

Material Safety Data Sheet Cover-Sheet – This page provides additional New Zealand specific information for this product and must be read in conjunction with the Safety Data Sheet (SDS) attached

Product Name: Impregum Penta Super Quick Medium Body IntroKit (69414)

Manufacturer: 3M

SDS Expiry: 19 July 2025

Supplier Details: Henry Schein New Zealand
243-249 Bush Road, Rosedale, Auckland, 0632
PO Box 101 140, North Shore, Auckland 0745
Ph. 0800 808 855
www.henryschein.co.nz

Emergency Contacts: Poisons/Hazardous Chemical Info Centre –
0800POISON/0800764766 (24 Hours)
Phone 111 for Fire, Ambulance or Police

HSNO Class/Category: 3 / 6

HSNO Group Standard: Dental Products Flammable Group Standard 2020 HSR002556

Statements/Pictograms: As per attached Safety Data Sheet (SDS)

Date Prepared: This coversheet was prepared – August 2023

This SDS coversheet has been produced by Henry Schein NZ and has been prepared in accordance with NZ EPA advice on making overseas SDS compliant to HSNO Act. The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with respect to the quality or the specifications of the product. Users must satisfy that the product is entirely suitable for their purpose. The SDS and this coversheet may be revised from time to time, please ensure you have a current copy.



Safety Data Sheet

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Document group:	37-9078-9	Version number:	1.00
Issue Date:	16/02/2020	Supersedes date:	Initial issue.

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)

IDENTIFICATION:

1.1. Product identifier

3M™ Impregum™ Penta™ Super Quick Medium Body IntroKit

Product Identification Numbers

UU-0093-4805-1

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Impression Material

Restrictions on use

For use only by dental professionals in approved indications.

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

Company Emergency Hotline:EMERGENCY: 1800 097 146 (Australia only)

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:

29-8225-4, 37-9020-1, 37-9016-9, 35-4551-4

One or more components of this KIT is classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011, in accordance with applicable State and Territory legislation.

TRANSPORT INFORMATION

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

UN No.: UN1133

Proper shipping name: ADHESIVES

Class/Division: 3

Packing Group: II

Marine Pollutant: Not applicable.

Hazchem Code: -3YE

IERG: 14

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

Special Instructions: Dangerous goods in Excepted Quantities, Class 3

International Air Transport Association (IATA)- Air Transport

Special Instructions: Dangerous goods in Excepted Quantities, Class 3

International Maritime Dangerous Goods Code (IMDG)- Marine Transport

Special Instructions: Forbidden due to internal policy

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



Safety Data Sheet

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Document group:	29-8225-4	Version number:	4.00
Issue Date:	05/04/2022	Supersedes date:	16/02/2020

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™ Astringent Retraction Paste (56944, 56945)

Product Identification Numbers

70-2011-3932-9 70-2011-3933-7

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Gingival Retraction

Restrictions on use

For use by dental professionals only.

1.3. Supplier's details

Address: 3M Australia - Building A, 1 Rivett Road, North Ryde NSW 2113
Telephone: 136 136
E Mail: productinfo.au@mmm.com
Website: www.3m.com.au

1.4. Emergency telephone number

EMERGENCY: 1800 097 146 (Australia only)

SECTION 2: Hazard identification

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

Not applicable.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable

2.3. Other assigned/identified product hazards

None known.

2.4. Other hazards which do not result in classification

May be harmful if swallowed.

Harmful to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Weight
Mica Group Minerals	12001-26-2	60 - 70
Aluminium Chloride (ALCL3), Hexahydrate	7784-13-6	< 20
Water	7732-18-5	10 - 20
Kaolin	1332-58-7	< 5
Poly(Dimethylsiloxane)	63148-62-9	< 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

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.
Hydrogen Chloride
Oxides of nitrogen.

Condition

During combustion.
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.

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

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.

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
Mica Group Minerals	12001-26-2	ACGIH	TWA(respirable fraction):0.1 mg/m3	
Mica Group Minerals	12001-26-2	Australia OELs	TWA(Inspirable)(8 hours):2.5 mg/m3	
Kaolin	1332-58-7	ACGIH	TWA(respirable fraction):2 mg/m3	A4: Not class. as human carcin
Kaolin	1332-58-7	Australia OELs	TWA(Inspirable dust)(8 hours):10 mg/m3	
Aluminium, soluble salts	7784-13-6	Australia OELs	TWA(as Al)(8 hours):2 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists
 AIHA : American Industrial Hygiene Association
 Australia OELs : Australia. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment
 CMRG : Chemical Manufacturer's Recommended Guidelines
 TWA: Time-Weighted-Average
 STEL: Short Term Exposure Limit
 CEIL: Ceiling
 Sen: Sensitiser
 Sk: Absorption through the skin may be a significant source of exposure.

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety glasses with side shields.

