



## TRANSPORT INFORMATION

The Dangerous Goods Classification for the complete Kit is provided below.

**UN No.:** UN3082

**Proper shipping name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., ( Acetic Acid, Copper (2+) Salt, Monohydrate )

**Class/Division:** 9

**Packing Group:** III

**Marine Pollutant:** Not applicable.

**Hazchem Code:** -3Z

**IERG:** 47

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

**Special Instructions:** Not restricted, environmentally hazardous substance exception.

**International Air Transport Association (IATA)- Air Transport**

**Special Instructions:** Not restricted, as per Special Provision A197, environmentally hazardous substance exception.

**International Maritime Dangerous Goods Code (IMDG)- Marine Transport**

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

**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](http://www.3m.com.au)**



## Safety Data Sheet

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<b>Issue Date:</b>	15/09/2021	<b>Supersedes date:</b>	01/02/2021

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™ RelyX™ Unicem Aplicap™/Maxicap™ Powder

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Dental Product, Universal luting material.

##### 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 classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011, in accordance with applicable State and Territory legislation.

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

#### 2.1. Classification of the substance or mixture

Serious Eye Damage/Irritation: Category 2.

#### 2.2. Label elements

The label elements below were prepared in accordance with the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals (Safe Work Australia, December 2011). This information may be different from the actual product label.

#### Signal word

Warning

**Symbols**

Exclamation mark |

**Pictograms**



**Hazard statements**

H319 Causes serious eye irritation.

**Precautionary statements**

**Prevention:**

P264 Wash thoroughly after handling.

**Response:**

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337 + P313 IF eye irritation persists: Get medical advice/attention.

**2.3. Other assigned/identified product hazards**

None known.

**2.4. Other hazards which do not result in classification**

May be harmful if swallowed.  
 Causes mild skin irritation.

**SECTION 3: Composition/information on ingredients**

This material is a mixture.

Ingredient	CAS Nbr	% by Weight
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2-methyl-3-(trimethoxysilyl)propyl ester (2530-85-0), bulk material	None	85 - 95
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	122334-95-6	1 - 10
Substituted pyrimidine	72846-00-5	1 - 5
Calcium dihydroxide	1305-62-0	< 3
Sodium Persulphate	7775-27-1	< 1
Titanium dioxide	13463-67-7	< 0.5

**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**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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**

No critical symptoms or effects. 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**

None known.

**Condition**

During combustion.

**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**

Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/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. Wash contaminated clothing before reuse. Do not get in eyes. Use personal protective equipment (eg. gloves, respirators...) as required. A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. If product contacts glove, remove and discard glove,

wash hands immediately with soap and water and then re-glove.

## 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
Calcium dihydroxide	1305-62-0	ACGIH	TWA:5 mg/m <sup>3</sup>	
Calcium dihydroxide	1305-62-0	Australia OELs	TWA(8 hours):5 mg/m <sup>3</sup>	
Titanium dioxide	13463-67-7	ACGIH	TWA:10 mg/m <sup>3</sup>	A4: Not class. as human carcin
Titanium dioxide	13463-67-7	Australia OELs	TWA(Inspirable dust)(8 hours):10 mg/m <sup>3</sup>	
PERSULFATE COMPOUNDS	7775-27-1	ACGIH	TWA(as persulfate):0.1 mg/m <sup>3</sup>	
Sodium Persulphate	7775-27-1	Australia OELs	Peak limit:0.01 mg/m <sup>3</sup>	

