Safety Data Sheet

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Issue Date: 09/05/19
Version Number: 3.01
Supercedes Date: 02/26/15

Product identifier
3M™ ESPE™ VITREBOND PLUS LINER A/B KIT

ID Number(s):
70-2010-5771-1, 70-2010-5772-9, 70-2010-7709-9, 70-2010-9606-5, 70-2014-0922-7, 70-2014-0924-3
7000054373, 7000054372

Recommended use
Dental Product, Dental liner/base

Restrictions on use
For use only by dental professionals

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)

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

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:
21-0047-7, 21-0049-3

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1.1. Product identifier
3M™ ESPE™ VITREBOND™ PLUS LINER LIQUID B

Product Identification Numbers

<table>
<thead>
<tr>
<th>ID Number</th>
<th>UPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>LE-F100-0224-3</td>
<td></td>
</tr>
<tr>
<td>LE-F100-0684-9</td>
<td></td>
</tr>
</tbody>
</table>

1.2. Recommended use and restrictions on use

Recommended use
Dental product, Liner/base

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

Serious Eye Damage/Irritation: Category 2B.
Skin Sensitizer: Category 1.
Carcinogenicity: Category 2.

2.2. Label elements
Signal word
Warning

Symbols
Exclamation mark | Health Hazard |

Pictograms

Hazard Statements
Causes eye irritation.
May cause an allergic skin reaction.
Suspected of causing cancer.

Precautionary Statements
Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.

Response:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
IF exposed or concerned: Get medical advice/attention.

Storage:
Store locked up.

Disposal:
Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

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>COPOLYMER OF ACRYLIC AND ITACONIC ACIDS</td>
<td>25948-33-8</td>
<td>40 - 50</td>
</tr>
<tr>
<td>WATER</td>
<td>7732-18-5</td>
<td>30 - 40</td>
</tr>
<tr>
<td>2-HYDROXYETHYL METHACRYLATE (HEMA)</td>
<td>868-77-9</td>
<td>15 - 25</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>141-78-6</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>DIPHENYLIODONIUM HEXAFLUOROPHOSPHATE</td>
<td>58109-40-3</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>109-99-9</td>
<td>&lt; 0.2</td>
</tr>
</tbody>
</table>

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade
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:
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

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. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment.
6.3. Methods and material for containment and cleaning up
Contain spill. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with water. 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
A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Do not get in eyes. Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities
Store away from heat.

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>TETRAHYDROFURAN (THF)</td>
<td>109-99-9</td>
<td>ACGIH</td>
<td>TWA:50 ppm; STEL:100 ppm</td>
<td>A3: Confirmed animal carcin., SKIN</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>109-99-9</td>
<td>OSHA</td>
<td>TWA:590 mg/m3(200 ppm)</td>
<td></td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>141-78-6</td>
<td>ACGIH</td>
<td>TWA:400 ppm</td>
<td></td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>141-78-6</td>
<td>OSHA</td>
<td>TWA:1400 mg/m3(400 ppm)</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>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Yellow</td>
</tr>
<tr>
<td>Specific Physical Form:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight Acrylate</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No Data Available</td>
</tr>
<tr>
<td>pH</td>
<td>2.5</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 214 °F [Test Method: Closed Cup]</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammable Limits(LEL)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammable Limits(UEL)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&lt;=27 psia [@ 131.0000000000 °F] [Details: MITS data]</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Density</td>
<td>1.14 g/ml</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.14 [Ref Std: WATER=1]</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Complete</td>
</tr>
<tr>
<td>Solubility- non-water</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/ water</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>200 - 300 centistoke</td>
</tr>
<tr>
<td>Volatile Organic Compounds</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Percent volatile</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>VOC Less H2O &amp; Exempt Solvents</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

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
Heat

10.5. Incompatible materials
None known.
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. The information below represents toxicological information associated with the individual components of the uncured product. Once properly mixed and/or cured, the product is safe for its intended use.