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

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Specific Physical Form:	Paste
Colour	Light Blue
Odour	Odourless
Odour threshold	<i>No data available.</i>
pH	3.2 - 4 [Details:10% aqueous solution]
Melting point/Freezing point	<i>Not applicable.</i>
Boiling point/Initial boiling point/Boiling range	<i>Not applicable.</i>
Flash point	Flash point > 93 °C (200 °F)
Evaporation rate	<i>No data available.</i>
Flammability (solid, gas)	Not classified
Flammable Limits(LEL)	<i>Not applicable.</i>
Flammable Limits(UEL)	<i>Not applicable.</i>
Vapour pressure	<i>No data available.</i>
Vapor Density and/or Relative Vapor Density	<i>No data available.</i>
Density	1.8 g/cm ³ - 2.2 g/cm ³
Relative density	1.8 - 2.2 [Ref Std:WATER=1]
Water solubility	Appreciable
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 H2O & exempt solvents	<i>No data available.</i>

Nanoparticles

This material does not contain nanoparticles.

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. 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****Condition**

None known.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects**Signs and Symptoms of Exposure**

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

No known health effects.

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

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	Ingestion		No data available; calculated ATE >2,000 - ≤5,000 mg/kg
Mica Group Minerals	Dermal		LD50 estimated to be > 5,000 mg/kg
Mica Group Minerals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Kaolin	Dermal		LD50 estimated to be > 5,000 mg/kg
Kaolin	Ingestion	Human	LD50 > 15,000 mg/kg
Poly(Dimethylsiloxane)	Dermal	Rabbit	LD50 > 19,400 mg/kg
Poly(Dimethylsiloxane)	Ingestion	Rat	LD50 > 17,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Overall product	Rabbit	No significant irritation
Kaolin	Professional judgement	No significant irritation
Poly(Dimethylsiloxane)	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Overall product	Rabbit	No significant irritation
Kaolin	Professional judgement	No significant irritation
Poly(Dimethylsiloxane)	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
Overall product	Guinea pig	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

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

Carcinogenicity

Name	Route	Species	Value
Kaolin	Inhalation	Multiple animal species	Not carcinogenic

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

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

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
Mica Group Minerals	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Kaolin	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL NA	occupational exposure
Kaolin	Inhalation	pulmonary fibrosis	Not classified	Rat	NOAEL Not available	

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 3: Harmful to aquatic life.

Chronic aquatic hazard:

GHS Chronic 3: Harmful to aquatic life with long lasting effects.

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Mica Group Minerals	12001-26-2		Data not available or insufficient for classification			N/A
Aluminium Chloride (ALCL ₃), Hexahydrate	7784-13-6	Green Algae	Estimated	72 hours	EC50	19.7 mg/l
Aluminium Chloride	7784-13-6	Rainbow trout	Estimated	96 hours	LC50	5.1 mg/l

(ALCL3), Hexahydrate						
Aluminium Chloride (ALCL3), Hexahydrate	7784-13-6	Water flea	Estimated	48 hours	EC50	2.72 mg/l
Kaolin	1332-58-7	Water flea	Experimental	48 hours	LC50	>1,100 mg/l
Poly(Dimethyls iloxane)	63148-62-9		Data not available or insufficient for classification			N/A

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Mica Group Minerals	12001-26-2	Data not available-insufficient	N/A	N/A	N/A	N/A
Aluminium Chloride (ALCL3), Hexahydrate	7784-13-6	Data not available-insufficient	N/A	N/A	N/A	N/A
Kaolin	1332-58-7	Data not available-insufficient	N/A	N/A	N/A	N/A
Poly(Dimethyls iloxane)	63148-62-9	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
Mica Group Minerals	12001-26-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Aluminium Chloride (ALCL3), Hexahydrate	7784-13-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Kaolin	1332-58-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Poly(Dimethyls iloxane)	63148-62-9	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

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials.

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.

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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



Safety Data Sheet

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Document group:	37-9020-1	Version number:	2.00
Issue Date:	23/03/2022	Supersedes date:	12/12/2018

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™ Impregum™ Penta™ Super Quick MB Ctalyst

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Impression Material

Restrictions on use

For use only by dental professionals in approved indications.

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

Skin Corrosion/Irritation: Category 2.

Skin Sensitizer: Category 1A.

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**

H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.

Precautionary statements**Prevention:**

P264 Wash thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280E Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.

Disposal:

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

2.3. Other assigned/identified product hazards

The silicosis target organ toxicity classification is not applied because there is no potential for inhalation exposure.

2.4. Other hazards which do not result in classification

Toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Weight
Sulfonium, [2-carboxy-1-(carboxymethyl)ethyl]dodecylethyl-, mixed Me and pentyl diesters, tetrafluoroborates	2220260-54-6	20 - 40
Diatomaceous earth	68855-54-9	10 - 30
Polyethylene-polypropylene glycol	9003-11-6	10 - 30
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	68909-20-6	10 - 30
Plasticiser	82469-79-2	1 - 20
Poly(Tetramethylene Ether)	25190-06-1	< 5
Titanium dioxide	13463-67-7	< 1

2,6-Di-tert-butyl-p-cresol	128-37-0	< 0.5
Dibenzyltoluene	53585-53-8	< 0.1

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

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

Allergic skin reaction (redness, swelling, blistering, and itching).

