

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

072361624

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

072361608 072361616 072361632 072361640

**SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION**

Respiratory: None

Eye Protection: Safety goggles

Gloves: Surgical, rubber/PVC gloves

Other Clothing and Equipment: Face Mask

Ventilation: None required, local exhaust recommended

**SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES**

Vapor Pressure: Negligible

Vapor Density: &gt;1

Evaporation Rate: &lt;1

Solubility in Water: Slight

Boiling Point: ND

Specific Gravity: &gt;1

Appearance and Odor: Tooth colored paste, slight odor

**SECTION X - STABILITY AND REACTIVITY**

Stable (x) Unstable ( )

Conditions to Avoid: Heat in excess of 25°C, direct sunlight or intense light.

Incompatibility: Free radical initiators, oxidizing agents

Hazardous Decomposition Products: Acrylic smoke

Hazardous Polymerization: May occur ( ) Will not occur (x)

**SECTION XI - TOXICOLOGICAL INFORMATION**

Carcinogens: None known.

**SECTION XII : ECOLOGICAL INFORMATION**

This material contains hazardous components. Allow materials to cure prior to disposal.

**SECTION XII : DISPOSAL CONSIDERATIONS**

Dispose of safely in accordance with local, state, and federal regulations.

**SECTION XIV : TRANSPORT INFORMATION**

Stable under normal conditions of use, transportation, and storage.

**SECTION XV: REGULATORY INFORMATION**

n/a

**SECTION XVI : OTHER INFORMATION**

None

The data and information given in this msds are accurate on the date of preparation. It does not indicate any warranty or representation. We disclaim all liability relating to use of this material since this is beyond our control.



3420 FOSTORIA WAY STE. A-200 SAN RAMON, CALIFORNIA 94583 USA  
PHONE 800/827-7940 FAX 925/973-0764

90346 REV E

Obtained by Global Safety Management, www.globalsafety.com (877) 683-7460

# TurboTemp 2™

**INSTRUCTIONS**

Turbo Temp 2™ is a unique 4:1, syringeable bis-acryl composite for temporary restorations. Turbo Temp is fast and accurate, especially when used in conjunction with a quality vinyl polysiloxane impression material such as Star VPS (available from Danville Materials).

**TURBO TEMP KIT**

Turbo Temp comes in a 76 gm automix cartridge. Ten waste-saver tips are included per kit. (Extra tips 10/pk, Order No. 90162, 50/pk, Order No. 90163).

Turbo Temp cartridges are designed to fit on a new style automix gun Order No. 90176.

It is important not to remove the cap on the cartridge until use. After use, leave the used tip on the cartridge. The hardened resin in the tip acts as a cap until the next use.

**IMMEDIATELY PRIOR TO USE**

Remove cap and eject about a pea size quantity of material out of the bare cartridge end. Eject slowly until steady flow exudes from both compartments. Wipe off the end (without cross mixing) and install the mixing tip.

**BEFORE THE PREP**

Make initial impression. Place some flexible vinyl polysiloxane (Star VPS Monophase recommended) on a posterior type bite tray and have patient close. Stiff heavy body materials must be avoided, as once removed, they do not go back well into undercuts. Alginate will also serve as a less satisfactory alternative.

An inexpensive bite tray is recommended for the initial impression. The small bite tray requires less impression material.

**PREP AND FINAL IMPRESSION**

Cut preparation. Take a final impression for the lab. Use a triple tray. Dual viscosity vinyl polysiloxane impression materials are recommended.

**AFTER THE PREP**

Once the prep and the lab impression have been completed, you are ready to make the temporary. Working time is only 30 to 40 seconds. Set time is 1-1/2 minutes after placement in mouth and full hardness is 3 to 4 minutes. Inject Turbo Temp into the prep areas of the preliminary impression. Use care to avoid trapping air bubbles. Have patient close on tray. Choose cementation technique A or B.

**A. Cementation Method (Recommended Technique)**

1. Remove the tray 1-3/4 to 2 minutes after the mix was injected. The temporary will be retained in the tray and will be slightly flexible. Break off the excess material around the temp while it is still in the impression. This excess should be thin and flexible and can be trimmed easily with an



2. Immediately reset the temp in the mouth and wait 1 or 2 more minutes for the completion of cure.
3. Remove again, wait 4-5 minutes, and pop the temp out of impression.
4. Trim margins with a diamond (it is now rigid).
5. Cement in place, using a non-eugenol temporary cement.