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

<b>Physical state</b>	Solid.
<b>Specific Physical Form:</b>	Powder
<b>Colour</b>	White-Beige
<b>Odour</b>	Odourless
<b>Odour threshold</b>	<i>No data available.</i>
<b>pH</b>	<i>Not applicable.</i>
<b>Melting point/Freezing point</b>	<i>No data available.</i>
<b>Boiling point/Initial boiling point/Boiling range</b>	<i>Not applicable.</i>
<b>Flash point</b>	No flash point
<b>Evaporation rate</b>	<i>Not applicable.</i>
<b>Flammability (solid, gas)</b>	Not classified
<b>Flammable Limits(LEL)</b>	<i>No data available.</i>
<b>Flammable Limits(UEL)</b>	<i>No data available.</i>
<b>Vapour pressure</b>	<i>Not applicable.</i>
<b>Vapor Density and/or Relative Vapor Density</b>	<i>Not applicable.</i>
<b>Density</b>	> 1 g/ml
<b>Relative density</b>	<i>No data available.</i>
<b>Water solubility</b>	Negligible
<b>Solubility- non-water</b>	<i>No data available.</i>
<b>Partition coefficient: n-octanol/water</b>	<i>No data available.</i>
<b>Autoignition temperature</b>	<i>Not applicable.</i>
<b>Decomposition temperature</b>	<i>No data available.</i>
<b>Viscosity/Kinematic Viscosity</b>	<i>Not applicable.</i>
<b>Volatile organic compounds (VOC)</b>	<i>Not applicable.</i>
<b>Percent volatile</b>	<i>No data available.</i>
<b>VOC less H<sub>2</sub>O &amp; exempt solvents</b>	<i>No data available.</i>
<b>Molecular weight</b>	<i>No data available.</i>

**Nanoparticles**

This material does not contain nanoparticles.

**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**

None known.

**Condition**

## 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

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest. May cause additional health effects (see below).

#### Skin contact

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

#### Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

#### Ingestion

May be harmful if swallowed.

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

#### Additional Health Effects:

#### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

#### 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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000 mg/kg
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2-methyl-3-(trimethoxysilyl)propyl ester (2530-85-0), bulk material	Dermal		LD50 estimated to be > 5,000 mg/kg
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2-methyl-3-(trimethoxysilyl)propyl ester (2530-85-0), bulk material	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester,	Dermal	Rabbit	LD50 > 5,000 mg/kg



hydrolysis products with silica			
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Calcium dihydroxide	Dermal	Rabbit	LD50 > 2,500 mg/kg
Calcium dihydroxide	Ingestion	Rat	LD50 7,340 mg/kg
Substituted pyrimidine	Dermal	Professional judgement	LD50 estimated to be 2,000 - 5,000 mg/kg
Substituted pyrimidine	Ingestion	Rat	LD50 > 2,000 mg/kg
Sodium Persulphate	Dermal	Rabbit	LD50 > 10,000 mg/kg
Sodium Persulphate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 47.93 mg/l
Sodium Persulphate	Ingestion	Rat	LD50 895 mg/kg
Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg

ATE = acute toxicity estimate

#### **Skin Corrosion/Irritation**

Name	Species	Value
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2 methyl-.3-(trimethoxysilyl)propyl ester (2530-85-0), bulk material	Professional judgement	No significant irritation
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	Rabbit	No significant irritation
Calcium dihydroxide	Human	Corrosive
Titanium dioxide	Rabbit	No significant irritation

#### **Serious Eye Damage/Irritation**

Name	Species	Value
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2 methyl-.3-(trimethoxysilyl)propyl ester (2530-85-0), bulk material	Professional judgement	No significant irritation
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	Rabbit	No significant irritation
Calcium dihydroxide	Rabbit	Corrosive
Titanium dioxide	Rabbit	No significant irritation

#### **Skin Sensitisation**

Name	Species	Value
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	Human and animal	Not classified
Substituted pyrimidine	Mouse	Not classified
Titanium dioxide	Human and animal	Not classified

#### **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
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	In Vitro	Not mutagenic
Substituted pyrimidine	In Vitro	Not mutagenic
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic

### Carcinogenicity

Name	Route	Species	Value
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Calcium dihydroxide	Inhalation	respiratory irritation	May cause respiratory irritation	Human	LOAEL 2.5 mg/m <sup>3</sup>	20 minutes
Substituted pyrimidine	Ingestion	nervous system	Not classified	Rat	NOAEL 2,000 mg/kg	

#### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure

D)propyl ester, hydrolysis products with silica						
Titanium dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium dioxide	Inhalation	pulmonary fibrosis	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.

**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:**

Not acutely toxic to aquatic life by GHS criteria.

