



## Safety Data Sheet

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**Document group:** 24-8575-3                      **Version number:** 3.00  
**Issue Date:** 28/09/2022                      **Supersedes date:** 08/07/2018

This Safety Data Sheet has been prepared in accordance with the New Zealand, Hazardous Substances (Safety Data Sheets) Notice 2017.

### IDENTIFICATION:

#### 1.1. Product identifier

3M™ Protemp™ 4 Refill (46954, 46956, 46957, 46959, 46960, 46972)

#### Product Identification Numbers

70-2011-3259-7      70-2011-3261-3      70-2011-3262-1      70-2011-3264-7      70-2011-3759-6

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

##### Recommended use

Dental Material, Dental Temporary Crown and Bridge Material

##### Restrictions on use

For use by dental professionals only.

#### 1.3. Supplier's details

**Address:** 3M New Zealand Ltd, 94 Apollo Drive, Rosedale 0632, Auckland  
**Telephone:** (09) 477 4040  
**E Mail:** innovation@nz.mmm.com  
**Website:** 3m.co.nz

#### 1.4. Emergency telephone number

24 hr Medical Emergency, National Poisons Centre, 0800 764 766 (0800 POISON)

**This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet for each of these components is included. Please do not separate the component Safety Data Sheets from this cover page. The document numbers of the SDSs for components of this product are:**

24-8565-4, 24-8558-9

All components in this KIT are classified as non-hazardous in accordance with the relevant criteria of the HSNO Act 1996, the Hazardous Substances (Classification) Notice 2017 and Hazardous Substances (Minimum Degrees of Hazard) Notice 2017.

### TRANSPORT INFORMATION

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

**UN No.:** UN3077

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., ( Bisphenol A Polyethylene Glycol Diether Dimethacrylate )

**Class/Division:** 9

**Packing Group:** III

**Marine Pollutant:** Not applicable.

**Hazchem Code:** 2Z

**IERG:** 47

**Land Transport Rule: Dangerous Goods - 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.

**Revision information:**

Complete document review.

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## Safety Data Sheet

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<b>Document group:</b>	24-8565-4	<b>Version number:</b>	3.00
<b>Issue Date:</b>	28/09/2022	<b>Supersedes date:</b>	08/07/2018

This Safety Data Sheet has been prepared in accordance with the New Zealand, Hazardous Substances (Safety Data Sheets) Notice 2017.

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Protemp™ 4 Base Paste

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

##### Recommended use

Dental Material, Temporary crown and bridge material

##### Restrictions on use

For use by dental professionals only.

#### 1.3. Supplier's details

**Address:** 3M New Zealand Ltd, 94 Apollo Drive, Rosedale 0632, Auckland

**Telephone:** (09) 477 4040

**E Mail:** innovation@nz.mmm.com

**Website:** 3m.co.nz

#### 1.4. Emergency telephone number

24 hr Medical Emergency, National Poisons Centre, 0800 764 766 (0800 POISON)

### SECTION 2: Hazard identification

Classified as hazardous in accordance with the relevant criteria of the HSNO Act 1996 and the Hazardous Substances (Hazard Classification) Notice 2020.

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

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

Chronic Aquatic Toxicity: Category 4

#### 2.2. Label elements

##### SIGNAL WORD

Not applicable.

##### Symbols:

Not applicable.

**HAZARD STATEMENTS:**

H413 May cause long lasting harmful effects to aquatic life.

**PRECAUTIONARY STATEMENTS****Prevention**

P273 Avoid release to the environment.

**Disposal**

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

**2.3. Other hazards**

This material has been tested for eye damage/irritation and the test results do not meet the criteria for classification.

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

Ingredient	CAS Nbr	% by Weight
Ethoxylated bis-phenol A dimethacrylate	41637-38-1	45 - 55
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	None	20 - 30
Reaction Products of 1,6-Diisocyanatohexane with 2-[(2-Methacryloyl) Ethyl]6-Hydroxyhexanoate and 2-Hydroxyethyl Methacrylate (DESMA)	1101874-33-2	10 - 15
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	68909-20-6	5 - 15

**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**

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**

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

Carbon monoxide.  
Carbon dioxide.  
Irritant vapours or gases.

##### Condition

During combustion.  
During combustion.  
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.

