SECTION 1: Identification

1.1. Product identifier
3M™ Protemp™ Crown

Product Identification Numbers
70-2010-5121-9, 70-2010-5122-7, 70-2010-5123-5, 70-2010-5124-3, 70-2010-5125-0, 70-2010-5126-8, 70-2010-5127-6, 70-2010-5128-4, 70-2010-5129-2, 70-2010-5130-0, 70-2010-5167-2, 70-2010-5194-6, 70-2010-5247-2, 70-2010-5248-0, 70-2010-5249-8, 70-2010-5252-0, 70-2010-5257-3, 70-2010-5258-4, 70-2010-5259-5
7000030524, 7000030523, 7000030522, 7000030521, 7000030520, 7000030519, 7000030518, 7000030517, 7000030516, 7000030515, 7000128815, 7000030531, 7000030532, 7100053839, 7100111843

1.2. Recommended use and restrictions on use

Recommended use
Dental product, Temporization material.

Restrictions on use
For use only by dental professionals.

1.3. Supplier’s details

MANUFACTURER: 3M
DIVISION: Oral Care Solutions Division
ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA
Telephone: 1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number
1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

2.1. Hazard classification

2.2. Label elements
Signal word
Not applicable.

Symbols
Not applicable.

Pictograms
Not applicable.

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silane Treated Ceramic</td>
<td>444758-98-9</td>
<td>70 - 80</td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>1565-94-2</td>
<td>5 - 15</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>112945-52-5</td>
<td>1 - 10</td>
</tr>
<tr>
<td>Reacted Polycaprolactone Polymer</td>
<td>None</td>
<td>1 - 10</td>
</tr>
<tr>
<td>Diphenylidonium Hexafluorophosphate</td>
<td>58109-40-3</td>
<td>&lt; 0.5</td>
</tr>
</tbody>
</table>

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:
No need for first aid is anticipated.

Eye Contact:
Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:
Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed
See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture
None inherent in this product.
Hazardous Decomposition or By-Products

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide</td>
<td>During Combustion</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>During Combustion</td>
</tr>
</tbody>
</table>

5.3. Special protective actions for fire-fighters
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Observe precautions from other sections.

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

7.2. Conditions for safe storage including any incompatibilities
No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

**Occupational exposure limits**
If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>Agency</th>
<th>Limit type</th>
<th>Additional Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILICA, AMORPHOUS</td>
<td>112945-52-5</td>
<td>OSHA</td>
<td>TWA concentration:0.8 mg/m3; TWA:20 millions of particles/cu. ft.</td>
<td></td>
</tr>
</tbody>
</table>

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
OSHA : United States Department of Labor - Occupational Safety and Health Administration
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls
Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Safety Glasses with side shields

Skin/hand protection
See Section 7.1 for additional information on skin protection.

Respiratory protection
None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Color</td>
<td>Off-White</td>
</tr>
</tbody>
</table>

Specific Physical Form: Paste

Odor Characteristic Odor
Odor threshold No Data Available
pH Not Applicable
Melting Point No Data Available
Boiling Point Not Applicable
Flash Point Not Applicable
Evaporation rate No Data Available
Flammability (solid, gas) Not Classified
Flammable Limits(LEL) Not Applicable
Flammable Limits(UEL) Not Applicable
Vapor Pressure Not Applicable
Vapor Density Not Applicable
Density 1.5 g/cm³
Specific Gravity 1.5 [Ref Std: WATER=1]
Solubility in Water Negligible
Solubility- non-water No Data Available
Partition coefficient: n-octanol/ water No Data Available
Autoignition temperature No Data Available
 Decomposition temperature No Data Available
Viscosity No Data Available
Percent volatile No Data Available

SECTION 10: Stability and reactivity

10.1. Reactivity
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability
Stable.
10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Light

10.5. Incompatible materials
Not determined

10.6. Hazardous decomposition products

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>None known.</td>
<td></td>
</tr>
</tbody>
</table>