**Chronic aquatic hazard:**

Not chronically toxic to aquatic life by GHS criteria.

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2-methyl-,3-(trimethoxysilyl)propyl ester (2530-85-0), bulk material	None		Data not available or insufficient for classification			N/A
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester,	122334-95-6	Activated sludge	Estimated	3 hours	NOEC	>=1,000 mg/l

hydrolysis products with silica						
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl) propyl ester, hydrolysis products with silica	122334-95-6		Data not available or insufficient for classification			N/A
Substituted pyrimidine	72846-00-5		Data not available or insufficient for classification			N/A
Calcium dihydroxide	1305-62-0	Fathead minnow	Estimated	96 hours	LC50	4,630 mg/l
Calcium dihydroxide	1305-62-0	Green Algae	Estimated	72 hours	EC50	>4,000 mg/l
Calcium dihydroxide	1305-62-0	Water flea	Estimated	48 hours	EC50	2,400 mg/l
Sodium Persulphate	7775-27-1	Algae other	Estimated	72 hours	EC50	320 mg/l
Sodium Persulphate	7775-27-1	Copepods	Estimated	48 hours	EC50	21.22 mg/l
Sodium Persulphate	7775-27-1	Rainbow trout	Estimated	96 hours	LC50	76.3 mg/l
Sodium Persulphate	7775-27-1	Algae other	Estimated	72 hours	NOEC	32 mg/l
Titanium dioxide	13463-67-7	Activated sludge	Experimental	3 hours	NOEC	>=1,000 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	EC50	>10,000 mg/l
Titanium dioxide	13463-67-7	Fathead minnow	Experimental	96 hours	LC50	>100 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	NOEC	5,600 mg/l

**12.2. Persistence and degradability**

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2 methyl-.3-(trimethoxysilyl)propyl ester (2530-85-0), bulk material	None	Data not available-insufficient			N/A	
2-Propenoic	122334-95-6	Data not			N/A	

acid, 2-methyl-, 3-(trimetoxysilyl) propyl ester, hydrolysis products with silica		available-insufficient				
Substituted pyrimidine	72846-00-5	Estimated Photolysis		Photolytic half-life (in air)	1.48 days (t 1/2)	Non-standard method
Substituted pyrimidine	72846-00-5	Experimental Biodegradation	28 days	CO2 evolution	29.1 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
Calcium dihydroxide	1305-62-0	Data not available-insufficient			N/A	
Sodium Persulfate	7775-27-1	Data not available-insufficient			N/A	
Titanium dioxide	13463-67-7	Data not available-insufficient			N/A	

**12.3 : Bioaccumulative potential**

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2 methyl-.3-(trimethoxysilyl)propyl ester (2530-85-0), bulk material	None	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl) propyl ester, hydrolysis products with silica	122334-95-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Substituted pyrimidine	72846-00-5	Experimental Bioconcentration		Log Kow	2.57	Non-standard method
Calcium dihydroxide	1305-62-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Sodium Persulfate	7775-27-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

Titanium dioxide	13463-67-7	Experimental BCF-Carp	42 days	Bioaccumulation factor	9.6	Non-standard method
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**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 uncured product in a permitted waste incineration facility. 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. Proper destruction may require the use of additional fuel during incineration processes. 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

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

**UN No.:** Not applicable.

**Proper shipping name:** Not applicable.

**Class/Division:** Not applicable.

**Sub Risk:** Not applicable.

**Packing Group:** Not applicable.

**Hazchem Code:** Not applicable

**IERG:** Not applicable.

**International Air Transport Association (IATA) - Air Transport**

**UN No.:** Not applicable.

**Proper shipping name:** Not applicable.

**Class/Division:** Not applicable.

**Sub Risk:** Not applicable.

**Packing Group:** Not applicable.

**International Maritime Dangerous Goods Code (IMDG)- Marine Transport**

**UN No.:** Not applicable.

**Proper shipping name:** Not applicable.

**Class/Division:** Not applicable.

**Sub Risk:** Not applicable.

**Packing Group:** Not applicable.

**Marine Pollutant:** Not applicable.

## 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.

## SECTION 16: Other information

**Revision information:**

Complete document review.