5.4. Hazchem code: 2Z

### 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

Refer to Section 15 - Controls for more information

#### 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

Store away from heat.

#### 7.3. Certified handler

Not required

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

#### 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.

Refer AS/NZS 1336 - Recommended practices for occupational eye protection and for performance specifications AS/NZS 1337, Parts 1 - 6 - Personal eye-protection.

**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. Paste
<b>Specific Physical Form:</b>	Paste
<b>Colour</b>	Tooth
<b>Odour</b>	Slight Acrylic
<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>No data available.</i>
<b>Flash point</b>	No flash point
<b>Evaporation rate</b>	<i>No data available.</i>
<b>Flammability (solid, gas)</b>	Not classified
<b>Flammable Limits(LEL)</b>	<i>Not applicable.</i>
<b>Flammable Limits(UEL)</b>	<i>Not applicable.</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>	1.3 g/cm <sup>3</sup> - 1.4 g/cm <sup>3</sup>
<b>Relative density</b>	1.3 - 1.4 [Ref Std: WATER=1]
<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>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>Not applicable.</i>
<b>Percent volatile</b>	<i>Not applicable.</i>
<b>VOC less H<sub>2</sub>O &amp; exempt solvents</b>	<i>Not applicable.</i>
<b>Molecular weight</b>	<i>No data available.</i>

**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

**10.2 Chemical stability**

Stable.

**10.3 Possibility of hazardous reactions**

Hazardous polymerisation will not occur.

**10.4 Conditions to avoid**

Heat.

**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 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**

May be harmful if inhaled.

**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	Dermal		No data available; calculated ATE >5,000 mg/kg

**3M™ Protemp™ 4 Base Paste**

Overall product	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE >5 - =12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Ethoxylated bis-phenol A dimethacrylate	Dermal	Rat	LD50 > 2,000 mg/kg
Ethoxylated bis-phenol A dimethacrylate	Ingestion	Rat	LD50 > 2,000 mg/kg
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	Dermal	Rabbit	LD50 > 5,000 mg/kg
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	Ingestion	Rat	LD50 > 5,110 mg/kg
Reaction Products of 1,6-Diisocyanatohexane with 2-[(2-Methacryloyl) Ethyl]6-Hydroxyhexanoate and 2-Hydroxyethyl Methacrylate (DESMA)	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Reaction Products of 1,6-Diisocyanatohexane with 2-[(2-Methacryloyl) Ethyl]6-Hydroxyhexanoate and 2-Hydroxyethyl Methacrylate (DESMA)	Ingestion	Rat	LD50 > 2,000 mg/kg
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
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

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Ethoxylated bis-phenol A dimethacrylate	In vitro data	No significant irritation
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	Rabbit	No significant irritation
Reaction Products of 1,6-Diisocyanatohexane with 2-[(2-Methacryloyl) Ethyl]6-Hydroxyhexanoate and 2-Hydroxyethyl Methacrylate (DESMA)	Rabbit	Minimal irritation
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	Rabbit	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
Overall product	Rabbit	Mild irritant
Ethoxylated bis-phenol A dimethacrylate	In vitro data	No significant irritation
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	Rabbit	No significant irritation
Reaction Products of 1,6-Diisocyanatohexane with 2-[(2-Methacryloyl) Ethyl]6-Hydroxyhexanoate and 2-Hydroxyethyl Methacrylate (DESMA)	In vitro data	No significant irritation
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	Rabbit	No significant irritation

**Sensitisation:****Skin Sensitisation**



Name	Species	Value
Ethoxylated bis-phenol A dimethacrylate	Multiple animal species	Not classified
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	Human and animal	Not classified
Reaction Products of 1,6-Diisocyanatohexane with 2-[(2-Methacryloyl) Ethyl]6-Hydroxyhexanoate and 2-Hydroxyethyl Methacrylate (DESMA)	Mouse	Not classified
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	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
Ethoxylated bis-phenol A dimethacrylate	In Vitro	Not mutagenic
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	In Vitro	Not mutagenic
Reaction Products of 1,6-Diisocyanatohexane with 2-[(2-Methacryloyl) Ethyl]6-Hydroxyhexanoate and 2-Hydroxyethyl Methacrylate (DESMA)	In Vitro	Not mutagenic
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	In Vitro	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, hydrolysis products with silica	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
Ethoxylated bis-phenol A dimethacrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Ethoxylated bis-phenol A dimethacrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Ethoxylated bis-phenol A dimethacrylate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