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Irritant vapours or gases.	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 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. 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

Store away from heat. Store away from acids. Store away from strong bases. 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 ³	A4: Not class. as human carcin
2,6-Di-tert-butyl-p-cresol	128-37-0	Australia OELs	TWA(8 hours):10 mg/m ³	
Titanium dioxide	13463-67-7	ACGIH	TWA:10 mg/m ³	A4: Not class. as human carcin
Titanium dioxide	13463-67-7	Australia OELs	TWA(Inspirable dust)(8 hours):10 mg/m ³	
CAS NO SEQ117921	68855-54-9	ACGIH	TWA(inhalable particulates):10 mg/m ³	
CAS NO SEQ117922	68855-54-9	ACGIH	TWA(respirable particles):3 mg/m ³	
Silicon dioxide	68855-54-9	Australia OELs	TWA(respirable fraction)(8 hours):2 mg/m ³	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

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

CMRG : Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

Sen: Sensitiser

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

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Safety glasses with side shields.

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

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Specific Physical Form:	Paste
Colour	Dark Red
Odour	Slight Acrid
Odour threshold	<i>No data available.</i>
pH	<i>No data available.</i>
Melting point/Freezing point	<i>No data available.</i>
Boiling point/Initial boiling point/Boiling range	<i>Not applicable.</i>
Flash point	No flash point
Evaporation rate	<i>Not applicable.</i>
Flammability (solid, gas)	Not classified
Flammable Limits(LEL)	<i>Not applicable.</i>
Flammable Limits(UEL)	<i>Not applicable.</i>
Vapour pressure	<i>Not applicable.</i>
Vapor Density and/or Relative Vapor Density	<i>Not applicable.</i>
Relative density	1.1 - 1.4 [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>Not applicable.</i>
Percent volatile	<i>Not applicable.</i>
VOC less H2O & exempt solvents	<i>Not applicable.</i>

Nanoparticles

This material contains nanoparticles.

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. Conditions to avoid

Heat.

10.4. Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.5 Incompatible materials

Strong acids.
Strong bases.
Strong oxidising agents.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

This product may have a characteristic odour; however, no adverse health effects are anticipated.

Skin contact

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

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.

Additional Health Effects:

Carcinogenicity:

Exposures needed to cause the following health effect(s) are not expected during normal, intended use:
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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Sulfonium, [2-carboxy-1-(carboxymethyl)ethyl]dodecylethyl-, mixed Me and pentyl diesters, tetrafluoroborates	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Sulfonium, [2-carboxy-1-(carboxymethyl)ethyl]dodecylethyl-, mixed Me and pentyl diesters, tetrafluoroborates	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
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Polyethylene-polypropylene glycol	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Polyethylene-polypropylene glycol	Ingestion	Rat	LD50 5,700 mg/kg
Diatomaceous earth	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Diatomaceous earth	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.7 mg/l
Diatomaceous earth	Ingestion	Rat	LD50 > 2,000 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
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
Dibenzyltoluene	Dermal	Rat	LD50 > 2,000 mg/kg
Dibenzyltoluene	Ingestion	Rat	LD50 > 10,360 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Sulfonium, [2-carboxy-1-(carboxymethyl)ethyl]dodecylethyl-, mixed Me and pentyl diesters, tetrafluoroborates	Professional judgement	Irritant
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Rabbit	No significant irritation
Diatomaceous earth	In vitro data	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
2,6-Di-tert-butyl-p-cresol	Human and animal	Minimal irritation
Dibenzyltoluene	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
Sulfonium, [2-carboxy-1-(carboxymethyl)ethyl]dodecylethyl-, mixed Me and pentyl diesters, tetrafluoroborates	In vitro data	No significant irritation
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products	Rabbit	No significant irritation

with silica		
Diatomaceous earth	Rabbit	Mild irritant
Titanium dioxide	Rabbit	No significant irritation
2,6-Di-tert-butyl-p-cresol	Rabbit	Mild irritant
Dibenzyltoluene	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
Sulfonium, [2-carboxy-1-(carboxymethyl)ethyl]dodecylethyl-, mixed Me and pentyl diesters, tetrafluoroborates	In vitro data	Sensitising
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Human and animal	Not classified
Diatomaceous earth	Mouse	Not classified
Titanium dioxide	Human and animal	Not classified
2,6-Di-tert-butyl-p-cresol	Human	Not classified
Dibenzyltoluene	Guinea pig	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
Sulfonium, [2-carboxy-1-(carboxymethyl)ethyl]dodecylethyl-, mixed Me and pentyl diesters, tetrafluoroborates	In Vitro	Not mutagenic
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	In Vitro	Not mutagenic
Diatomaceous earth	In Vitro	Some positive data exist, but the data are not sufficient for classification
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
2,6-Di-tert-butyl-p-cresol	In Vitro	Not mutagenic
2,6-Di-tert-butyl-p-cresol	In vivo	Not mutagenic
Dibenzyltoluene	In Vitro	Not mutagenic
Dibenzyltoluene	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
Diatomaceous earth	Inhalation	Human and animal	Carcinogenic.
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.
2,6-Di-tert-butyl-p-cresol	Ingestion	Multiple animal species	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
------	-------	-------	---------	-------------	-------------------

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
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
Dibenzyltoluene	Ingestion	Toxic to male reproduction	Rat	NOAEL 250 mg/kg/day	28 days
Dibenzyltoluene	Ingestion	Toxic to female reproduction	Rat	NOAEL 250 mg/kg/day	prematuring into lactation
Dibenzyltoluene	Ingestion	Toxic to development	Rabbit	LOAEL 10 mg/kg/day	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Dibenzyltoluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	