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.

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**3M Australia SDSs are available at [www.3m.com.au](http://www.3m.com.au)**



## 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™ RELYX™ Unicem Aplicap™/Maxicap™ Liquid

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Dental Product, For use by dental professionals.

#### 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 classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011, in accordance with applicable State and Territory legislation.

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

#### 2.1. Classification of the substance or mixture

Flammable Liquid: Category 4.

Serious Eye Damage/Irritation: Category 1.

Skin Sensitizer: Category 1.

#### 2.2. Label elements

The label elements below were prepared in accordance with the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals (Safe Work Australia, December 2011). This information may be different from the actual product label.

##### Signal word

Danger



**Symbols**

Corrosion | Exclamation mark |

**Pictograms**



**Hazard statements**

H227 Combustible Liquid  
 H318 Causes serious eye damage.  
 H317 May cause an allergic skin reaction.

**Precautionary statements**

**Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P280A Wear eye/face protection.

**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTRE or doctor/physician.  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P362 + P364 Take off contaminated clothing and wash it before reuse.  
 P370 + P378 In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

**Storage:**

P403 Store in a well-ventilated place.

**Disposal:**

P501 Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**2.3. Other assigned/identified product hazards**

None known.

**2.4. Other hazards which do not result in classification**

Causes mild skin irritation.  
 Toxic to aquatic life with long lasting effects.

**SECTION 3: Composition/information on ingredients**

This material is a mixture.

Ingredient	CAS Nbr	% by Weight
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mixture of mono-, di- and tri-glycerin-dimethacrylate-ester of phosphoric acid	1224866-76-5	40 - 50
2,2'-Ethylenedioxydiethyl dimethacrylate	109-16-0	20 - 35
(1-Methylethylidene)bis(4, 1-phenyleneoxy-3, 1-propanediyl) bismethacrylate	27689-12-9	20 - 30
2,6-Di-tert-butyl-p-cresol	128-37-0	< 0.5
Methyl Methacrylate	80-62-6	< 0.5
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	< 0.2

## **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**

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately 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**

No critical symptoms or effects. 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 flammable liquids such as dry chemical or carbon dioxide to extinguish.

### **5.2. Special hazards arising from the substance or mixture**

Closed containers exposed to heat from fire may build pressure and explode.

### **Hazardous Decomposition or By-Products**

#### **Substance**

Carbon monoxide.

Carbon dioxide.

#### **Condition**

During combustion.

During combustion.

### **5.3. Special protective actions for fire-fighters**

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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.

**Hazchem Code:** •3Z

## **SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. **WARNING !** A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. 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 using non-sparking tools. 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**

This product is classified as a C1 COMBUSTIBLE LIQUID. For more information please refer to AS 1940

**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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing dust/fume/gas/mist/vapours/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. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Do not get in eyes.

**7.2. Conditions for safe storage including any incompatibilities**

Store in a well-ventilated place. Keep cool. Store away from heat. Store away from acids. Store away from oxidising agents.

**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
2,6-Di-tert-butyl-p-cresol	128-37-0	ACGIH	TWA(inhalable fraction and vapour):2 mg/m <sup>3</sup>	A4: Not class. as human carcin
2,6-Di-tert-butyl-p-cresol	128-37-0	Australia OELs	TWA(8 hours):10 mg/m <sup>3</sup>	
COPPER COMPOUNDS	6046-93-1	ACGIH	TWA(as Cu, fume):0.2 mg/m <sup>3</sup> ;TWA(as Cu dust or mist):1 mg/m <sup>3</sup>	
Methyl Methacrylate	80-62-6	ACGIH	TWA:50 ppm;STEL:100 ppm	A4: Not class. as human carcin, Dermal Sensitizer
Methyl Methacrylate	80-62-6	Australia OELs	TWA(8 hours):208 mg/m <sup>3</sup> (50 ppm);STEL(15 minutes):416 mg/m <sup>3</sup> (100 ppm)	SKIN