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**

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
Ethoxylated bis-phenol A dimethacrylate	Ingestion	hematopoietic system   liver   immune system   kidney and/or bladder   endocrine system   eyes	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

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

**Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.**

**SECTION 12: Ecological information**

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**

**Ecotoxic to the aquatic environment.**

Chronic Aquatic Toxicity: Category 4

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Ethoxylated bis-phenol A	41637-38-1	Activated sludge	Estimated	3 hours	EC50	>1,000 mg/l

dimethacrylate						
Ethoxylated bis-phenol A dimethacrylate	41637-38-1	Green algae	Estimated	72 hours	No tox obs at lmt of water sol	>100 mg/l
Ethoxylated bis-phenol A dimethacrylate	41637-38-1	Rainbow trout	Estimated	96 hours	No tox obs at lmt of water sol	>100 mg/l
Ethoxylated bis-phenol A dimethacrylate	41637-38-1	Green algae	Estimated	72 hours	No tox obs at lmt of water sol	>100 mg/l
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	None		Data not available or insufficient for classification			N/A
Reaction Products of 1,6-Diisocyanatohe xane with 2-[(2-Methacryloyl) Ethyl]6-Hydroxyhexan oate and 2-Hydroxyethyl Methacrylate (DESMA)	1101874-33-2	Green algae	Endpoint not reached	72 hours	EC50	>100 mg/l
Reaction Products of 1,6-Diisocyanatohe xane with 2-[(2-Methacryloyl) Ethyl]6-Hydroxyhexan oate and 2-Hydroxyethyl Methacrylate (DESMA)	1101874-33-2	Water flea	Experimental	48 hours	EC50	>100 mg/l

2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl) propyl ester, hydrolysis products with silica	68909-20-6	Algae or other aquatic plants	Estimated	72 hours	EC50	>100 mg/l
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**12.2. Persistence and degradability**

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Ethoxylated bis-phenol A dimethacrylate	41637-38-1	Experimental Biodegradation	28 days	BOD	24 %BOD/ThOD	OECD 301D - Closed bottle test
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	None	Data not available - insufficient	N/A	N/A	N/A	N/A
Reaction Products of 1,6-Diisocyanatohe xane with 2-[(2-Methacryloyl) Ethyl]6-Hydroxyhexan oate and 2-Hydroxyethyl Methacrylate (DESMA)	1101874-33-2	Experimental Biodegradation	28 days	BOD	6 %BOD/ThOD	OECD 301F - Manometric respirometry
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl) propyl ester, hydrolysis products with silica	68909-20-6	Data not available - insufficient	N/A	N/A	N/A	N/A

**12.3 : Bioaccumulative potential**

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
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Ethoxylated bis-phenol A dimethacrylate	41637-38-1	Estimated Bioconcentration		Bioaccumulation factor	6.6	
Ethoxylated bis-phenol A dimethacrylate	41637-38-1	Experimental Bioconcentration		Log Kow	≥4.66	OECD 117 log Kow HPLC method
Amorphous silica (7631-86-9), surface modified with 2-propenoic acid, methyl-, 3-(trimethoxysilyl)propyl ester (2530-80-0) and phenyltrimethoxy silane (2996-92-1)	None	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Reaction Products of 1,6-Diisocyanatohe xane with 2-[(2-Methacryloyl) Ethyl]6-Hydroxyhexan oate and 2-Hydroxyethyl Methacrylate (DESMA)	1101874-33-2	Experimental Bioconcentration		Log Kow	7.28	
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl) propyl ester, hydrolysis products with silica	68909-20-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

**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**

In accordance with the Hazardous Substances (Disposal) Notice 2017 and the relevant criteria of the HSNO Act 1996.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste.

Packaging (that may or may not contain any residual substance) may be lawfully disposed of by householders or other consumers through public or commercial waste collection services.

