



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Safe Work Australia, December 2011)

SECTION 1: Identification

1.1. Product identifier

3M™ ESPE™ CAVIT™-W

Product Identification Numbers

70-2011-0465-3 70-2011-3641-6

1.2. Recommended use and restrictions on use

Recommended use

Dental product, Temporary dental restorative

For use only by dental professionals.

Restrictions on use

For use by dental professionals only.

1.3. Supplier's details

Address: 3M Australia - Building A, 1 Rivett Road, North Ryde NSW 2113

Telephone: 136 136

E Mail: productinfo.au@mmm.com

Website: www.3m.com.au

1.4. Emergency telephone number

EMERGENCY: 1800 097 146 (Australia only)

SECTION 2: Hazard identification

This product is NOT classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011.

Refer to Section 14 of this Safety Data Sheets for product Dangerous Goods Classification.

2.1. Classification of the substance or mixture

Not applicable.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

2.3. Other assigned/identified product hazards

None known.

2.4. Other hazards which do not result in classification

Very toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Weight
Zinc Oxide	1314-13-2	20 - 50
Barium sulphate	7727-43-7	10 - 30
SULFURIC ACID, CALCIUM SALT, HYDRATE	10034-76-1	10 - 30
2,2'-[Ethane-1,2-diylbis(oxy)]bisethyl diacetate	111-21-7	10 - 20
Zinc sulphate	7733-02-0	1 - 20
Poly(vinyl acetate)	9003-20-7	1 - 10

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**Substance**

Carbon monoxide.
Carbon dioxide.
Irritant vapours or gases.

Condition

During combustion.
During combustion.
During combustion.

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

Hazchem Code: 2Z

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	CAS Nbr	Agency	Limit type	Additional comments
Sulfuric acid, calcium salt (1:1)	10034-76-1	Australia OELs	TWA(Inspirable dust)(8 hours):10 mg/m ³	
SULFURIC ACID, CALCIUM SALT, HYDRATE	10034-76-1	ACGIH	TWA(inhalable fraction):10 mg/m ³	
Zinc Oxide	1314-13-2	ACGIH	TWA(respirable fraction):2	

			mg/m ³ ;STEL(respirable fraction):10 mg/m ³	
Zinc Oxide	1314-13-2	Australia OELs	TWA(as fume)(8 hours):5 mg/m ³ ;TWA(Inspirable dust)(8 hours):10 mg/m ³ ;STEL(as fume)(15 minutes):10 mg/m ³	
Barium sulphate	7727-43-7	ACGIH	TWA(inhalable fraction):5 mg/m ³	
Barium sulphate	7727-43-7	Australia OELs	TWA(Inspirable dust)(8 hours):10 mg/m ³	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

Australia OELs : Australia. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment

CMRG : Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

Sen: Sensitiser

Sk: Absorption through the skin may be a significant source of exposure.

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.

Select and use eye protection in accordance with AS/NZS 1336. Eye protection should comply with the performance specifications of AS/NZS 1337.

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

Physical state	Solid.
Specific Physical Form:	Paste
Appearance/Odour	Slight odour of acetic acid,;white, paste
Odour threshold	<i>No data available.</i>
pH	<i>Not applicable.</i>
Melting point/Freezing point	<i>No data available.</i>
Boiling point/Initial boiling point/Boiling range	<i>Not applicable.</i>
Flash point	Flash point > 93 °C (200 °F)
Evaporation rate	<i>No data available.</i>
Flammability (solid, gas)	Not classified

Flammable Limits(LEL)	<i>Not applicable.</i>
Flammable Limits(UEL)	<i>Not applicable.</i>
Vapour pressure	<i>Not applicable.</i>
Vapour density	<i>Not applicable.</i>
Density	2.6 g/cm ³ - 3 g/cm ³
Relative density	2.6 - 2.8 [Ref Std: WATER=1]
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>Not applicable.</i>
Autoignition temperature	<i>Not applicable.</i>
Decomposition temperature	<i>No data available.</i>
Viscosity	<i>No data available.</i>
Volatile organic compounds (VOC)	<i>Not applicable.</i>
Percent volatile	<i>Not applicable.</i>
VOC less H ₂ O & exempt solvents	<i>Not applicable.</i>

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. Conditions to avoid

None known.

10.4. Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Substance

Condition

None known.

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 labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

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 odour; 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 diarrhoea.

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
SULFURIC ACID, CALCIUM SALT, HYDRATE	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
SULFURIC ACID, CALCIUM SALT, HYDRATE	Ingestion	similar compounds	LD50 estimated to be > 5,000 mg/kg
Barium sulphate	Dermal		LD50 estimated to be > 5,000 mg/kg
Barium sulphate	Ingestion	Rat	LD50 > 15,000 mg/kg
2,2'-[Ethane-1,2-diylbis(oxy)]bisethyl diacetate	Dermal	Rabbit	LD50 9,040 mg/kg
2,2'-[Ethane-1,2-diylbis(oxy)]bisethyl diacetate	Ingestion	Rat	LD50 15,594 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 animal	No significant irritation
Poly(vinyl acetate)	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
Zinc Oxide	Rabbit	Mild irritant
Barium sulphate	Rabbit	No significant irritation
Poly(vinyl acetate)	similar health hazards	Moderate irritant

Skin Sensitisation

Name	Species	Value
Zinc Oxide	Guinea pig	Some positive data exist, but the data are not sufficient for classification
Poly(vinyl acetate)	Human	Not sensitizing

Respiratory Sensitisation

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

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

Carcinogenicity

Name	Route	Species	Value
Poly(vinyl acetate)	Not specified.	Multiple animal species	Not carcinogenic

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	prematuring & during gestation

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 sulphate	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	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.