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
Diatomaceous earth	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Diatomaceous earth	Ingestion	hematopoietic system eyes kidney and/or bladder	Not classified	Rat	NOAEL 3,738 mg/kg/day	90 days
Titanium dioxide	Inhalation	respiratory system	Some positive data exist, but the	Rat	LOAEL 0.01 mg/l	2 years

			data are not sufficient for classification			
Titanium dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
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
Dibenzyltoluene	Ingestion	liver kidney and/or bladder heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system eyes respiratory system vascular system	Not classified	Rat	NOAEL 500 mg/kg/day	120 days

Aspiration Hazard

Name	Value
Dibenzyltoluene	Aspiration hazard

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
Sulfonium, [2-carboxy-1-(carboxymethyl)ethyl]dodecyl-, mixed Me and pentyl diesters, tetrafluoroborates	2220260-54-6	Green Algae	Estimated	72 hours	EC50	1.3 mg/l
Diatomaceous earth	68855-54-9	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Diatomaceous earth	68855-54-9	Rainbow trout	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Diatomaceous earth	68855-54-9	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Diatomaceous earth	68855-54-9	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Diatomaceous earth	68855-54-9	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Polyethylene-polypropylene glycol	9003-11-6		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	Estimated	72 hours	EC50	>100 mg/l
Plasticiser	82469-79-2	Activated sludge	Experimental	3 hours	NOEC	>10 mg/l
Plasticiser	82469-79-2	Water flea	Experimental	48 hours	EC50	0.38 mg/l
Plasticiser	82469-79-2	Green Algae	Experimental	72 hours	NOEC	1.04 mg/l
Poly(Tetramethylene Ether)	25190-06-1	Activated sludge	Experimental	30 minutes	EC20	450 mg/l
Poly(Tetramethylene Ether)	25190-06-1		Data not available or insufficient for classification			N/A
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	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l

dioxide						
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	NOEC	5,600 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
Dibenzyltoluene	53585-53-8	Bacteria	Experimental	4.92 hours	EC10	>1,000 mg/l
Dibenzyltoluene	53585-53-8	Copepods	Experimental	48 hours	LC50	>0.0206 mg/l
Dibenzyltoluene	53585-53-8	Green algae	Experimental	96 hours	EC50	0.019 mg/l
Dibenzyltoluene	53585-53-8	Water flea	Experimental	48 hours	EC50	>0.029 mg/l
Dibenzyltoluene	53585-53-8	Zebra Fish	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Dibenzyltoluene	53585-53-8	Green algae	Experimental	96 hours	EC10	0.006 mg/l
Dibenzyltoluene	53585-53-8	Water flea	Experimental	21 days	NOEC	0.03 mg/l

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Sulfonium, [2-carboxy-1-(carboxymethyl)ethyl]dodecylethyl-, mixed Me and pentyl diesters, tetrafluoroborates	2220260-54-6	Experimental Hydrolysis		Hydrolytic half-life	8 minutes (t _{1/2})	Non-standard method
Sulfonium, [2-carboxy-1-(carboxymethyl)ethyl]dodecylethyl-, mixed Me and pentyl diesters, tetrafluoroborates	2220260-54-6	Experimental Biodegradation	28 days	BOD	60 % BOD/ThBOD (does not pass 10-day window)	OECD 301F - Manometric respirometry
Diatomaceous	68855-54-9	Data not	N/A	N/A	N/A	N/A

earth		available-insufficient				
Polyethylene-polypropylene glycol	9003-11-6	Data not available-insufficient	N/A	N/A	N/A	N/A
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl) propyl ester, hydrolysis products with silica	68909-20-6	Data not available-insufficient	N/A	N/A	N/A	N/A
Poly(Tetramethylene Ether)	25190-06-1	Data not available-insufficient	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Data not available-insufficient	N/A	N/A	N/A	N/A
2,6-Di-tert-butyl-p-cresol	128-37-0	Data not available-insufficient	N/A	N/A	N/A	N/A
Dibenzyltoluene	53585-53-8	Experimental Biodegradation	28 days	BOD	0.5 % BOD/ThBOD	OECD 301D - Closed bottle test

12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Diatomaceous earth	68855-54-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyethylene-polypropylene glycol	9003-11-6	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	68909-20-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Plasticiser	82469-79-2	Estimated Bioconcentration		Bioaccumulation factor	7.05	Estimated: Bioconcentration factor
Poly(Tetramethylene Ether)	25190-06-1	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
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
Dibenzyltoluene	53585-53-8	Experimental BCF - Carp	56 days	Bioaccumulation factor	6300	OECD 305E - Bioaccumulation flow-through fish test

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

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

SECTION 14: Transport Information

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

UN No.: UN3077

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ,
((1,2,3-Propanetricarboxylic acid, 2-(1-oxobutoxy)-, trihexyl ester))

Class/Division: 9

Sub Risk: Not applicable.

Packing Group: III

Special Instructions: Not restricted, environmentally hazardous substance exception.