## SECTION 14: Transport Information

### New Zealand Land Transport Rule: Dangerous Goods - Road/Rail Transport

UN No.: UN3077

**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. , ( Bisphenol A Polyethylene Glycol Diether Dimethacrylate )

**Class/Division:** 9

**Sub Risk:** Not applicable.

**Packing Group:** III

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

**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. , ( Bisphenol A Polyethylene Glycol Diether Dimethacrylate )

**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.: UN3077

**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. , ( Bisphenol A Polyethylene Glycol Diether Dimethacrylate )

**Class/Division:** 9

**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

HSNO Approval number	HSR002558
Group standard name	Dental Products (Subsidiary Hazard) Group Standard 2020
HSNO Hazard classification	Refer to Section 2: Hazard identification

### NZ Inventory of Chemicals (NZIoC) Status

All applicable chemical ingredients in this material are in compliance with NZIoC listing requirements.

### Controls in accordance with The Health and Safety at Work Act 2015, Health and Safety at Work (Hazardous Substances) Regulations 2017 and the HSNO Act 1996, Hazardous Substances (Hazardous Property Controls) Notice 2017

Certified handler	Not required
Location Compliance Certificate	Not required
Hazardous atmosphere zone	Not required
Fire extinguishers	Not required

Emergency response plan	100 L or 100 kg (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L or 1 000 kg (for Acute toxicity Category 4, Skin sensitisation Category 1, Respiratory sensitisation Category 1, Hazardous to the aquatic environment Category 2 or Hazardous to the aquatic environment Category 3 substances); or 10 000 L or 10 000 kg (for Germ cell mutagenicity Category 1, Reproductive toxicity Category 1, Specific target organ toxicity Category 1, Serious eye damage Category 1, Hazardous to the aquatic environment Category 4 substances)
Secondary containment	100 L or 100 kg (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L or 1 000 kg (for Acute toxicity Category 4, Skin sensitisation Category 1, Respiratory sensitisation Category 1, Hazardous to the aquatic environment Category 2 or Hazardous to the aquatic environment Category 3 substances); or 10 000 L or 10 000 kg (for Germ cell mutagenicity Category 1, Reproductive toxicity Category 1, Specific target organ toxicity Category 1, Serious eye damage Category 1, Hazardous to the aquatic environment Category 4 substances)
Tracking	Not required
Warning signage	100 L or 100 kg (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L or 1 000 kg (for Serious eye damage Category 1, Hazardous to the aquatic environment Category 2 or Hazardous to the aquatic environment Category 3 substances); or 10 000 L or 10 000 kg (for Acute toxicity Category 4 or Hazardous to the aquatic environment Category 4 substances)

## SECTION 16: Other information

### Revision information:

Complete document review.

<b>Document group:</b>	24-8565-4	<b>Version number:</b>	3.00
<b>Issue Date:</b>	28/09/2022	<b>Supersedes date:</b>	08/07/2018

### Key to abbreviations and acronyms

**GHS** refers to the Globally Harmonised System of Classification and Labelling of Chemicals, 7th revised edition of 2017

**HSNO** means Hazardous Substances and New Organisms Act 1996

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3M New Zealand SDS are available at 3M New Zealand Website: <http://solutions.3mnz.co.nz>



## Safety Data Sheet

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<b>Document group:</b>	24-8558-9	<b>Version number:</b>	3.00
<b>Issue Date:</b>	28/09/2022	<b>Supersedes date:</b>	08/07/2018

This Safety Data Sheet has been prepared in accordance with the New Zealand, Hazardous Substances (Safety Data Sheets) Notice 2017.

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Protemp™ 4 Catalyst Paste

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

##### Recommended use

Dental Material, Temporary crown and bridge material

##### Restrictions on use

For use by dental professionals only.

#### 1.3. Supplier's details

**Address:** 3M New Zealand Ltd, 94 Apollo Drive, Rosedale 0632, Auckland

**Telephone:** (09) 477 4040

**E Mail:** innovation@nz.mmm.com

**Website:** 3m.co.nz

#### 1.4. Emergency telephone number

24 hr Medical Emergency, National Poisons Centre, 0800 764 766 (0800 POISON)

### SECTION 2: Hazard identification

Not classified as hazardous in accordance with the relevant criteria of the HSNO Act 1996 and the Hazardous Substances (Hazard Classification) Notice 2020.

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

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

Not classified as hazardous.

#### 2.2. Label elements

##### SIGNAL WORD

Not applicable.