Exposure Levels

Refer Section 8.1 Control Parameters of this Safety Data Sheet.

Interactive Effects

Not determined.

SECTION 12: Ecological 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. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

GHS Acute 1: Very toxic to aquatic life.

Chronic aquatic hazard:

GHS Chronic 1: Very toxic to aquatic life with long lasting effects.

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Zinc Oxide	1314-13-2	Chinook Salmon	Experimental	96 hours	LC50	0.23 mg/l
Zinc Oxide	1314-13-2	Water flea	Experimental	48 hours	EC50	3.2 mg/l
Zinc Oxide	1314-13-2	Green Algae	Experimental	72 hours	EC50	0.046 mg/l
Zinc Oxide	1314-13-2	Green Algae	Experimental	72 hours	NOEC	0.021 mg/l
SULFURIC ACID, CALCIUM SALT, HYDRATE	10034-76-1	Water flea	Laboratory	48 hours	EC50	>1,910 mg/l
Barium sulphate	7727-43-7	Fish other	Experimental	96 hours	LC50	>100 mg/l
2,2'-[Ethane-1,2-diylbis(oxy)]bisethyl diacetate	111-21-7	Zebra Fish	Estimated	96 hours	LC50	50 mg/l
2,2'-[Ethane-1,2-diylbis(oxy)]bisethyl diacetate	111-21-7	Inland Silverside	Estimated	96 hours	LC50	78 mg/l
Zinc sulphate	7733-02-0	Crustacea	Experimental	21 days	NOEC	0.11 mg/l
Zinc sulphate	7733-02-0	Fish	Experimental	28 days	NOEC	0.09 mg/l
Zinc sulphate	7733-02-0	Crustacea	Experimental	48 hours	EC50	0.099 mg/l
Zinc sulphate	7733-02-0	Water flea	Experimental	48 hours	EC50	0.15 mg/l
Zinc sulphate	7733-02-0	Algae	Experimental	72 hours	NOEC	0.05 mg/l
Zinc sulphate	7733-02-0	Green Algae	Experimental	72 hours	IC50	0.11 mg/l
Zinc sulphate	7733-02-0	Fish	Experimental	96 hours	LC50	0.021 mg/l
Poly(vinyl acetate)	9003-20-7		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
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2,2'-[Ethane-1,2-diylbis(oxy)]bisethyl diacetate	111-21-7	Estimated Photolysis		Photolytic half-life (in air)	1 days (t 1/2)	Other methods
Zinc sulphate	7733-02-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Barium sulphate	7727-43-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,2'-[Ethane-1,2-diylbis(oxy)]bisethyl diacetate	111-21-7	Estimated Hydrolysis		Hydrolytic half-life	152 days (t 1/2)	Other methods
Zinc Oxide	1314-13-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,2'-[Ethane-1,2-diylbis(oxy)]bisethyl diacetate	111-21-7	Estimated Biodegradation	28 days	BOD	77 % weight	OECD 301C - MITI test (I)
2,2'-[Ethane-1,2-diylbis(oxy)]bisethyl diacetate	111-21-7	Estimated Biodegradation	28 days	BOD	101 % weight	OECD 301C - MITI test (I)
SULFURIC ACID, CALCIUM SALT, HYDRATE	10034-76-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Poly(vinyl acetate)	9003-20-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Poly(vinyl acetate)	9003-20-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
SULFURIC ACID, CALCIUM SALT, HYDRATE	10034-76-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Zinc Oxide	1314-13-2	Experimental BCF-Carp	56 days	Bioaccumulation factor	<217	OECD 305E - Bioaccumulation flow-through fish test
Barium sulphate	7727-43-7	Data not available or	N/A	N/A	N/A	N/A

		insufficient for classification				
2,2'-[Ethane-1,2-diylbis(oxy)]bisethyl diacetate	111-21-7	Estimated Bioconcentration		Bioaccumulation factor	2.6	Other methods
Zinc sulphate	7733-02-0	Experimental BCF - Other	40 days	Bioaccumulation factor	13900	Other methods

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes.

SECTION 14: Transport Information

Australian Dangerous Goods Code (ADG) - Road/Rail Transport

UN No.: UN3077

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Class/Division: Not applicable.

Sub Risk: Not applicable.

Packing Group: III

Hazchem Code: 2Z

IERG: 47

International Air Transport Association (IATA) - Air Transport

UN No.: UN3077

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Class/Division: Not applicable.

Sub Risk: Not applicable.

Packing Group: III

Special Instructions: Not restricted, as per Special Provision A197.

International Maritime Dangerous Goods Code (IMDG)- Marine Transport

UN No.: UN3077

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Class/Division: Not applicable.

Sub Risk: Not applicable.

Packing Group: III

Marine Pollutant: Not applicable.

Special Instructions: Not restricted, as per IMDG code 2.10.2.7, marine pollutant exception.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Australian Inventory Status:

This product is regulated by the Therapeutics Goods Administration and is exempt from compliance with the Industrial Chemicals (Notification and Assessment) Act 1989 as amended.

Poison Schedule: This product is not a scheduled poison according to the criteria of the Standard for the Uniform Scheduling of Medicines and Poisons.

SECTION 16: Other information

Revision information:

Conversion to GHS format SDS.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Safety Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

Greenguard® is a United States based program. The 'Low VOC' reference related to United States Federal and State regulations exemptions for some solvents.

3M Australia SDSs are available at www.3m.com.au