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

<b>Physical state</b>	Liquid.
<b>Specific Physical Form:</b>	Liquid.
<b>Colour</b>	Yellow
<b>Odour</b>	Acrylate
<b>Odour threshold</b>	<i>No data available.</i>
<b>pH</b>	2.3
<b>Melting point/Freezing point</b>	<i>No data available.</i>
<b>Boiling point/Initial boiling point/Boiling range</b>	> 93.3 °C
<b>Flash point</b>	64 °C [ <i>Test Method: Tagliabue closed cup</i> ]
<b>Evaporation rate</b>	<i>No data available.</i>
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Flammable Limits(LEL)</b>	<i>No data available.</i>
<b>Flammable Limits(UEL)</b>	<i>No data available.</i>
<b>Vapour pressure</b>	<i>No data available.</i>
<b>Vapor Density and/or Relative Vapor Density</b>	<i>No data available.</i>
<b>Density</b>	1.14 g/ml
<b>Relative density</b>	1.14 [ <i>Ref Std: WATER=1</i> ]
<b>Water solubility</b>	< 63 g/l
<b>Solubility- non-water</b>	<i>No data available.</i>
<b>Partition coefficient: n-octanol/water</b>	<i>No data available.</i>
<b>Autoignition temperature</b>	<i>No data available.</i>
<b>Decomposition temperature</b>	<i>No data available.</i>
<b>Viscosity/Kinematic Viscosity</b>	<i>No data available.</i>

<b>Volatile organic compounds (VOC)</b>	<i>No data available.</i>
<b>Percent volatile</b>	<i>No data available.</i>
<b>VOC less H<sub>2</sub>O &amp; exempt solvents</b>	<i>No data available.</i>
<b>Molecular weight</b>	<i>No data available.</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

Heat.

### 10.4. Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.5 Incompatible materials

None known.

### 10.6 Hazardous decomposition products

#### Substance

None known.

#### Condition

## 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**

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

#### **Eye contact**

Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

#### **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
mixture of mono-, di- and tri-glycerin-dimethacrylate-ester of phosphoric acid	Dermal		LD50 estimated to be > 5,000 mg/kg
mixture of mono-, di- and tri-glycerin-dimethacrylate-ester of phosphoric acid	Ingestion	Rat	LD50 > 2,000 mg/kg
2,2'-Ethylenedioxydiethyl dimethacrylate	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
2,2'-Ethylenedioxydiethyl dimethacrylate	Ingestion	Rat	LD50 10,837 mg/kg
(1-Methylethylidene)bis(4, 1-phenyleneoxy- 3, 1-propanediyl) bismethacrylate	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
(1-Methylethylidene)bis(4, 1-phenyleneoxy- 3, 1-propanediyl) bismethacrylate	Ingestion	Rat	LD50 > 17,600 mg/kg
2,6-Di-tert-butyl-p-cresol	Dermal	Rat	LD50 > 2,000 mg/kg
2,6-Di-tert-butyl-p-cresol	Ingestion	Rat	LD50 > 2,930 mg/kg
Methyl Methacrylate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Methyl Methacrylate	Inhalation-Vapour (4 hours)	Rat	LC50 29 mg/l
Methyl Methacrylate	Ingestion	Rat	LD50 7,900 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
mixture of mono-, di- and tri-glycerin-dimethacrylate-ester of phosphoric acid	Rabbit	Minimal irritation
2,2'-Ethylenedioxydiethyl dimethacrylate	Guinea pig	Mild irritant
(1-Methylethylidene)bis(4, 1-phenyleneoxy- 3, 1-propanediyl) bismethacrylate	Rabbit	No significant irritation
2,6-Di-tert-butyl-p-cresol	Human and animal	Minimal irritation
Methyl Methacrylate	Human and animal	Mild irritant

**Serious Eye Damage/Irritation**

Name	Species	Value
mixture of mono-, di- and tri-glycerin-dimethacrylate-ester of phosphoric acid	Rabbit	Corrosive
2,2'-Ethylenedioxydiethyl dimethacrylate	Professional judgement	Moderate irritant
(1-Methylethylidene)bis(4, 1-phenyleneoxy- 3, 1-propanediyl) bismethacrylate	Rabbit	Mild irritant
2,6-Di-tert-butyl-p-cresol	Rabbit	Mild irritant
Methyl Methacrylate	Rabbit	Moderate irritant

