

Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3MTM ESPETM CAVITTM-G

Product Identification Numbers

70-2011-0466-1, 70-2011-2000-6

1.2. Recommended use and restrictions on use

Recommended use

Dental product, Temporary restorative

Restrictions on use

For use only by dental professionals

1.3. Supplier's details

3M **MANUFACTURER:**

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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Ingredient	C.A.S. No.	% by Wt
ZINC OXIDE	1314-13-2	30 - 50 Trade Secret *
TALC	14807-96-6	10 - 30 Trade Secret *
BARIUM SULFATE	7727-43-7	10 - 20 Trade Secret *
ETHYLENE BIS(OXYETHYLENE)DIACETATE	111-21-7	10 - 20 Trade Secret *
ZINC SULFATE	7733-02-0	1 - 20 Trade Secret *
POLY(VINYL ACETATE)	9003-20-7	1 - 10 Trade Secret *
SULURIC ACID, CALCIUM SALT, HYDRATE	10034-76-1	1 - 10 Trade Secret *

^{*}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.

Hazardous Decomposition or By-Products

<u>Substance</u> <u>Condition</u>

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Carbon monoxide Carbon dioxide Irritant Vapors or Gases During Combustion During Combustion 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.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Plaster of Paris	10034-76-1	OSHA	TWA(as total dust):15	
(Ca(SO4).1/2H2O)			mg/m3;TWA(respirable	
			fraction):5 mg/m3	
Sulfuric acid, calcium salt (1:1)	10034-76-1	OSHA	TWA(as total dust):15	
			mg/m3;TWA(respirable	
			fraction):5 mg/m3	
SULURIC ACID, CALCIUM	10034-76-1	ACGIH	TWA(inhalable fraction):10	
SALT, HYDRATE			mg/m3	
ZINC OXIDE	1314-13-2	ACGIH	TWA(respirable fraction):2	
			mg/m3;STEL(respirable	
			fraction):10 mg/m3	
ZINC OXIDE	1314-13-2	OSHA	TWA(as fume):5	
			mg/m3;TWA(as total dust):15	
			mg/m3;TWA(respirable	
			fraction):5 mg/m3	

TALC	14807-96-6	ACGIH	TWA(respirable fraction):2	A4: Not class. as human
			mg/m3	carcin
TALC	14807-96-6	CMRG	TWA(as respirable dust):0.5	
			mg/m3	
TALC	14807-96-6	OSHA	TWA concentration(as total	
			dust):0.3 mg/m3;TWA	
			concentration(respirable):0.1	
			mg/m3(2.4 millions of	
			particles/cu. ft.);TWA:20	
			millions of particles/cu. ft.	
BARIUM SULFATE	7727-43-7	ACGIH	TWA(inhalable fraction):5	
			mg/m3	
BARIUM SULFATE	7727-43-7	OSHA	TWA(as total dust):15	
			mg/m3;TWA(respirable	
			fraction):5 mg/m3	

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

General Physical Form: Solid
Specific Physical Form: Paste

Odor, Color, Grade: Slight odor of acetic acid, grey, paste

Odor thresholdNo Data AvailablepHNot ApplicableMelting pointNo Data AvailableBoiling PointNot Applicable

Flash Point Flash point > 93 °C (200 °F)

Evaporation rateNo Data AvailableFlammability (solid, gas)Not ClassifiedFlammable Limits(LEL)Not Applicable

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Flammable Limits(UEL)

Vapor Pressure

Vapor Density

Not Applicable

Not Applicable

Not Applicable

2.6 g/cm3 - 3 g/cm3

Specific Gravity 2.6 - 2.8 [Ref Std: WATER=1]

Solubility in Water Nil

Solubility- non-water No Data Available Partition coefficient: n-octanol/ water Not Applicable **Autoignition temperature** Not Applicable No Data Available **Decomposition temperature** No Data Available Viscosity **Volatile Organic Compounds** Not Applicable Not Applicable Percent volatile Not Applicable **VOC Less H2O & Exempt Solvents**

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

<u>Substance</u> <u>Condition</u>

None known.

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

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
ZINC OXIDE	Dermal		LD50 estimated to be > 5,000 mg/kg
ZINC OXIDE	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 5.7 mg/l
ZINC OXIDE	Ingestion	Rat	LD50 > 5,000 mg/kg
BARIUM SULFATE	Ingestion	Rat	LD50 > 15,000 mg/kg
ETHYLENE BIS(OXYETHYLENE)DIACETATE	Dermal	Rabbit	LD50 9,040 mg/kg
ETHYLENE BIS(OXYETHYLENE)DIACETATE	Ingestion	Rat	LD50 15,594 mg/kg
TALC	Dermal		LD50 estimated to be > 5,000 mg/kg
TALC	Ingestion		LD50 estimated to be > 5,000 mg/kg
SULURIC ACID, CALCIUM SALT, HYDRATE	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
SULURIC ACID, CALCIUM SALT, HYDRATE	Ingestion	similar compoun ds	LD50 estimated to be > 5,000 mg/kg
POLY(VINYL ACETATE)	Dermal		LD50 estimated to be > 5,000 mg/kg
POLY(VINYL ACETATE)	Ingestion	Rat	LD50 > 9,700 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
ZINC OXIDE	Human and	No significant irritation
	animal	
TALC	Rabbit	No significant irritation
POLY(VINYL ACETATE)	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
ZINC OXIDE	Rabbit	Mild irritant
BARIUM SULFATE	Rabbit	No significant irritation

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TALC	Rabbit	No significant irritation
POLY(VINYL ACETATE)	similar	Moderate irritant
	health	
	hazards	

Skin Sensitization

Name	Species	Value
ZINC OXIDE	Guinea	Some positive data exist, but the data are not
	pig	sufficient for classification
POLY(VINYL ACETATE)	Human	Not sensitizing

Respiratory Sensitization

N	ame	Species	Value
	ALC	Human	Not sensitizing

Germ Cell Mutagenicity

Name	Route	Value
ZINC OXIDE	In Vitro	Some positive data exist, but the data are not sufficient for classification
ZINC OXIDE	In vivo	Some positive data exist, but the data are not sufficient for classification
TALC	In Vitro	Not mutagenic
TALC	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
TALC	Inhalation	Rat	Some positive data exist, but the data are not
			sufficient for classification
POLY(VINYL ACETATE)	Not	Multiple	Not carcinogenic
	Specified	animal	
		species	

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
ZINC OXIDE	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation
TALC	Ingestion	Not toxic to development	Rat	NOAEL 1,600 mg/kg	during organogenesi s

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

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ZINC OXIDE	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 600 mg/kg/day	10 days
ZINC OXIDE	Ingestion	endocrine system hematopoietic system kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Other	NOAEL 500 mg/kg/day	6 months

BARIUM SULFATE	Inhalation	pneumoconiosis	Some positive data exist, but the	Human	NOAEL Not	occupational
			data are not sufficient for		available	exposure
			classification			
TALC	Inhalation	pneumoconiosis	Causes damage to organs through	Human	NOAEL Not	occupational
			prolonged or repeated exposure		available	exposure
TALC	Inhalation	pulmonary fibrosis	Some positive data exist, but the	Rat	NOAEL 18	113 weeks
		respiratory system	data are not sufficient for		mg/m3	
			classification			

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):

<u>Ingredient</u>	C.A.S. No	<u>% by Wt</u>	
ZINC SULFATE (ZINC COMPOUNDS)	7733-02-0	1 - 20	
ZINC OXIDE (ZINC COMPOUNDS)	1314-13-2	30 - 50	

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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