor pressure (mmHg):	Not determined
Odor threshold:	Not determined	Vapor density:	Not determined
pH:	Not determined	Solubility(ies):	Insoluble in water
Melting/freezing point:	Not determined	Partition coefficient: n-octanol/water:	Not determined
Initial boiling point and boiling range:	Not determined	Auto-ignition temperature:	Not determined
Flash point:	Not determined	Decomposition temperature:	Not determined
Evaporation rate:	Not determined	Viscosity:	Not determined
Flammability (solid, gas):	Not determined	Oxidizing Properties:	Not determined

9.2 Other Information: None available.

10. STABILITY AND REACTIVITY

10.1 Reactivity: Stable at ambient temperature and under normal conditions of use.

10.2 Chemical Stability: Stable at standard temperature and pressure.

10.3 Possibility of Hazardous Reactions: None.

10.4 Conditions to Avoid: Keep away from heat, sparks, flames and other sources of ignition.

10.5 Incompatible materials: High temperatures, visible light sources, strong oxidizing agents. Keep away from sunlight and open flames.

10.6 Hazardous Decomposition Products: Oxides of carbon when burned.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

2-Propenoic acid, 2-methyl-,(1-methylethylidene)bis{4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (1565-94-2)

LD50 oral	Not Available
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Poly(oxy-1,2-ethanediyl), alpha,alpha'-((1-methylethylidene)di-4,1-phenylene)bis(omega-((2-methyl-1-oxo-2-propen-1-yl)oxy)- (41637-38-1)

LD50 oral rat	>2000 mg/kg
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2-Propenoic acid, 2-methyl-, (tetrahydro-2-furanyl)methyl ester (2455-24-5)

LD50 oral (estimate)	4003 mg/kg
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2-Hydroxyethyl methacrylate (868-77-9)

LD50 oral rat	>5000 mg/kg
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2-Propenoic acid, 2-methyl-, 1,1'-(2-ethyl-2-(((2-methyl-1-oxo-2-propen-1-yl)oxy)methyl)-1,3-propanediyl) ester (3290-92-4)

LD50 oral rat	>2000 mg/kg
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2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester (2867-47-2)

LD50 oral rat	1751 mg/kg
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12. ECOLOGICAL INFORMATION

12.1 Toxicity: No data available

12.2 Persistence and Degradability: No data available.

12.3 Bio-accumulative Potential: No data available.

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB Assessment: No data available.

12.6 Other Adverse Effects: No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Regulations: Dispose in accordance with all national and local regulations.

Properties (Physical/Chemical) Affecting Disposal: None currently known.

Waste Treatment Recommendations: Dispose in accordance with national and local regulations.

14. TRANSPORT INFORMATION

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not dangerous goods.

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

U.S. Federal Regulations

2-Propenoic acid, 2-methyl-,(1-methylethylidene)bis{4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (1565-94-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Poly(oxy-1,2-ethanediyl), alpha,alpha'-((1-methylethylidene)di-4,1-phenylene)bis(omega-((2-methyl-1-oxo-2-propen-1-yl)oxy)- (41637-38-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-Propenoic acid, 2-methyl-, (tetrahydro-2-furanyl)methyl ester (2455-24-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-Hydroxyethyl methacrylate (868-77-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-Propenoic acid, 2-methyl-, 1,1'-(2-ethyl-2-(((2-methyl-1-oxo-2-propen-1-yl)oxy)methyl)-1,3-propanediyl) ester (3290-92-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester (2867-47-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

International Regulations

Canadian Workplace Hazardous Materials Information System (WHMIS): Medical devices are not subject to WHMIS.

Canadian Environmental Protection Act: This product is a medical device and not subject to chemical notification requirements.

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

European Inventory of Existing Chemicals (EINECS): This product is a medical device and not subject to chemical notification requirements.

EU REACH: All components requiring registration have been pre-registered.

Australian Inventory of Chemical Substances: This product is a medical device and not subject to chemical notification requirements.

China Inventory of Existing Chemicals and Chemical Substances: This product is a medical device and not subject to chemical notification requirements.

Japanese Existing and New Chemical Substances: This product is a medical device and not subject to chemical notification requirements.

Korean Existing Chemicals List: This product is a medical device and not subject to chemical notification requirements.

Philippine Inventory of Chemicals and Chemical Substances: This product is a medical device and not subject to chemical notification requirements.

15.2 Chemical Safety Assessment: None required.

16. OTHER INFORMATION

HMIS Hazard Rating:

Health: 1	Flammability: 0	Reactivity: 0
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Full text of Classification abbreviations used in Section 2 and 3:

Eye Irrit. 2A	Serious eye damage/ eye irritation Category 2A
Skin Irrit. 2	Skin corrosion irritant Category 2
Skin Sens. 1	Skin sensitization Category 1
H227:	Combustible liquid.
H302	Harmful if swallowed.
H312:	Harmful in contact with skin.
H314:	Causes severe skin burns and eye damage.
H315:	Causes skin irritation.
H316:	Causes mild skin irritation.
H317:	May cause an allergic skin reaction.
H318:	Causes serious eye damage.
H320:	Causes eye irritation.
H335:	May cause respiratory irritation.
H361:	Suspected of damaging fertility or the unborn child.
H401:	Toxic to aquatic life.

H402:	Harmful to aquatic life.
H411:	Toxic to aquatic life with long-lasting effects.

Supersedes: June 22, 2018
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Revision Summary: March 14, 2024: Updated to revised GF-404 Rev001 Template.
Data Sources: US NLM ChemID Plus and HSDB, Substance SDS for components, IUCLID Dataset EU Chemical Bureau, ESIS, Country websites for occupational exposure limits.

Manufacturer disclaimer:

The information and recommendations are taken from sources (raw material MSDS(s), SDS(s) and manufacturers knowledge) believed to be accurate; however, the manufacturer makes no warranty with respect to the accuracy of the information or the suitability of the recommendation and assumes no liability to any user thereof. Each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.