Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier
3M™ ESPE™ CAVIT™

Product Identification Numbers

1.2. Recommended use and restrictions on use

Recommended use
Dental product, Temporary dental restorative

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.

2.3. Hazards not otherwise classified
None.

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>ZINC OXIDE</td>
<td>1314-13-2</td>
<td>40 - 60</td>
</tr>
<tr>
<td>SULFURIC ACID, CALCIUM SALT, HYDRATE</td>
<td>10034-76-1</td>
<td>15 - 35</td>
</tr>
<tr>
<td>ETHYLENE BIS(OXYETHYLENE)DIACETATE</td>
<td>111-21-7</td>
<td>10 - 20</td>
</tr>
<tr>
<td>ZINC SULFATE</td>
<td>7733-02-0</td>
<td>1 - 20</td>
</tr>
<tr>
<td>POLY(VINYL ACETATE)</td>
<td>9003-20-7</td>
<td>1 - 10</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:
No need for first aid is anticipated.

Skin Contact:
Wash with soap and water. 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.

<table>
<thead>
<tr>
<th>Hazardous Decomposition or By-Products</th>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
</table>
Carbon monoxide During Combustion
Carbon dioxide During Combustion
Irritant Vapors or Gases During Combustion

5.3. Special protective actions for fire-fighters
No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
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.

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. Avoid release to the environment.

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>Plaster of Paris (Ca(SO4).1/2H2O)</td>
<td>10034-76-1</td>
<td>OSHA</td>
<td>TWA(as total dust):15 mg/m3; TWA(respirable fraction):5 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Sulfuric acid, calcium salt (1:1)</td>
<td>10034-76-1</td>
<td>OSHA</td>
<td>TWA(as total dust):15 mg/m3; TWA(respirable fraction):5 mg/m3</td>
<td></td>
</tr>
<tr>
<td>SULFURIC ACID, CALCIUM SALT, HYDRATE</td>
<td>10034-76-1</td>
<td>ACGIH</td>
<td>TWA(inhalable fraction):10 mg/m3</td>
<td></td>
</tr>
<tr>
<td>ZINC OXIDE</td>
<td>1314-13-2</td>
<td>ACGIH</td>
<td>TWA(respirable fraction):2 mg/m3; STEL(respirable fraction):10 mg/m3</td>
<td></td>
</tr>
<tr>
<td>ZINC OXIDE</td>
<td>1314-13-2</td>
<td>OSHA</td>
<td>TWA(as fume):5 mg/m3; TWA(as total dust):15 mg/m3; TWA(respirable fraction):5 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>
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

General Physical Form: Solid
Specific Physical Form: Paste
Odor, Color, Grade: Slight odor of acetic acid, pink, paste
Odor threshold: No Data Available
pH: Not Applicable
Melting point: No Data Available
Boiling 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: 2.6 g/cm³ - 3 g/cm³
Specific Gravity: 2.6 - 3 [Ref Std: WATER=1]
Solubility- non-water: No Data Available
Partition coefficient: n-octanol/ water: Not Applicable
Autoignition temperature: Not Applicable
Decomposition temperature: No Data Available
Viscosity: No Data Available
Molecular weight: No Data Available
Volatile Organic Compounds: Not Applicable
Percent volatile: Not Applicable
VOC Less H₂O & Exempt Solvents: Not Applicable

SECTION 10: Stability and reactivity
10.1. Reactivity
This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
None known.

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>None known.</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.

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

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.

**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>Ingestion</td>
<td>No data available; calculated ATE &gt; 5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>ZINC OXIDE</td>
<td>Dermal</td>
<td>LD50 estimated to be &gt; 5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>ZINC OXIDE</td>
<td>Inhalation-Dust/Mist (4 hours)</td>
<td>Rat</td>
<td>LC50 &gt; 5.7 mg/l</td>
</tr>
<tr>
<td>ZINC OXIDE</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>SULFURIC ACID, CALCIUM SALT, HYDRATE</td>
<td>Dermal</td>
<td>Professio nal judgement</td>
<td>LD50 estimated to be &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>SULFURIC ACID, CALCIUM SALT, HYDRATE</td>
<td>Ingestion</td>
<td>similar compounds</td>
<td>LD50 estimated to be &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>ETHYLENE BIS(OXYETHYLENE)DIACETATE</td>
<td>Dermal</td>
<td>Rabbit</td>
<td>LD50 9.040 mg/kg</td>
</tr>
<tr>
<td>ETHYLENE BIS(OXYETHYLENE)DIACETATE</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 15.594 mg/kg</td>
</tr>
<tr>
<td>POLY(VINYL ACETATE)</td>
<td>Dermal</td>
<td>LD50 estimated to be &gt; 5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>POLY(VINYL ACETATE)</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 &gt; 9,700 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>ZINC OXIDE</td>
<td>Human and animal</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>POLY(VINYL ACETATE)</td>
<td>Rabbit</td>
<td>Mild irritant</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>ZINC OXIDE</td>
<td>Rabbit</td>
<td>Mild irritant</td>
</tr>
<tr>
<td>POLY(VINYL ACETATE)</td>
<td>similar health hazards</td>
<td>Moderate irritant</td>
</tr>
</tbody>
</table>

**Skin Sensitization**

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZINC OXIDE</td>
<td>Guinea pig</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
<tr>
<td>POLY(VINYL ACETATE)</td>
<td>Human</td>
<td>Not sensitizing</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>ZINC OXIDE</td>
<td>In Vitro</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
<tr>
<td>ZINC OXIDE</td>
<td>In vivo</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>
</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>ZINC OXIDE</td>
<td>Ingestion</td>
<td>Some positive reproductive/developmental data exist, but the data are not sufficient for classification</td>
<td>Multiple animal species</td>
<td>NOAEL 125 mg/kg/day</td>
<td>premating &amp; during gestation</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>
<th>Species</th>
<th>Test Result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZINC OXIDE</td>
<td>Ingestion</td>
<td>nervous system</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td>Rat</td>
<td>NOAEL 600 mg/kg/day</td>
<td>10 days</td>
</tr>
<tr>
<td>ZINC OXIDE</td>
<td>Ingestion</td>
<td>endocrine system</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td>Other</td>
<td>NOAEL 500 mg/kg/day</td>
<td>6 months</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 waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.
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.

311/312 Hazard Categories:
Fire Hazard - No    Pressure Hazard - No    Reactivity Hazard - No    Immediate Hazard - No    Delayed Hazard - No

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZINC OXIDE (ZINC COMPOUNDS)</td>
<td>1314-13-2</td>
<td>40 - 60</td>
</tr>
<tr>
<td>ZINC SULFATE (ZINC COMPOUNDS)</td>
<td>7733-02-0</td>
<td>1 - 20</td>
</tr>
</tbody>
</table>

15.2. State Regulations
Contact 3M for more information.

15.3. Chemical Inventories
The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

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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