**Skin Sensitisation**

Name	Species	Value
mixture of mono-, di- and tri-glycerin-	Guinea pig	Not classified

dimethacrylate-ester of phosphoric acid		
2,2'-Ethylenedioxydiethyl dimethacrylate	Human and animal	Sensitising
(1-Methylethylidene)bis(4, 1-phenyleneoxy- 3, 1-propanediyl) bismethacrylate	Guinea pig	Not classified
2,6-Di-tert-butyl-p-cresol	Human	Not classified
Methyl Methacrylate	Human and animal	Sensitising

**Respiratory Sensitisation**

Name	Species	Value
Methyl Methacrylate	Human	Not classified

**Germ Cell Mutagenicity**

Name	Route	Value
mixture of mono-, di- and tri-glycerin-dimethacrylate-ester of phosphoric acid	In Vitro	Not mutagenic
2,2'-Ethylenedioxydiethyl dimethacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
(1-Methylethylidene)bis(4, 1-phenyleneoxy- 3, 1-propanediyl) bismethacrylate	In Vitro	Not mutagenic
2,6-Di-tert-butyl-p-cresol	In Vitro	Not mutagenic
2,6-Di-tert-butyl-p-cresol	In vivo	Not mutagenic
Methyl Methacrylate	In vivo	Not mutagenic
Methyl Methacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
2,2'-Ethylenedioxydiethyl dimethacrylate	Dermal	Mouse	Not carcinogenic
2,6-Di-tert-butyl-p-cresol	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Methyl Methacrylate	Ingestion	Rat	Not carcinogenic
Methyl Methacrylate	Inhalation	Human and animal	Not carcinogenic

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
2,2'-Ethylenedioxydiethyl dimethacrylate	Ingestion	Not classified for female reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
2,2'-Ethylenedioxydiethyl dimethacrylate	Ingestion	Not classified for male reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
2,2'-Ethylenedioxydiethyl dimethacrylate	Ingestion	Not classified for development	Mouse	NOAEL 1 mg/kg/day	1 generation
2,6-Di-tert-butyl-p-cresol	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
2,6-Di-tert-butyl-p-cresol	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
2,6-Di-tert-butyl-p-cresol	Ingestion	Not classified for development	Rat	NOAEL 100 mg/kg/day	2 generation
Methyl Methacrylate	Inhalation	Not classified for male reproduction	Mouse	NOAEL 36.9 mg/l	
Methyl Methacrylate	Inhalation	Not classified for	Rat	NOAEL 8.3	during

		development		mg/l	organogenesis
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**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Methyl Methacrylate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
2,2'-Ethyleneedioxy diethyl dimethacrylate	Dermal	kidney and/or bladder   blood	Not classified	Mouse	NOAEL 833 mg/kg/day	78 weeks
2,6-Di-tert-butyl-p-cresol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 250 mg/kg/day	28 days
2,6-Di-tert-butyl-p-cresol	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 500 mg/kg/day	2 generation
2,6-Di-tert-butyl-p-cresol	Ingestion	blood	Not classified	Rat	LOAEL 420 mg/kg/day	40 days
2,6-Di-tert-butyl-p-cresol	Ingestion	endocrine system	Not classified	Rat	NOAEL 25 mg/kg/day	2 generation
2,6-Di-tert-butyl-p-cresol	Ingestion	heart	Not classified	Mouse	NOAEL 3,480 mg/kg/day	10 weeks
Methyl Methacrylate	Dermal	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
Methyl Methacrylate	Inhalation	olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Methyl Methacrylate	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	14 weeks
Methyl Methacrylate	Inhalation	liver	Not classified	Mouse	NOAEL 12.3 mg/l	14 weeks
Methyl Methacrylate	Inhalation	respiratory system	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.

**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 2: Toxic to aquatic life.

#### Chronic aquatic hazard:

GHS Chronic 2: Toxic to aquatic life with long lasting effects.