Hazchem Code: Not applicable

IERG: 47

International Air Transport Association (IATA) - Air Transport

UN No.: UN3077

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ,
((1,2,3-Propanetricarboxylic acid, 2-(1-oxobutoxy)-, trihexyl ester))

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. ,
((1,2,3-Propanetricarboxylic acid, 2-(1-oxobutoxy)-, trihexyl ester))

Class/Division: 9

Sub Risk: Not applicable.

Packing Group: III

Marine Pollutant: (1,2,3-Propanetricarboxylic acid, 2-(1-oxobutoxy)-, trihexyl ester)

Special Instructions: Forbidden due to internal policy

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



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™ Impregum™ Penta™ Super Quick MB Base

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Impression Material

Restrictions on use

For use only by dental professionals in approved indications.

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.

Skin Sensitizer: Category 1A.

Reproductive Toxicity: 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

Exclamation mark |Health Hazard |

Pictograms



Hazard statements

H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H360 May damage fertility or the unborn child.

Precautionary statements

Prevention:

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P264 Wash thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.

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.
 P308 + P313 IF exposed or concerned: Get medical advice/attention.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

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.
 Very toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Weight
------------	---------	-------------

Polyether	110531-92-5	40 - 60
Glycerides, C14-18	67701-27-3	1 - 20
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	68855-54-9	1 - 20
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	53585-53-8	10 - 15
N-Ethyl-P-Toluenesulfonamide	80-39-7	1 - 10
Lanthanum Trioxide	1312-81-8	1 - 5
Polyethylene-Polypropylene Glycol	9003-11-6	< 2
1-Dodecylimidazole	4303-67-7	< 1
2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)-	6485-40-1	< 0.5
Titanium dioxide	13463-67-7	< 0.5
(S)-(-)-P-Mentha-1,8-Diene	5989-54-8	< 0.3
Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S-trans)-	14073-97-3	< 0.3

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

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

Allergic skin reaction (redness, swelling, blistering, and itching).

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.

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**7.1. Precautions for safe handling**

Do not handle until all safety precautions have been read and understood. 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. 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

Store away from heat. Store away from acids. Store away from strong bases. 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
Titanium dioxide	13463-67-7	ACGIH	TWA:10 mg/m ³	A4: Not class. as human carcin
Titanium dioxide	13463-67-7	Australia OELs	TWA(Inspirable dust)(8 hours):10 mg/m ³	
CAS NO SEQ117921	68855-54-9	ACGIH	TWA(inhalable particulates):10 mg/m ³	
CAS NO SEQ117922	68855-54-9	ACGIH	TWA(respirable particles):3 mg/m ³	
Silicon dioxide	68855-54-9	Australia OELs	TWA(respirable fraction)(8 hours):2 mg/m ³	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

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

CMRG : Chemical Manufacturer's Recommended Guidelines
 TWA: Time-Weighted-Average
 STEL: Short Term Exposure Limit
 CEIL: Ceiling
 Sen: Sensitiser
 Sk: Absorption through the skin may be a significant source of exposure.

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
 Safety glasses with side shields.

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

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Specific Physical Form:	Paste
Colour	Blue
Odour	Minty
Odour threshold	<i>No data available.</i>
pH	<i>Not applicable.</i>
Melting point/Freezing point	<i>Not applicable.</i>
Boiling point/Initial boiling point/Boiling range	<i>Not applicable.</i>
Flash point	Flash point > 93 °C (200 °F)
Evaporation rate	<i>Not applicable.</i>
Flammability (solid, gas)	Not classified
Flammable Limits(LEL)	<i>Not applicable.</i>
Flammable Limits(UEL)	<i>Not applicable.</i>
Vapour pressure	<i>No data available.</i>
Vapor Density and/or Relative Vapor Density	<i>No data available.</i>
Density	1 g/cm ³ - 1.2 g/cm ³
Relative density	> 1 [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	No data available.
Volatile organic compounds (VOC)	No data available.
Percent volatile	No data available.
VOC less H2O & exempt solvents	No data available.
Molecular weight	No data available.

Nanoparticles

This material does not contain nanoparticles.

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. Conditions to avoid

Heat.

10.4. Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.5 Incompatible materials

Strong acids.

Strong bases.

Strong oxidising agents.

10.6 Hazardous decomposition products**Substance****Condition**

None known.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects**Signs and Symptoms of Exposure**

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

This product may have a characteristic odour; however, no adverse health effects are anticipated.

Skin contact

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

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Carcinogenicity:

Exposures needed to cause the following health effect(s) are not expected during normal, intended use:

