DENTAL TECHNOLOGIES

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 010.003
Date Revised: 8/8/2019

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

1.1 Product Identifier:

Trade Name (as labeled):	**Self Cure Core Build-Up**
Product Form:	**Mixture**
Part/Item Number:	**Base: 120-0700, 120-0800, 120-0900** **Catalyst: 120-0600**

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

Recommended Use:	**Composites**
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) Skin Sensitizer 1B (H317) Eye Irritant 2B (H319)	Not hazardous	Not hazardous

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 hands and skin thoroughly after handling. P272 – Contaminated work clothing should 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 soap and 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. P310 – Immediately call a POISON CENTER or doctor/physician. P312 – Call a POISON CENTER or doctor/physician if you feel unwell. P321 – See section 4 for specific treatment. P332+P313 – IF SKIN irritation occurs: Get medical advice/attention. P333+P313 – IF SKIN irritation or rash occurs: Get medical advice/attention. P362 – Take off contaminated clothing and wash before reuse. P363 – Wash contaminated clothing before reuse. P405 – Store locked up. P501 – Dispose of contents/containers 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

Core Build-Up Base

3.1 Substances: None.

3.2 Mixture:

Hazardous Components	C.A.S. #	Classification	WT %
Inorganic Glass	N/A	Not Classified	50-75%
Silicon Dioxide	14808-60-7	Carcinogen, Category 1A, H350i Specific Target Organ Toxicity (Repeated Exposure), Category 1, H372	10-25%
2-Propenoic acid, 2-methyl-, (1-methylethylidene) bis [4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester	1565-94-2	Skin irritation, Category 3, H315 Eye irritation, Category 2B, H319	10-25%
Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.' – [1-methylethylidene) di-4,1-phenylene] bis[.omega.-[(2-	41637-38-1	Skin irritation, Category 2, H315 Eye irritation, Category 2B, H319 Skin sensitization, Category 1, H317 Specific Target Organ Toxicity (Single	1-10%

methyl-1-oxo-2-propenyl)oxy]-		Exposure) Respiratory Tract, Category 3, H335	
Triethylene Glycol Dimethacrylate	109-16-0	Skin sensitization 1	1-10%
Synthetic Amorphous, Pyrogenic Silica	112945-52-5	Not Classified	1-10%
Titanium Dioxide	13463-67-7	Eye irritation Skin irritation Respiratory tract irritation	1-10%

The exact concentration is being withheld as a trade secret.

Core Build-Up Catalyst

3.1 Substances: None.

3.2 Mixture:

Hazardous Components	C.A.S. #	Classification	WT %
Silicon Dioxide	14808-60-7	Carcinogen Category 1A, H350i Specific Target Organ Toxicity (Repeated Exposure) Category 1, H372	50-75%
2-Propenoic acid, 2-methyl-, (1-methylethylidene) bis [4,1- phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester	1565-94-2	Skin irritation, Category 3, H315 Eye irritation, Category 2B, H319	10-25%
Diurethane dimethacrylate	72869-86-4	Skin sensitization, Category 1, H317 Acute Aquatic Toxicity, Category 3, H402 Chronic Aquatic Toxicity, Category 3, H412	1-10%
Triethylene Glycol Dimethacrylate	109-16-0	Skin sensitization, Category 1, H317 Skin irritant, Category 2, H315 Eye irritant, Category 2B, H319	1-10%
Aluminum oxide	1344-28-1	Not Classified	1-10%
Synthetic Amorphous, Pyrogenic Silica	112945-52-5	Not Classified	1-10%

The exact concentration is 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 victim's eyes with large quantities of water for several minutes, holding the eyelids apart. Get medical attention.
Skin	Remove contaminated clothing. Wash skin with soap and water. If irritation develops, get medical attention. Launder clothing before re-use. Consult a physician. Prolonged or repeated exposure to uncured material may cause irritation or skin rash.
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. Prolonged or excessive inhalation may cause respiratory tract irritation.
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. Uncured material may be harmful or fatal if swallowed.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed:
The most important known symptoms are described in the labelling (see section 2.2) and/or in section 11.

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, Carbon Dioxide, Dry Chemical Powder, Water Spray.

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. General: Evacuate all personnel; use protective equipment for fire-fighting.
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 Handing:

Wash thoroughly after handling. Provide appropriate ventilation. For precautions see section 2.2.

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 other than that described in Section 1.2.

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: Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards.

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 known.

Recommended Personal Protective Equipment

EYES/FACE	HANDS	RESPIRATORY	SKIN
			

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties (Base/Catalyst):

Physical state:	Homogeneous Paste/ Homogeneous Paste	**Relative density:**	No data available
Appearance:	White, Natural, or Blue/White	**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):**	No data available
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: None.