#### B. Non-Cementation Method

1. Leave Turbo Temp in the mouth during the initial insertion for 2 ½ minutes. It will shrink to fit. It is recommended to cut an escape route in the facial surface of the impression. This will allow excess Turbo Temp to escape, thereby reducing flashing.
2. Remove impression from mouth; the temporary should remain in the mouth.
3. Trim excess with the scalpel blade or a diamond bur if necessary.

Note: Some non-cemented Turbo Temp restorations may turn dark after two weeks. To avoid this, either place permanent restoration within two weeks or cement the temporary restoration.

#### Turbotemp 2 bridge fabrication:

Three units is the recommended maximum span. To add strength the proximals of posteriors, the connector areas should be modified to add bulk, prior to taking the preliminary impression. In the posterior, both buccal and lingual can be modified. In the anterior, most of the modification would be done on the lingual to preserve esthetics. The preferred block-out material is Ultradent Blue Bolckout, but soft wax can also be used.

#### Reinforcement can also be used in addition:

Take the preliminary impression. Then place a piece of Ribbond or some other fibers, from mesial to distal, using cured flowable composite to hold it on preps. The entire piece of reinforcement should be infused with flowable composite. A figure 8 configuration might be considered. No bonding is used so that the reinforcement will be retrievable with the temporary restoration. In the usual manner, form the Turbotemp 2 over the reinforcement. Do not disturb the oxygen inhibited outer layer on the flowable so the Turbotemp 2 will adhere directly to it.

#### Trouble Shooting

- When starting with a new cartridge, discard the first pea size amount dispensed through the mixing tip to ensure even mixing.
- Do not remove the mixing tip after each use. Wait until ready to use it again, then install new tip. This will prevent catalyst contamination possibly resulting in a plug.
- Mount the mixing tip in proper alignment. Note that the tips are notched to indicate the proper alignment on the cartridge. By forcing the tip, it can be mounted backwards, resulting in non-setting mixes. (The two sides of the mixing tip have different size bores.)
- A slightly gummy air inhibited layer will remain on the hardened surface of the temporary. This layer allows bubble and margin defects to be minimized by directly bonding with a flowable composite such as StarFlow. The layer is easily removed with ethyl alcohol.
- Exposure to temperatures below 74°F will extend the setting time of Turbo Temp. Set times are based on room temperature material. Refrigeration greatly retards set times.
- Normally there is no need for occlusal adjustments if vinyl polysiloxane is used.
- Before placing a new mix tip, extrude a small amount of material to insure both sides are flowing. Waste a pea size amount of material immediately before use to insure a full mix.

## MATERIAL SAFETY DATA

### SECTION I - PRODUCT IDENTIFICATION

Company Name: Danville Materials  
3420 Fostoria Way Suite A-200  
San Ramon, CA 94583  
Phone: (925)973-0710  
Fax: (925) 973-0764  
Prepared: December 19, 2011

### SECTION II - HAZARD(S) IDENTIFICATION

OSHA Permissible Exposure Limits: None  
Other Exposure Limit Used: None  
ACGIH Threshold Exposure Limit: None  
Chronic, Other: None

### SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous component % by weight:

Multifunctional Methacrylates 30-40  
Malyonlurea Derivative Trace  
Silica Filler 45-50  
Polyvinyl esters 5-10

### SECTION IV - FIRST AID MEASURES

Primary Routes of Exposure: Skin, ingestion  
Signs of Exposure: Severe skin or eye irritation, redness or burning sensation.  
Ingestion may cause nausea.  
Medical Conditions Generally Aggravated by Exposure: Allergies to methacrylates.  
First Aid Procedures: For Skin - Wash off infected area with soap and water. For Ingestion - Seek medical advice, carry container with label and MSDS. For Eyes - Rinse immediately with plenty of water and consult physician

### SECTION V - FIRE-FIGHTING MEASURES

Flash Point: >100°C  
Extinguishing Media: Carbon dioxide, foam, dry chemical  
Special Fire Fighting Procedures: None  
Flammable limits: ND  
Unusual Fire and Explosion Hazards: Polymerizes upon heating.

### SECTION VI - ACCIDENT RELEASE MEASURES

None

### SECTION VII - HANDLING AND STORAGE

Spill Management: Use absorbent to collect the material. Wash contaminated surfaces with soap and water.