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 >5,000 mg/kg
Polyether	Dermal	Professional judgement	LD50 Not applicable
Polyether	Ingestion	Rat	LD50 > 2,000 mg/kg
Glycerides, C14-18	Dermal	Rabbit	LD50 > 2,000 mg/kg
Glycerides, C14-18	Ingestion	Rat	LD50 > 2,000 mg/kg
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	Dermal	Rat	LD50 > 2,000 mg/kg
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	Ingestion	Rat	LD50 > 10,360 mg/kg
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.7 mg/l
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Ingestion	Rat	LD50 > 2,000 mg/kg
N-Ethyl-P-Toluenesulfonamide	Dermal	Rabbit	LD50 > 5,000 mg/kg
N-Ethyl-P-Toluenesulfonamide	Ingestion	similar compounds	LD50 estimated to be 300 - 2,000 mg/kg
Lanthanum Trioxide	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Lanthanum Trioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.3 mg/l
Lanthanum Trioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Polyethylene-Polypropylene Glycol	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Polyethylene-Polypropylene Glycol	Ingestion	Rat	LD50 5,700 mg/kg
1-Dodecylimidazole	Ingestion	Rat	LD50 641 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
(S)-(-)-P-Mentha-1,8-Diene	Inhalation-Vapour (4 hours)	Mouse	LC50 > 3.14 mg/l
Cyclohexanone, 5-methyl-2-(1-	Ingestion	Multiple animal	LD50 > 2,000 mg/kg

		species	
methylethyl)-, (2S-trans)- (S)-(-)-P-Mentha-1,8-Diene	Dermal	Rabbit	LD50 > 5,000 mg/kg
Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S-trans)- (S)-(-)-P-Mentha-1,8-Diene	Dermal	Rabbit	LD50 > 5,000 mg/kg
	Ingestion	Rat	LD50 4,400 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Polyether	Rabbit	No significant irritation
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	Rabbit	Mild irritant
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	In vitro data	No significant irritation
Lanthanum Trioxide	Rabbit	No significant irritation
1-Dodecylimidazole	Rabbit	Mild irritant
Titanium dioxide	Rabbit	No significant irritation
(S)-(-)-P-Mentha-1,8-Diene	Rabbit	Mild irritant
Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S-trans)-	In vitro data	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Polyether	Rabbit	Moderate irritant
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	Rabbit	No significant irritation
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Rabbit	Mild irritant
Lanthanum Trioxide	Rabbit	Mild irritant
1-Dodecylimidazole	In vitro data	Severe irritant
Titanium dioxide	Rabbit	No significant irritation
(S)-(-)-P-Mentha-1,8-Diene	Rabbit	Mild irritant
Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S-trans)-	In vitro data	No significant irritation

Skin Sensitisation

Name	Species	Value
Polyether	Guinea pig	Not classified
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	Guinea pig	Not classified
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Mouse	Not classified
Lanthanum Trioxide	Guinea pig	Not classified
1-Dodecylimidazole	Mouse	Sensitising
Titanium dioxide	Human and animal	Not classified
(S)-(-)-P-Mentha-1,8-Diene	Mouse	Sensitising
Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S-trans)-	Mouse	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
Polyether	In Vitro	Not mutagenic
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	In Vitro	Not mutagenic

Benzene, bis(phenylmethyl)-, ar-methyl deriv.	In vivo	Not mutagenic
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	In Vitro	Some positive data exist, but the data are not sufficient for classification
1-Dodecylimidazole	In Vitro	Not mutagenic
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
(S)-(-)-P-Mentha-1,8-Diene	In Vitro	Not mutagenic
(S)-(-)-P-Mentha-1,8-Diene	In vivo	Not mutagenic
Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S-trans)-	In Vitro	Not mutagenic
Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S-trans)-	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation	Human and animal	Carcinogenic.
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.
(S)-(-)-P-Mentha-1,8-Diene	Ingestion	Rat	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
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	Ingestion	Toxic to male reproduction	Rat	NOAEL 250 mg/kg/day	28 days
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	Ingestion	Toxic to female reproduction	Rat	NOAEL 250 mg/kg/day	pre mating into lactation
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	Ingestion	Toxic to development	Rabbit	LOAEL 10 mg/kg/day	during gestation
(S)-(-)-P-Mentha-1,8-Diene	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	pre mating & during gestation
(S)-(-)-P-Mentha-1,8-Diene	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 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
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
(S)-(-)-P-Mentha-1,8-Diene	Ingestion	nervous system	Not classified		NOAEL Not available	
Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S-trans)-	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	Ingestion	liver kidney and/or bladder heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system eyes respiratory system vascular system	Not classified	Rat	NOAEL 500 mg/kg/day	120 days
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Ingestion	hematopoietic system eyes kidney and/or bladder	Not classified	Rat	NOAEL 3,738 mg/kg/day	90 days
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
(S)-(-)-P-Mentha-1,8-Diene	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 75 mg/kg/day	103 weeks
(S)-(-)-P-Mentha-1,8-Diene	Ingestion	liver	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
(S)-(-)-P-Mentha-1,8-Diene	Ingestion	heart endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system respiratory system	Not classified	Rat	NOAEL 600 mg/kg/day	103 weeks

Aspiration Hazard

Name	Value
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	Aspiration hazard
(S)-(-)-P-Mentha-1,8-Diene	Aspiration hazard

Exposure Levels

Refer Section 8.1 **Control Parameters** of this Safety Data Sheet.

Interactive Effects

Not determined.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity**Acute aquatic hazard:**

GHS Acute 1: Very toxic to aquatic life.

