



Safety Data Sheet

Safety Data Sheet (in compliance with Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EC) 453/2010)

Document Number: SDS 133.000
Date Revised: 5/29/2019

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

1.1 Product Identifier:

Trade Name (as labeled): L/C Nano-Hybrid Composite
Product Form: Mixture
Part/Item Number: 108-xx00-002 (xx denotes shade variances)

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

Recommended Use: Restorative Composite
Restrictions on Use: For Professional Use Only

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:

The product as manufactured is a solid composed of encapsulated chemical ingredients. No hazardous exposures are anticipated during normal product handling and use conditions.

GHS Classification:		
Health	Environmental	Physical
Skin Irritant 2 (H315)	Not Hazardous	Not Hazardous
Eye Irritant 2A (H319)		
Skin Sensitizer 1 (H317)		

2.2 Label Elements:

Hazard pictograms (GHS-US)



GHS07



GHS08

Signal Word: Warning

Hazard Phrases	Precautionary Phrases
H315 – Causes skin irritation H317 – May cause an allergic skin reaction H319 – Causes serious eye irritation	P264 – Wash skin thoroughly after handling. P280 – Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 – IF ON SKIN: wash with plenty of soap and water. P321 – See Section 4 of this document for specific treatment. P332+P313 – IF SKIN irritation occurs: Get medical advice/attention. P362 – Take off contaminated clothing and wash before reuse. P261 – Avoid breathing dust/fume/gas/mist/vapors/spray. P272 – Contaminated work clothing should not be allowed out of the workplace. P333+P313 – IF SKIN irritation or rash occurs: Get medical advice/attention/ P363 – Wash contaminated clothing before reuse. P501 – Dispose of contents/container appropriately in accordance with local and national regulations. 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.

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 %
Barium Glass	N/A	Not Classified	50-75%
Ytterbium Trifluoride	13760-80-0	H315, H319, H335	1-10%
Triethylene Glycol Dimethacrylate	109-16-0	H317	1-10%
2-Propenoic acid, 2-methyl-, (1-methylethylidene) bis [4,1-Phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester	1565-94-2	H319, H315, H335, H317	10-25%
Diurethane Dimethacrylate	72869-86-4	H317, H402, H412	1-10%
Poly(oxy-1,2-ethanediyl), .alpha., .alpha.' - [1-methylethylidene) di-4,1-phenylene] bis[.omega.- [(2-methyl-1-oxo-2-propenyl)oxy]-	41637-38-1	H319, H315, H335, H317	1-10%

The exact concentration is being withheld as a trade secret.

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

4. FIRST AID MEASURES

4.1 Description of First Aid Measures:	
Eye	Immediately flush victim's eyes with large quantities of water for several minutes, holding the eyelids apart. Get medical attention if irritation persists.
Skin	Remove contaminated clothing. Wash skin with soap and water. If irritation develops, get medical attention. Launder clothing before re-use.
Inhalation	Remove victim to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration and get immediate medical attention.
Ingestion	Rinse out mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious or drowsy person. Get immediate 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 and skin irritation. May cause skin sensitization. May be harmful if swallowed.





4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed:
Immediate medical attention should not be required except in cases of high quantities of ingestion or inhalation.
Note to Physicians (Treatment, Testing, and Monitoring): Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media:	
	Use Chemical Foam, CO2, Dry Chemical Powder, Water Spray. NOTE: Water may be ineffective in extinguishing the fire.

5.2 Special Hazards Arising from the Substance or Mixture:
Material may burn if exposed to flame.

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. Avoid breathing vapors. Wear appropriate clothing as described in Section 8.

6.3 Methods and Material for Containment and Cleaning up:

Clean up with absorbent material and remove residue with alcohol damp wipe. Rinse spill area with water. Use non-sparking tools and equipment.

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. Avoid breathing vapors. Wear protective clothing and equipment as described in Section 8. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from heat, sparks, flames, and other sources of ignition.

7.2 Conditions for Safe Storage, Including Any Incompatibilities:

Store in a cool, dry, well-ventilated area away from heat, direct sunlight, and all sources of ignition. Store away from incompatible materials. Keep container closed to prevent contamination.

7.3 Specific End Use (s): No specific end use.

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: Chemical safety goggles should be worn if needed to avoid eye contact.

Specific Skin Protection: Wear impervious gloves such as natural rubber or neoprene if needed to avoid skin contact. Consult glove supplier for thickness and breakthrough times.

Specific Respiratory Protection: None should be needed under normal use. If exposure limits are exceeded an approved respirator or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form, and concentration. Follow applicable regulations and good industrial hygiene practice.

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:

Appearance:	Homogeneous Paste	Relative density:	No data available
Color:	A1 – B2	Explosive limits:	No data available
Odor:	No data available	Vapor pressure (mmHg):	No data available
Odor threshold:	No data available	Vapor density:	No data available
pH:	No data available	Solubility(ies):	< 7.5 µg/µL
Melting/freezing point:	No data available	Partition coefficient: n-octanol/water:	No data available
Initial boiling point and boiling range:	No data available	Auto-ignition temperature:	No data available
Flash point:	No data available	Decomposition temperature:	No data available
Evaporation rate:	No data available	Viscosity:	No data available
Flammability (solid, gas):	No data available	Oxidizing Properties:	No data available
Explosive Properties:	No data available		

9.2 Other Information:

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: May occur in large quantities.

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:

Triethylene glycol dimethacrylate (109-16-0)	
LD50 oral rat	10837 mg/kg
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

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 applicable

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

Triethylene Glycol Dimethacrylate (109-16-0)

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

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-propenyl)oxy]- (41637-38-1)

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

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Supersedes: N/A

Date updated: 5/29/2019

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Revision Summary: May 29th, 2019 : SDS Created

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:

FOR DENTAL USE ONLY. 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.