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:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

**Skin Contact:**

Contact with the skin during product use is not expected to result in significant irritation. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Eye Contact:**

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Ingestion:**

May be harmful if swallowed.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

**Additional Health Effects:**

**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>Class Description</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>109-99-9</td>
<td>Grp. 2B: Possible human carcinogen</td>
<td>International Agency for Research on Cancer</td>
</tr>
</tbody>
</table>

**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.

### Acute Toxicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall product</td>
<td>Dermal</td>
<td>No data available; calculated ATE &gt;5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Overall product</td>
<td>Ingestion</td>
<td>No data available; calculated ATE2,000 - 5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>COPOLYMER OF ACRYLIC AND ITACONIC ACIDS</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>COPOLYMER OF ACRYLIC AND ITACONIC ACIDS</td>
<td>Dermal</td>
<td>similar health hazards</td>
<td>LD50 estimated to be &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>2-HYDROXYETHYL METHACRYLATE (HEMA)</td>
<td>Dermal</td>
<td>Rabbit</td>
<td>LD50 &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>2-HYDROXYETHYL METHACRYLATE (HEMA)</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 5,564 mg/kg</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Dermal</td>
<td>Rabbit</td>
<td>LD50 &gt; 18,000 mg/kg</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Inhalation-Vapor (4 hours)</td>
<td>Rat</td>
<td>LC50 70.5 mg/l</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 5,620 mg/kg</td>
</tr>
<tr>
<td>DIPHENYLIODONIUM HEXAFLUOROPHOSPHATE</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 32 mg/kg</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Dermal</td>
<td>Rat</td>
<td>LD50 &gt; 2,000 mg/kg</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Inhalation-Vapor (4 hours)</td>
<td>Rat</td>
<td>LC50 54 mg/l</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 3,180 mg/kg</td>
</tr>
</tbody>
</table>

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-HYDROXYETHYL METHACRYLATE (HEMA)</td>
<td>Rabbit</td>
<td>Minimal irritation</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Rabbit</td>
<td>Minimal irritation</td>
</tr>
<tr>
<td>DIPHENYLIODONIUM HEXAFLUOROPHOSPHATE</td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Rabbit</td>
<td>Minimal irritation</td>
</tr>
</tbody>
</table>

### Serious Eye Damage/Irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-HYDROXYETHYL METHACRYLATE (HEMA)</td>
<td>Rabbit</td>
<td>Moderate irritant</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Rabbit</td>
<td>Mild irritant</td>
</tr>
<tr>
<td>DIPHENYLIODONIUM HEXAFLUOROPHOSPHATE</td>
<td>Rabbit</td>
<td>Mild irritant</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Rabbit</td>
<td>Corrosive</td>
</tr>
</tbody>
</table>

### Skin Sensitization

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-HYDROXYETHYL METHACRYLATE (HEMA)</td>
<td>Human and animal</td>
<td>Sensitizing</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Guinea pig</td>
<td>Not classified</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Human and animal</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