Chronic aquatic hazard:

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

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Polyether	110531-92-5		Data not available or insufficient for classification			N/A
Glycerides, C14-18	67701-27-3	Green algae	Estimated	72 hours	EC50	>100 mg/l
Glycerides, C14-18	67701-27-3	Water flea	Estimated	48 hours	EC50	>100 mg/l
Glycerides, C14-18	67701-27-3	Zebra Fish	Estimated	96 hours	LC50	>100 mg/l
Glycerides, C14-18	67701-27-3	Green algae	Estimated	72 hours	NOEC	100 mg/l
Glycerides, C14-18	67701-27-3	Water flea	Estimated	21 days	NOEC	100 mg/l
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	68855-54-9	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	68855-54-9	Rainbow trout	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	68855-54-9	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l

Flux calcined diatomaceous earth (cristobalite 1 - <10%)	68855-54-9	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	68855-54-9	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	53585-53-8	Bacteria	Experimental	4.92 hours	EC10	>1,000 mg/l
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	53585-53-8	Copepods	Experimental	48 hours	LC50	>0.0206 mg/l
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	53585-53-8	Green algae	Experimental	96 hours	EC50	0.019 mg/l
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	53585-53-8	Water flea	Experimental	48 hours	EC50	>0.029 mg/l
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	53585-53-8	Zebra Fish	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	53585-53-8	Green algae	Experimental	96 hours	EC10	0.006 mg/l
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	53585-53-8	Water flea	Experimental	21 days	NOEC	0.03 mg/l
N-Ethyl-P-Toluenesulfonamide	80-39-7	Green Algae	Analogous Compound	72 hours	ErC50	78 mg/l
N-Ethyl-P-Toluenesulfonamide	80-39-7	Rainbow trout	Analogous Compound	96 hours	LC50	80 mg/l
N-Ethyl-P-Toluenesulfonamide	80-39-7	Water flea	Analogous Compound	48 hours	EC50	>1,000 mg/l
N-Ethyl-P-Toluenesulfonamide	80-39-7	Green Algae	Analogous Compound	72 hours	ErC10	13 mg/l
Lanthanum Trioxide	1312-81-8	Water flea	Experimental	48 hours	EC50	>100 mg/l
Lanthanum Trioxide	1312-81-8	Zebra Fish	Experimental	96 hours	LC50	>100 mg/l
Lanthanum	1312-81-8	Water flea	Experimental	21 days	NOEC	100 mg/l

Trioxide						
Polyethylene-Polypropylene Glycol	9003-11-6		Data not available or insufficient for classification			N/A
1-Dodecylimidazole	4303-67-7	Green Algae	Experimental	72 hours	EC50	0.00557 mg/l
1-Dodecylimidazole	4303-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
1-Dodecylimidazole	4303-67-7	Green algae	Experimental	72 hours	EC10	0.0021 mg/l
2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)-	6485-40-1	Green Algae	Experimental	72 hours	EC50	19 mg/l
2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)-	6485-40-1	Rainbow trout	Experimental	96 hours	LC50	6.1 mg/l
2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)-	6485-40-1	Water flea	Experimental	48 hours	EC50	38 mg/l
2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)-	6485-40-1	Green Algae	Experimental	72 hours	NOEC	4.3 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
(S)-(-)-P-Mentha-1,8-Diene	5989-54-8		Data not available or insufficient for classification			N/A
Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S-trans)-	14073-97-3	Green Algae	Experimental	72 hours	EC50	58 mg/l
Cyclohexanone, 5-methyl-2-	14073-97-3	Water flea	Experimental	48 hours	EC50	30.6 mg/l

(1-methylethyl)-, (2S-trans)-						
Cyclohexanone , 5-methyl-2- (1-methylethyl)-, (2S-trans)-	14073-97-3	Zebra Fish	Experimental	96 hours	LC50	15.6 mg/l
Cyclohexanone , 5-methyl-2- (1-methylethyl)-, (2S-trans)-	14073-97-3	Green Algae	Experimental	72 hours	NOEC	10 mg/l

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Polyether	110531-92-5	Data not available- insufficient			N/A	
Glycerides, C14-18	67701-27-3	Estimated Biodegradation	28 days	BOD	79 % BOD/ThBOD	OECD 301F - Manometric respirometry
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	68855-54-9	Data not available- insufficient			N/A	
Benzene, bis(phenylmeth yl)-, ar-methyl deriv.	53585-53-8	Experimental Biodegradation	28 days	BOD	0.5 % BOD/ThBOD	OECD 301D - Closed bottle test
N-Ethyl-P- Toluenesulfona mide	80-39-7	Analogous Compound Aquatic Inherent Biodegrad.	35 days	CO2 evolution	3 %CO2 evolution/THC O2 evolution	
N-Ethyl-P- Toluenesulfona mide	80-39-7	Modeled Biodegradation	28 days	BOD	25 % BOD/ThBOD	Catalogic™
N-Ethyl-P- Toluenesulfona mide	80-39-7	Analogous Compound Biodegradation	28 days	Dissolv. Organic Carbon Deplet	50.6 %removal of DOC	similar to 835.3240
Lanthanum Trioxide	1312-81-8	Data not available- insufficient			N/A	
Polyethylene- Polypropylene Glycol	9003-11-6	Data not available- insufficient			N/A	
1- Dodecylimidaz ole	4303-67-7	Experimental Biodegradation	28 days	CO2 evolution	2-3 % weight	OECD 301B - Modified sturm or CO2
2-Cyclohexen- 1-one, 2- methyl-5-(1-	6485-40-1	Estimated Photolysis		Photolytic half- life (in air)	2.7 hours (t 1/2)	Non-standard method

methylethenyl), (R)-						
2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl), (R)-	6485-40-1	Experimental Biodegradation	28 days	BOD	90 % BOD/ThBOD	OECD 301F - Manometric respirometry
Titanium dioxide	13463-67-7	Data not available-insufficient			N/A	
(S)-(-)-P-Mentha-1,8-Diene	5989-54-8	Data not available-insufficient			N/A	
Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S-trans)-	14073-97-3	Analogous Compound Biodegradation	28 days	BOD	63 % BOD/ThBOD	EC C.4.E Closed Bottle Test