10. STABILITY AND REACTIVITY

10.1 Reactivity: Stable at ambient temperature and under normal conditions of use.
10.2 Chemical Stability: Stable under recommended storage conditions.
10.3 Possibility of Hazardous Reactions: None known.
10.4 Conditions to Avoid: Keep away from light, heat, sparks, flames, and other sources of ignition.
10.5 Incompatible materials: Keep away from light, reducing agents, oxidizing agents, peroxides, amines and open flames.
10.6 Hazardous Decomposition Products: Oxides of Carbon when burned.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Poly(oxy-1,2-ethanediyl),.alpha.,.alpha.' – [(1-methylethylidene) di-4,1-phenylene] bis[.omega.-[(2-methyl – 1-oxo-2propenyl)]-:

Acute Toxicity:	
Oral – Rat – LD50	> 2,000 mg/kg
Dermal – Rat – LD50	> 2,000 mg/kg

Triethylene Glycol Dimethacrylate:

Acute Toxicity:	
Oral – Mouse – LD50	10,750 mg/kg
Oral – Rat – LD50	10,837 mg/kg
Carcinogenicity:	Triethylene Glycol Dimethacrylate may contain trace quantities of substances known to the state of California to cause cancer and/or reproductive toxicity.

Aluminum Oxide:

Acute Toxicity:	
Oral – Rat – LD50	> 5,000 mg/kg

12. ECOLOGICAL INFORMATION

12.1 Toxicity:
Poly(oxy-1,2-ethanediyl),.alpha.,.alpha.' –[1-methylethylidene) di-4,1-phenylene]
bis[.omega.-[(2-methyl – 1-oxo-2-propenyl)]-:
Fish – LD50 – 96h: > 100mg/L
Daphnia magna – EC50 – 48h: > 100 mg/L
Algae – EC50 – 72h: > 100 mg/L

Diurethane Dimethacrylate:
Acute aquatic toxicity category 3 (UN-GHS)
Chronic aquatic toxicity category 3 (UN-GHS)
LC50 Brachydanio rerio – 96h: > 100 mg/L

Aluminum Oxide
LC50 Salmo trutta – 96h: > 100 mg/L
EC50 Daphnia magna – 96h: > 100 mg/L
EC50 Pseudokirchneriella subcapitata – 72h: > 100 mg/L

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: Unpolymerized (uncured) material may be hazardous waste. Incinerate uncured material and dispose in accordance with 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

Poly(oxy-1,2-ethanediyl),.alpha.,.alpha.' –[1-methylethylidene) di-4,1-phenylene] bis[.omega.-[(2-methyl – 1-oxo-2-propenyl)]-:

TSCA	Listed
DSL	Listed
NDSL	Not Listed
EINECS	Listed
SARA 311/312 Hazard Categories	None
SARA 313 Components	None

Triethylene Glycol Dimethacrylate:

OSHA	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
TSCA	Listed
DSL/NDSL	Listed
EINECS	Listed
SARA Section 302	There may be specific Threshold Planning Quantities for the components of this product.
SARA 311/312 Hazard Categories	Immediate (Acute) Health
SARA 313 Components	None
WHMIS Hazard Class	This product has been classified according to the hazard criteria of the CPR and MSDS contains all of the Information required by the CPR. None of the Components of this product are listed on the Priorities Substances List.

Titanium Dioxide:

AICS	Listed
DSL	Listed
NDSL	Not Listed
ECSC	Listed
EINECS	Listed
ELINCS	Not Listed
ENCS	Listed
ECL	Listed
New Zealand Inventory	Listed
PICCS	Listed
TSCA	Listed
US California Proposition 65 – Carcinogens & Reproductive Toxicty (CRT): Listed substance	Titanium Dioxide (Cas No. 13463-67-7)
US – Massachusetts RTK	Titanium Dioxide (Cas No. 13463-67-7)
US – New Jersey RTK	Titanium Dioxide (Cas No. 13463-67-7)
US – Pennsylvania RTK	Titanium Dioxide (Cas No. 13463-67-7)

15.2 Chemical Safety Assessment: None required.

16. OTHER INFORMATION

HMIS Hazard Rating:

Health: 1	Flammability: 0	Reactivity: 1

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.
H350i	May cause cancer by inhalation.
H372	Causes damage to organs through prolonged or repeated exposure.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Supersedes: MSDS-010 Rev002
Date updated: 8/8/2019
Change Control Document #: 6891
Revision Summary: August 8th, 2019 : Converted MSDS to Reach SDS. Updated all sections.
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.