### Respiratory Sensitization

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

### Germ Cell Mutagenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-HYDROXYETHYL METHACRYLATE (HEMA)</td>
<td>In vivo</td>
<td>Not mutagen</td>
</tr>
<tr>
<td>2-HYDROXYETHYL METHACRYLATE (HEMA)</td>
<td>In Vitro</td>
<td>Some positive data exist, but the data are not sufficient for classification</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>TETRAHYDROFURAN (THF)</td>
<td>Inhalation</td>
<td>Multiple animal species</td>
<td>Carcinogenic</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>ETHYL ACETATE</td>
<td>Ingestion</td>
<td>Not classified for female reproduction</td>
<td>Rat</td>
<td>NOAEL 1,000 mg/kg/day</td>
<td>2 generation</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Ingestion</td>
<td>Not classified for male reproduction</td>
<td>Rat</td>
<td>NOAEL 1,000 mg/kg/day</td>
<td>49 days</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Ingestion</td>
<td>Not classified for development</td>
<td>Rat</td>
<td>NOAEL 1,000 mg/kg/day</td>
<td>premating &amp; during gestation</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Ingestion</td>
<td>Not classified for female reproduction</td>
<td>Rat</td>
<td>NOAEL 782 mg/kg/day</td>
<td>2 generation</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Ingestion</td>
<td>Not classified for male reproduction</td>
<td>Rat</td>
<td>NOAEL 782 mg/kg/day</td>
<td>2 generation</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Ingestion</td>
<td>Not classified for development</td>
<td>Rat</td>
<td>NOAEL 305 mg/kg/day</td>
<td>2 generation</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Inhalation</td>
<td>Not classified for development</td>
<td>Mouse</td>
<td>NOAEL 1.8 mg/l</td>
<td>during gestation</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>COPOLYMER OF ACRYLIC AND ITACONIC ACIDS</td>
<td>Ingestion</td>
<td>nervous system</td>
<td>Not classified</td>
<td>Rat</td>
<td>NOAEL 5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Inhalation</td>
<td>central nervous</td>
<td>May cause drowsiness or dizziness</td>
<td>Human</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Inhalation</td>
<td>respiratory</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td>Human</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Ingestion</td>
<td>central nervous</td>
<td>May cause drowsiness or dizziness</td>
<td>Human</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>DIPHENYLDIODONIUM HEXAFLUOROPHOSPHATE</td>
<td>Inhalation</td>
<td>respiratory</td>
<td>Not classified</td>
<td>Not available</td>
<td>Irritation</td>
<td>Equivocal</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Inhalation</td>
<td>central nervous</td>
<td>May cause drowsiness or dizziness</td>
<td>Human</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Inhalation</td>
<td>respiratory</td>
<td>May cause respiratory irritation</td>
<td>Human</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Inhalation</td>
<td>respiratory</td>
<td>Not classified</td>
<td>Rabbit</td>
<td>NOAEL 2.9 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Ingestion</td>
<td>central nervous</td>
<td>May cause drowsiness or dizziness</td>
<td>Rat</td>
<td>NOAEL 180 mg/kg</td>
<td>not applicable</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</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYL ACETATE</td>
<td>Ingestion</td>
<td>central nervous</td>
<td>May cause drowsiness or dizziness</td>
<td>Rat</td>
<td>NOAEL 1.8 mg/l</td>
<td>not applicable</td>
</tr>
<tr>
<td>Chemical</td>
<td>Route of Exposure</td>
<td>Effect(s)</td>
<td>Classification</td>
<td>Species</td>
<td>NOAEL</td>
<td>Duration</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------</td>
<td>---------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>COPOLYMER OF ACRYLIC AND ITACONIC ACIDS</td>
<td>Ingestion</td>
<td>endocrine system</td>
<td>hematopoietic system</td>
<td>liver</td>
<td>Not classified</td>
<td>Rat</td>
</tr>
<tr>
<td>COPOLYMER OF ACRYLIC AND ITACONIC ACIDS</td>
<td>Ingestion</td>
<td>heart</td>
<td>bone, teeth, nails, and/or hair</td>
<td>immune system</td>
<td>muscles</td>
<td>nervous system</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Inhalation</td>
<td>endocrine system</td>
<td>liver</td>
<td>nervous system</td>
<td>Not classified</td>
<td>Rat</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Inhalation</td>
<td>hematopoietic system</td>
<td>Not classified</td>
<td>Rabbit</td>
<td>LOAEL 16 mg/l</td>
<td>40 days</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Ingestion</td>
<td>hematopoietic system</td>
<td>liver</td>
<td>kidney and/or bladder</td>
<td>Not classified</td>
<td>Rat</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Inhalation</td>
<td>liver</td>
<td>Not classified</td>
<td>Some positive data exist, but data are not sufficient for classification</td>
<td>Rat</td>
<td>NOAEL 0.6 mg/l</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Inhalation</td>
<td>respiratory system</td>
<td>Not classified</td>
<td>Rat</td>
<td>NOAEL 2.9 mg/l</td>
<td>12 weeks</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Inhalation</td>
<td>kidney and/or bladder</td>
<td>Not classified</td>
<td>Rat</td>
<td>NOAEL 0.6 mg/l</td>
<td>105 weeks</td>
</tr>
<tr>
<td>TETRAHYDROFURAN (THF)</td>
<td>Ingestion</td>
<td>liver</td>
<td>Not classified</td>
<td>Some positive data exist, but data are not sufficient for classification</td>
<td>Rat</td>
<td>NOAEL Not available</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.