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
mixture of mono-, di- and tri-glycerin-dimethacrylate-ester of phosphoric acid	1224866-76-5	Green algae	Endpoint not reached	72 hours	EC50	>100 mg/l
mixture of mono-, di- and tri-glycerin-dimethacrylate-ester of phosphoric acid	1224866-76-5	Water flea	Experimental	48 hours	EC50	>100 mg/l
mixture of mono-, di- and tri-glycerin-dimethacrylate-ester of phosphoric acid	1224866-76-5	Green algae	Experimental	72 hours	NOEC	56 mg/l
2,2'-Ethylenedioxydiethyl dimethacrylate	109-16-0	Green algae	Experimental	72 hours	EC50	>100 mg/l
2,2'-Ethylenedioxydiethyl dimethacrylate	109-16-0	Zebra Fish	Experimental	96 hours	LC50	16.4 mg/l
2,2'-Ethylenedioxydiethyl dimethacrylate	109-16-0	Green algae	Experimental	72 hours	NOEC	18.6 mg/l
2,2'-Ethylenedioxydiethyl dimethacrylate	109-16-0	Water flea	Experimental	21 days	NOEC	32 mg/l
(1-Methylethylidene)bis(4, 1-phenyleneoxy-3, 1-propanediyl)	27689-12-9	Green algae	Experimental	72 hours	EC50	>100 mg/l

**3M™ RELYX™ Unicem Aplicap™/Maxicap™ Liquid**

bismethacrylate						
(1-Methylethylidene)bis(4,1-phenyleneoxy-3,1-propanediyl) bismethacrylate	27689-12-9	Water flea	Experimental	48 hours	EC50	>100 mg/l
(1-Methylethylidene)bis(4,1-phenyleneoxy-3,1-propanediyl) bismethacrylate	27689-12-9	Green algae	Experimental	72 hours	NOEC	>100 mg/l
2,6-Di-tert-butyl-p-cresol	128-37-0	Activated sludge	Experimental	3 hours	EC50	>10,000 mg/l
2,6-Di-tert-butyl-p-cresol	128-37-0	Green algae	Experimental	72 hours	EC50	>0.4 mg/l
2,6-Di-tert-butyl-p-cresol	128-37-0	Water flea	Experimental	48 hours	EC50	0.48 mg/l
2,6-Di-tert-butyl-p-cresol	128-37-0	Zebra Fish	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
2,6-Di-tert-butyl-p-cresol	128-37-0	Green algae	Experimental	72 hours	EC10	0.4 mg/l
2,6-Di-tert-butyl-p-cresol	128-37-0	Medaka	Experimental	42 days	NOEC	0.053 mg/l
2,6-Di-tert-butyl-p-cresol	128-37-0	Water flea	Experimental	21 days	NOEC	0.023 mg/l
Methyl Methacrylate	80-62-6	Green algae	Experimental	72 hours	EC50	>110 mg/l
Methyl Methacrylate	80-62-6	Rainbow trout	Experimental	96 hours	LC50	>79 mg/l
Methyl Methacrylate	80-62-6	Water flea	Experimental	48 hours	EC50	69 mg/l
Methyl Methacrylate	80-62-6	Green algae	Experimental	72 hours	NOEC	110 mg/l
Methyl Methacrylate	80-62-6	Water flea	Experimental	21 days	NOEC	37 mg/l
Methyl Methacrylate	80-62-6	Activated sludge	Experimental	30 minutes	EC20	150 mg/l
Methyl Methacrylate	80-62-6	Soil microbes	Experimental	28 days	NOEC	>1,000 mg/kg (Dry Weight)
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Green algae	Estimated	72 hours	EC50	0.33 mg/l
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Water flea	Estimated	48 hours	EC50	0.04 mg/l
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Zebra Fish	Estimated	96 hours	LC50	0.037 mg/l
Acetic acid, copper(2+) salt,	6046-93-1	Fathead minnow	Estimated	32 days	EC10	0.019 mg/l