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

**Inhalation:**
This product may have a characteristic odor; however, no adverse health effects are anticipated.

**Skin Contact:**
Contact with the skin during product use is not expected to result in significant irritation.

**Eye Contact:**
Contact with the eyes during product use is not expected to result in significant irritation.

**Ingestion:**
May be harmful if swallowed.

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

<table>
<thead>
<tr>
<th>Acute Toxicity</th>
<th>Route</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall product</td>
<td>Ingestion</td>
<td></td>
<td>No data available; calculated ATE2,000 - 5,000 mg/kg</td>
</tr>
<tr>
<td>Name</td>
<td>Route</td>
<td>Species</td>
<td>Value</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>----------------</td>
<td>---------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silane Treated Ceramic</td>
<td>Dermal</td>
<td></td>
<td>LD50 estimated to be &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Similar compounds</td>
<td></td>
<td></td>
<td>LD50 estimated to be 2,000 - 5,000 mg/kg</td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>Dermal</td>
<td>Rat</td>
<td>LD50 estimated to be &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>Ingestion</td>
<td>Rabbit</td>
<td>LD50 &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>Inhalation-Dust/Mist (4 hours)</td>
<td>Rat</td>
<td>LC50 &gt; 0.691 mg/l</td>
</tr>
<tr>
<td>Diphenyliodonium Hexafluorophosphate</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 &gt; 5,110 mg/kg</td>
</tr>
<tr>
<td>LD50 estimated to be 2,000 - 5,000 mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATE = acute toxicity estimate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serious Eye Damage/Irritation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silane Treated Ceramic</td>
<td></td>
<td></td>
<td>Mild irritant</td>
</tr>
<tr>
<td>Similar compounds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td></td>
<td>In vitro data</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td></td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>Diphenyliodonium Hexafluorophosphate</td>
<td></td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>Skin Sensitization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silane Treated Ceramic</td>
<td></td>
<td></td>
<td>Not classified</td>
</tr>
<tr>
<td>Similar compounds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td></td>
<td>Mouse</td>
<td>Not classified</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td></td>
<td>Human and animal</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory Sensitization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For the component/components, either no data are currently available or the data are not sufficient for classification.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Route</td>
<td>Value</td>
<td></td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>In Vitro</td>
<td>Not mutagenic</td>
<td></td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>In Vitro</td>
<td>Not mutagenic</td>
<td></td>
</tr>
<tr>
<td>Diphenyliodonium Hexafluorophosphate</td>
<td>In Vitro</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td></td>
</tr>
</tbody>
</table>
Carcinogenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silane Treated Ceramic</td>
<td>Inhalation</td>
<td>similar</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>Not Specified</td>
<td>Mouse</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
</tbody>
</table>

Reproductive Toxicity

Reproductive and/or Developmental Effects

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Value</th>
<th>Species</th>
<th>Test Result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>Ingestion</td>
<td>Not classified for development</td>
<td>Rat</td>
<td>NOAEL 1,000 mg/kg/day</td>
<td>during gestation</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>Ingestion</td>
<td>Not classified for female reproduction</td>
<td>Rat</td>
<td>NOAEL 509 mg/kg/day</td>
<td>1 generation</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>Ingestion</td>
<td>Not classified for male reproduction</td>
<td>Rat</td>
<td>NOAEL 497 mg/kg/day</td>
<td>1 generation</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>Ingestion</td>
<td>Not classified for development</td>
<td>Rat</td>
<td>NOAEL 1,350 mg/kg/day</td>
<td>during organogenesis</td>
</tr>
</tbody>
</table>

Target Organ(s)

Specific Target Organ Toxicity - single exposure

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Target Organ(s)</th>
<th>Value</th>
<th>Species</th>
<th>Test Result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenyliodonium Hexafluorophosphate</td>
<td>Inhalation</td>
<td>respiratory irritation</td>
<td>Not classified</td>
<td>Not available</td>
<td>Irritation</td>
<td>Equivocal</td>
</tr>
</tbody>
</table>

Specific Target Organ Toxicity - repeated exposure

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Target Organ(s)</th>
<th>Value</th>
<th>Species</th>
<th>Test Result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silane Treated Ceramic</td>
<td>Inhalation</td>
<td>pulmonary fibrosis</td>
<td>Not classified</td>
<td>similar compounds</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>Ingestion</td>
<td>endocrine system</td>
<td>hematopoietic system</td>
<td>liver</td>
<td>heart</td>
<td>skin</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>Inhalation</td>
<td>respiratory system</td>
<td>Not classified</td>
<td>Human</td>
<td>NOAEL Not available</td>
<td>occupational exposure</td>
</tr>
</tbody>
</table>

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information
Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods
Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations
Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:

Physical Hazards
Not applicable

Health Hazards
Not applicable

15.2. State Regulations
Contact 3M for more information.

15.3. Chemical Inventories
This material contains one or more substances not listed on the TSCA Inventory. Commercial use of this material is regulated by the FDA.

Contact 3M for more information.

15.4. International Regulations
Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.
SECTION 16: Other information

NFPA Hazard Classification
Health: 0  Flammability: 1  Instability: 0  Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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Issue Date: 04/01/20  Supercedes Date: 09/03/19

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