As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Dispose of completely cured (or polymerized) material in a permitted industrial waste 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
Carcinogenicity
Respiratory or Skin Sensitization
Serious eye damage or eye irritation

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: 2 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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Supercedes Date: 01/22/18

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SECTION 1: Identification

1.1. Product identifier
3M™ VitreBond™ Plus Light Cure Glass Ionomer Liner/Base Paste, Part A

Product Identification Numbers
LE-F100-0224-5, LE-F100-0224-6, LE-F100-0688-2

1.2. Recommended use and restrictions on use

Recommended use
Dental product, Liner/base

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
Serious Eye Damage/Irritation: Category 2B.
Skin Sensitizer: Category 1.

2.2. Label elements
Signal word
Warning
Symbols
Exclamation mark |

Pictograms

Hazard Statements
Causes eye irritation.
May cause an allergic skin reaction.

Precautionary Statements

Prevention:
Wear protective gloves.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.

Response:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.

Disposal:
Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

76% of the mixture consists of ingredients of unknown acute oral toxicity.

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 Glass</td>
<td>None</td>
<td>70 - 80 Trade Secret *</td>
</tr>
<tr>
<td>2-Hydroxyethyl Methacrylate (HEMA)</td>
<td>868-77-9</td>
<td>10 - 20 Trade Secret *</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>1 - 10 Trade Secret *</td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>1565-94-2</td>
<td>&lt; 2 Trade Secret *</td>
</tr>
<tr>
<td>Silane Treated Silica</td>
<td>68909-20-6</td>
<td>&lt; 2 Trade Secret *</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:
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

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. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

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
A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate
commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not get in eyes.

7.2. Conditions for safe storage including any incompatibilities
Store away from heat.

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>68909-20-6</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

Appearance
Physical state: Solid
Color: Off-White, Yellow
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
Not Applicable

### Flammability (solid, gas)
Not Classified

### Flammable Limits(LEL)
Not Applicable

### Flammable Limits(UEL)
Not Applicable

### Vapor Pressure
Not Applicable

### Vapor Density
Not Applicable

### Density
1.9 g/cm³

### Specific Gravity
1.9  
[Ref Std: WATER=1]

### Solubility in Water
Negligible

### Solubility- non-water
No Data Available

### Partition coefficient: n-octanol/ water
Not Applicable

### Autoignition temperature
Not Applicable

### Decomposition temperature
No Data Available

### Viscosity
$$\geq$$300,000 centistoke  
[Test Method: Brookfield]

### Volatile Organic Compounds
Not Applicable

### Percent volatile
Negligible

### VOC Less H₂O & Exempt Solvents
Not Applicable

## 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**
Heat

**10.5. Incompatible materials**
None known.

**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. The information below represents toxicological information associated with the individual components of the uncured product. Once properly mixed and/or cured, the product is safe for its intended use.