##### Symbols:

Not applicable.



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

Ingredient	CAS Nbr	% by Weight
2,2'-(1-methylethylidene)bis(4,1-phenyleneoxy)bisethyldiacetate	19224-29-4	70 - 80
Benzyl-phenyl-barbituric acid	72846-00-5	5 - 15
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	68909-20-6	5 - 15
(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl)(1-phenyleneoxy-2,2'ethoxyethanediyl)bisacetate	None	1 - 10
tert-Butyl peroxy-3,5,5-trimethylhexanoate	13122-18-4	< 0.4

**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 you feel unwell, 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**

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**

Carbon monoxide.  
Carbon dioxide.  
Irritant vapours or gases.

**Condition**

During combustion.  
During combustion.  
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.

**5.4. Hazchem code:** Not applicable.

## 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

Refer to Section 15 - Controls for more information

### 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

Store away from heat.

### 7.3. Certified handler

Not required

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

### 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.

Refer AS/NZS 1336 - Recommended practices for occupational eye protection and for performance specifications AS/NZS 1337, Parts 1 - 6 - Personal eye-protection.

##### 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
Colour	White
Odour	Slight Acidic
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>No data available.</i>
Flash point	No flash point
Evaporation rate	<i>No data available.</i>
Flammability (solid, gas)	Not classified
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Vapour pressure	<i>No data available.</i>
Vapor Density and/or Relative Vapor Density	<i>No data available.</i>
Density	1.2 g/cm <sup>3</sup> - 1.3 g/cm <sup>3</sup>
Relative density	1.2 - 1.3 [Ref Std:WATER=1]
Water solubility	Negligible
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Autoignition temperature	<i>No data available.</i>
Decomposition temperature	<i>No data available.</i>
Viscosity/Kinematic Viscosity	<i>No data available.</i>
Volatile organic compounds (VOC)	<i>No data available.</i>
Percent volatile	<i>No data available.</i>
VOC less H <sub>2</sub> O & exempt solvents	<i>No data available.</i>
Molecular weight	<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 Possibility of hazardous reactions**

Hazardous polymerisation will not occur.

**10.4 Conditions to avoid**

Heat.

**10.5 Incompatible materials**

None known.

**10.6 Hazardous decomposition products**

**Substance**

None known.

**Condition**

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 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**

May be harmful in contact with skin.

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**

May be harmful if swallowed.

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	Dermal		No data available; calculated ATE >2,000 - =5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bisethyldiacetate	Dermal	Professional judgement	LD50 estimated to be 2,000 - 5,000 mg/kg
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bisethyldiacetate	Ingestion	Rat	LD50 > 2,000 mg/kg
Benzyl-phenyl-barbituric acid	Dermal	Professional judgement	LD50 estimated to be 2,000 - 5,000 mg/kg
Benzyl-phenyl-barbituric acid	Ingestion	Rat	LD50 > 2,000 mg/kg
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l

**3M™ Protemp™ 4 Catalyst Paste**

2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
tert-Butyl peroxy-3,5,5-trimethylhexanoate	Dermal	Rat	LD50 > 2,000 mg/kg
tert-Butyl peroxy-3,5,5-trimethylhexanoate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.8 mg/l
tert-Butyl peroxy-3,5,5-trimethylhexanoate	Ingestion	Rat	LD50 12,905 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bisethyldiacetate	In vitro data	No significant irritation
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Rabbit	No significant irritation
tert-Butyl peroxy-3,5,5-trimethylhexanoate	Rabbit	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bisethyldiacetate	In vitro data	No significant irritation
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Rabbit	No significant irritation
tert-Butyl peroxy-3,5,5-trimethylhexanoate	Rabbit	No significant irritation

**Sensitisation:****Skin Sensitisation**

Name	Species	Value
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bisethyldiacetate	Mouse	Not classified
Benzyl-phenyl-barbituric acid	Mouse	Not classified
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Human and animal	Not classified
tert-Butyl peroxy-3,5,5-trimethylhexanoate	Guinea pig	Sensitising

**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
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bisethyldiacetate	In Vitro	Not mutagenic
Benzyl-phenyl-barbituric acid	In Vitro	Not mutagenic
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	In Vitro	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