monohydrate						
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Green algae	Estimated		NOEC	0.069 mg/l
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Water flea	Estimated	7 days	NOEC	0.01 mg/l
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Activated sludge	Estimated		EC50	22 mg/l
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Barley	Estimated	4 days	NOEC	50 mg/kg (Dry Weight)
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Bobwhite quail	Estimated	14 days	LD50	4,402 mg per kg of bodyweight
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Redworm	Estimated	56 days	NOEC	31 mg/kg (Dry Weight)
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Sediment Worm	Estimated	28 days	NOEC	57.5 mg/kg (Dry Weight)
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Soil microbes	Estimated	4 days	NOEC	38 mg/kg (Dry Weight)
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Springtail	Estimated	28 days	NOEC	87.7 mg/kg (Dry Weight)

## 12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
mixture of mono-, di- and tri-glycerin-dimethacrylate-ester of phosphoric acid	1224866-76-5	Experimental Biodegradation	28 days	BOD	82 %BOD/ThB OD	OECD 301F - Manometric respirometry
2,2'-Ethylenedioxydiethyl dimethacrylate	109-16-0	Experimental Biodegradation	28 days	CO2 evolution	85 % weight	OECD 301B - Modified sturm or CO2
(1-Methylethylidene)bis(4, 1-phenyleneoxy-3, 1-propanediyl) bismethacrylate	27689-12-9	Experimental Biodegradation	28 days	CO2 evolution	7-12 % weight	OECD 301B - Modified sturm or CO2
2,6-Di-tert-butyl-p-cresol	128-37-0	Data not available-insufficient	N/A	N/A	N/A	N/A
Methyl Methacrylate	80-62-6	Experimental Biodegradation	14 days	BOD	94 %BOD/ThB OD	OECD 301C - MITI test (I)
Acetic acid,	6046-93-1	Analogous	14 days	BOD	74 %BOD/ThB	OECD 301C - MITI

copper(2+) salt, monohydrate		Compound Biodegradation			OD	test (I)
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### 12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
mixture of mono-, di- and tri-glycerin-dimethacrylate-ester of phosphoric acid	1224866-76-5	Experimental Bioconcentration		Log Kow	-0.2	Non-standard method
2,2'-Ethylenedioxydiethyl dimethacrylate	109-16-0	Experimental Bioconcentration		Log Kow	2.3	Non-standard method
(1-Methylethylene)bis(4, 1-phenyleneoxy-3, 1-propanediyl) bismethacrylate	27689-12-9	Estimated Bioconcentration		Log Kow	7.61	Estimated: Octanol-water partition coefficient
2,6-Di-tert-butyl-p-cresol	128-37-0	Experimental BCF - Carp	56 days	Bioaccumulation factor	1277	OECD 305E - Bioaccumulation flow-through fish test
Methyl Methacrylate	80-62-6	Experimental Bioconcentration		Log Kow	1.38	OECD 107 log Kow shke flask mtd
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	Analogous Compound Bioconcentration		Log Kow	-0.17	

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

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

**UN No.:** UN3082

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. , ( Acetic Acid, Copper (2+) Salt, Monohydrate )

**Class/Division:** 9

**Sub Risk:** Not applicable.

**Packing Group:** III

**Special Instructions:** Not restricted, environmentally hazardous substance exception.

**Hazchem Code:** •3Z

**IERG:** 47

**International Air Transport Association (IATA) - Air Transport**

**UN No.:** UN3082

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. , ( Acetic Acid, Copper (2+) Salt, Monohydrate )

**Class/Division:** 9

**Sub Risk:** Not applicable.

**Packing Group:** III

**Special Instructions:** Not restricted, as per Special Provision A197, environmentally hazardous substance exception.

**International Maritime Dangerous Goods Code (IMDG)- Marine Transport**

**UN No.:** UN3082

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. , ( Acetic Acid, Copper (2+) Salt, Monohydrate )

**Class/Division:** 9

**Sub Risk:** Not applicable.

**Packing Group:** III

**Marine Pollutant:** Acetic Acid, Copper (2+) Salt, Monohydrate

**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.

## **SECTION 16: Other information**

**Revision information:**

Complete document review.

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](http://www.3m.com.au)**