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. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Eye Contact:**
Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Ingestion:**
Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

### 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>Name</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 ATE &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>2-Hydroxyethyl Methacrylate (HEMA)</td>
<td>Dermal</td>
<td>Rabbit</td>
<td>LD50 &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>2-Hydroxyethyl Methacrylate (HEMA)</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 5,564 mg/kg</td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>Dermal</td>
<td>Professional judgement</td>
<td>LD50 estimated to be &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 11,700 mg/kg</td>
</tr>
<tr>
<td>Silane Treated Silica</td>
<td>Dermal</td>
<td>Rabbit</td>
<td>LD50 &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Silane Treated Silica</td>
<td>Inhalation-Dust/Mist (4 hours)</td>
<td>Rat</td>
<td>LC50 &gt; 0.691 mg/l</td>
</tr>
<tr>
<td>Silane Treated Silica</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 &gt; 5,110 mg/kg</td>
</tr>
</tbody>
</table>

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Hydroxyethyl Methacrylate (HEMA)</td>
<td>Rabbit</td>
<td>Minimal irritation</td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>Silane Treated Silica</td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
</tbody>
</table>

### Serious Eye Damage/Irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Hydroxyethyl Methacrylate (HEMA)</td>
<td>Rabbit</td>
<td>Moderate irritant</td>
</tr>
</tbody>
</table>
### Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)
- **In vitro data**: No significant irritation

### Silane Treated Silica
- **Species**: Rabbit
- **Value**: No significant irritation

#### Skin Sensitization

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Hydroxyethyl Methacrylate (HEMA)</td>
<td>Human and animal</td>
<td>Sensitizing</td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>Mouse</td>
<td>Not classified</td>
</tr>
<tr>
<td>Silane Treated Silica</td>
<td>Human and animal</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

#### Respiratory Sensitization

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

#### Germ Cell Mutagenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Hydroxyethyl Methacrylate (HEMA)</td>
<td>In vivo</td>
<td>Not mutagenic</td>
</tr>
<tr>
<td>2-Hydroxyethyl Methacrylate (HEMA)</td>
<td>In Vitro</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>In Vitro</td>
<td>Not mutagenic</td>
</tr>
<tr>
<td>Silane Treated Silica</td>
<td>In Vitro</td>
<td>Not mutagenic</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 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>
</tr>
</thead>
<tbody>
<tr>
<td>2-Hydroxyethyl Methacrylate (HEMA)</td>
<td>Ingestion</td>
<td>Not classified for female reproduction</td>
</tr>
<tr>
<td>2-Hydroxyethyl Methacrylate (HEMA)</td>
<td>Ingestion</td>
<td>Not classified for male reproduction</td>
</tr>
<tr>
<td>2-Hydroxyethyl Methacrylate (HEMA)</td>
<td>Ingestion</td>
<td>Not classified for development</td>
</tr>
<tr>
<td>Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)</td>
<td>Ingestion</td>
<td>Not classified for development</td>
</tr>
<tr>
<td>Silane Treated Silica</td>
<td>Ingestion</td>
<td>Not classified for female reproduction</td>
</tr>
<tr>
<td>Silane Treated Silica</td>
<td>Ingestion</td>
<td>Not classified for male reproduction</td>
</tr>
<tr>
<td>Silane Treated Silica</td>
<td>Ingestion</td>
<td>Not classified for development</td>
</tr>
</tbody>
</table>

#### Target Organ(s)

### Specific Target Organ Toxicity - single exposure

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

### Specific Target Organ Toxicity - repeated exposure

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Target Organ(s)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Species</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA) | Ingestion | endocrine system | hematopoietic system | liver | heart | skin | gastrointestinal tract | bone, teeth, nails, and/or hair | immune system | muscles | nervous system | eyes | kidney and/or bladder | respiratory system | vascular system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 90 days

Silane Treated Silica | Inhalation | respiratory system | silicosis | Not classified | Human | NOAEL Not available | occupational exposure

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.

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
Respiratory or Skin Sensitization
Serious eye damage or eye irritation

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: 2  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.

Document Group: 21-0049-3  Version Number: 7.02
Issue Date: 04/06/20  Supersedes Date: 01/19/18

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