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure
------	-------	-------	---------	-------------	----------

**3M™ Protemp™ 4 Catalyst Paste**

					<b>Duration</b>
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
Benzyl-phenyl-barbituric acid	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)propyl ester, hydrolysis products with silica	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

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

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information**

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****Ecotoxic to the aquatic environment.**

Acute Aquatic Toxicity: Category 3

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bisethyldiacetate	19224-29-4	Green algae	Experimental	72 hours	EC50	>100 mg/l
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]	19224-29-4	Green algae	Experimental	72 hours	NOEC	100 mg/l

bisethyldiacetate						
Benzyl-phenyl-barbituric acid	72846-00-5		Data not available or insufficient for classification			N/A
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl) propyl ester, hydrolysis products with silica	68909-20-6	Algae or other aquatic plants	Estimated	72 hours	EC50	>100 mg/l
tert-Butyl peroxy-3,5,5-trimethylhexanoate	13122-18-4	Activated sludge	Experimental	3 hours	NOEC	26.3 mg/l
tert-Butyl peroxy-3,5,5-trimethylhexanoate	13122-18-4	Green algae	Experimental		EC50	0.51 mg/l
tert-Butyl peroxy-3,5,5-trimethylhexanoate	13122-18-4	Rainbow trout	Experimental		LC50	7 mg/l
tert-Butyl peroxy-3,5,5-trimethylhexanoate	13122-18-4	Water flea	Experimental		EC50	>100 mg/l
tert-Butyl peroxy-3,5,5-trimethylhexanoate	13122-18-4	Green algae	Experimental		NOEC	0.125 mg/l

## 12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
2,2'-(1-methylethylidene)bis(4,1-phenyleneoxy)] bisethyldiacetate	19224-29-4	Experimental Biodegradation	28 days	CO2 evolution	8-13 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
Benzyl-phenyl-barbituric acid	72846-00-5	Experimental Biodegradation	28 days	CO2 evolution	29.1 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
Benzyl-phenyl-barbituric acid	72846-00-5	Estimated Photolysis		Photolytic half-life (in air)	1.48 days (t 1/2)	
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl) propyl ester, hydrolysis	68909-20-6	Data not available - insufficient	N/A	N/A	N/A	N/A

products with silica						
tert-Butyl peroxy-3,5,5-trimethylhexanoate	13122-18-4	Estimated Biodegradation	28	BOD	14 %BOD/ThOD	OECD 301C - MITI test (I)

**12.3 : Bioaccumulative potential**

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bisethyldiacetate	19224-29-4	Estimated Bioconcentration		Log Kow	7.16	
Benzyl-phenylbarbituric acid	72846-00-5	Experimental Bioconcentration		Log Kow	2.57	
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	68909-20-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
tert-Butyl peroxy-3,5,5-trimethylhexanoate	13122-18-4	Estimated Bioconcentration		Bioaccumulation factor	363	

**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**

In accordance with the Hazardous Substances (Disposal) Notice 2017 and the relevant criteria of the HSNO Act 1996.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility.

Packaging (that may or may not contain any residual substance) may be lawfully disposed of by householders or other consumers through public or commercial waste collection services.

**SECTION 14: Transport Information**

**New Zealand Land Transport Rule: Dangerous Goods - 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

HSNO Approval number Not applicable  
 Group standard name Not applicable  
 HSNO Hazard classification Refer to Section 2: Hazard identification

#### NZ Inventory of Chemicals (NZIoC) Status

All applicable chemical ingredients in this material are in compliance with NZIoC listing requirements.

#### Controls in accordance with The Health and Safety at Work Act 2015, Health and Safety at Work (Hazardous Substances) Regulations 2017 and the HSNO Act 1996, Hazardous Substances (Hazardous Property Controls) Notice 2017

Certified handler	Not required
Location Compliance Certificate	Not required
Hazardous atmosphere zone	Not required
Fire extinguishers	Not required
Emergency response plan	Not required
Secondary containment	Not required
Tracking	Not required
Warning signage	Not required

### SECTION 16: Other information

#### Revision information:

Complete document review.

<b>Document group:</b>	24-8558-9	<b>Version number:</b>	3.00
<b>Issue Date:</b>	28/09/2022	<b>Supersedes date:</b>	08/07/2018

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