## 1. Identification

**Product identifier** TurboTemp™ 2 & 3  
**Other means of identification**  
**Document number** SDS-013-ZD Rev. B  
**Recommended use** Provisional dental composites.  
**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

#### Supplier

**Company name** Danville Materials  
**Address** 2875 Loker Avenue East  
 Carlsbad, CA 92010  
**Telephone** 1-800-827-7940  
**Contact** Customer Service  
**E-mail** danvillecs@zestdent.com  
**Website** www.zestdent.com  
**Emergency telephone number** 800-451-8346 / 760-602-8703

## 2. Hazard(s) identification

**Physical hazards** Not classified.  
**Health hazards** Sensitization, skin Category 1B  
**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 3  
 Hazardous to the aquatic environment, long-term hazard Category 3  
**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Warning  
**Hazard statement** May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.  
**Precautionary statement**  
**Prevention** Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves.  
**Response** If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.  
**Storage** Store away from incompatible materials.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.  
**Hazard(s) not otherwise classified (HNOC)** None known.  
**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Ethoxylated bisphenol A dimethacrylate	41637-38-1	20 - 50
Diurethane dimethacrylate	72869-86-4	3 - 20
Fused silica	Proprietary	1 - 15

**Composition comments** All concentrations are in percent by weight unless otherwise indicated. Components not listed are either non-hazardous or are below reportable limits.

The manufacturer has claimed one or more hazardous ingredients as trade secret under the OSHA Hazard Communication Standard. The hazards of this (these) ingredient(s) are given on this SDS.

#### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	May cause an allergic skin reaction. Dermatitis. Rash.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Contains one or more components that will burn if involved in a fire.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Prevent product from entering drains.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
<b>Environmental precautions</b>	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

**Precautions for safe handling** Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Persons susceptible to allergic reactions should not handle this product. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store in a well-ventilated place. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Fused silica	PEL	0.05 mg/m <sup>3</sup>	Respirable dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Fused silica	TWA	0.05 mg/m <sup>3</sup>	Respirable.
		1.2 mppcf	Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Fused silica	TWA	0.025 mg/m <sup>3</sup>	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Fused silica	TWA	0.05 mg/m <sup>3</sup>	Respirable dust.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash fountain and emergency showers are recommended.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear approved chemical safety goggles. Face shield is recommended.

#### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

#### Skin protection

**Other** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection** None required where adequate ventilation conditions exist. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

**Physical state** Paste.

**Form** Paste.

**Color** Not available.

**Odor** Not available.

**Odor threshold** Not available.

**pH** Not applicable.

<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Does not flash.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	> 20.5 mm <sup>2</sup> /s
<b>Viscosity temperature</b>	104 °F (40 °C)
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Excessive heat.
<b>Incompatible materials</b>	Strong oxidizing agents. Free radical initiators. Iron.
<b>Hazardous decomposition products</b>	Thermal decomposition of this product can generate carbon monoxide and carbon dioxide. Silicon oxide fumes.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	May cause an allergic skin reaction.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be acutely toxic.
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	May cause an allergic skin reaction.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Due to the form of the product, exposure to the potentially carcinogenic components is not expected.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Fused silica (CAS Proprietary) 1 Carcinogenic to humans.

**NTP Report on Carcinogens**

Fused silica (CAS Proprietary) Known To Be Human Carcinogen.  
Reasonably Anticipated to be a Human Carcinogen.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Fused silica (CAS Proprietary) Cancer

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful.

**12. Ecological information**

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

Ethoxylated bisphenol A dimethacrylate (CAS 41637-38-1) 5.3 - 5.62

**Mobility in soil** No data available for this product.

**Other adverse effects** None known.

**13. Disposal considerations**

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. Transport information**

**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**15. Regulatory information**

**US federal regulations** This mixture is a product regulated by the FDA. Within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200]: this mixture is considered hazardous.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.



**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Fused silica (CAS Proprietary)

Cancer  
lung effects  
immune system effects  
kidney effects**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes**Classified hazard categories** Respiratory or skin sensitization**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations****US. Massachusetts RTK - Substance List**

Fused silica (CAS Proprietary)

**US. New Jersey Worker and Community Right-to-Know Act**

Fused silica (CAS Proprietary)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Fused silica (CAS Proprietary)

**US. Rhode Island RTK**

Fused silica (CAS Proprietary)

**California Proposition 65**California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Fused silica (CAS Proprietary)

**16. Other information, including date of preparation or last revision****Issue date** 21-February-2018**Revision date** 03-December-2018**Version #** 07**NFPA ratings****Disclaimer**

Danville Materials cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.