12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Polyether	110531-92-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glycerides, C14-18	67701-27-3	Estimated Bioconcentration		Bioaccumulation factor	7.4	Non-standard method
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	68855-54-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Benzene, bis(phenylmethyl)-, ar-methyl deriv.	53585-53-8	Experimental BCF-Carp	56 days	Bioaccumulation factor	6300	OECD 305E - Bioaccumulation flow-through fish test
N-Ethyl-P-Toluenesulfonamide	80-39-7	Analogous Compound Bioconcentration		Log Kow	1.8	
Lanthanum Trioxide	1312-81-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyethylene-Polypropylene Glycol	9003-11-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1-Dodecylimidazole	4303-67-7	Estimated Bioconcentration		Bioaccumulation factor	3090	Estimated: Bioconcentration factor
2-Cyclohexen-1-one, 2-	6485-40-1	Experimental Bioconcentration		Log Kow	2.74	Non-standard method

methyl-5-(1-methylethenyl)-, (R)-		on				
Titanium dioxide	13463-67-7	Experimental BCF-Carp	42 days	Bioaccumulation factor	9.6	Non-standard method
(S)-(-)-P-Mentha-1,8-Diene	5989-54-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S-trans)-	14073-97-3	Experimental Bioconcentration		Log Kow	3.05	

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.

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

SECTION 14: Transport Information

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

UN No.: UN3077

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. , (Dibenzyl Toluene)

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. , (Dibenzyl Toluene)

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. , (Dibenzyl Toluene)

Class/Division: 9

Sub Risk: Not applicable.

Packing Group: III

Marine Pollutant: Dibenzyl Toluene

Special Instructions: Forbidden due to internal policy

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



Safety Data Sheet

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Issue Date: 19/07/2020 **Supersedes date:** 06/12/2016

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™ Polyether Adhesive - New Formulation

Product Identification Numbers

70-2011-4439-4 UU-0098-0601-7

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Tray Adhesive

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, the Hazardous Substances (Classification) Notice 2017 and Hazardous Substances (Minimum Degrees of Hazard) Notice 2017.

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

2.1. Classification of the substance or mixture

GHS	HSNO
Flammable Liquid: Category 2	3.1B Flammable Liquid
Specific Target Organ Toxicity (single exposure): Category 3	6.9B Narcotic effects

2.2. Label elements

SIGNAL WORD

DANGER!

Symbols:

Flame | Exclamation mark |

Pictograms



HAZARD STATEMENTS:

H225 Highly flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

PRECAUTIONARY STATEMENTS

Prevention:

P210A Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P240B Ground and bond container and receiving equipment.
 P242A Use non-sparking tools.
 P233 Keep container tightly closed.
 P243A Take action to prevent static discharges.
 P241 Use explosion-proof electrical/ventilating/lighting equipment.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P271 Use only outdoors or in a well-ventilated area.
 P280B Wear protective gloves and eye/face protection.

Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 Call a POISON CENTRE or doctor/physician if you feel unwell.
 P370 + P378G In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.
 P303 + P361 + P353A IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P403 + P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.

Disposal:

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

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	% by Weight
Ethyl acetate	141-78-6	70 - 80

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

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. Do not induce vomiting. Get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for 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.

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.

5.4. Hazchem code: -3Y

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 vapors 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. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. 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. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidising agents.

7.3. Certified handler

Not required

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
Ethyl acetate	141-78-6	ACGIH	TWA:400 ppm	
Ethyl acetate	141-78-6	New Zealand WES	TWA(8 hours):720 mg/m ³ (200 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

New Zealand WES : New Zealand Workplace Exposure Standards.

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

ppm: parts per million

mg/m³: milligrams per cubic metre

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety glasses with side shields.

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	Liquid.
Specific Physical Form:	Viscous.
Colour	Red
Odour	Characteristic Organic solvent
Odour threshold	<i>No data available.</i>
pH	<i>No data available.</i>
Melting point/Freezing point	<i>No data available.</i>
Boiling point/Initial boiling point/Boiling range	76.1 °C
Flash point	-3.9 °C [Test Method: Closed Cup]
Evaporation rate	<i>No data available.</i>
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	1.2 %
Flammable Limits(UEL)	11.5 %
Vapour pressure	17,465.2 Pa
Vapor Density and/or Relative Vapor Density	> 1 [Ref Std: AIR=1]
Density	± 0.9 g/cm ³
Relative density	> 0.9 [Ref Std: WATER=1]
Water solubility	Nil
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	± 0.25 Pa-s
Volatile organic compounds (VOC)	
Percent volatile	<i>No data available.</i>
VOC less H ₂ O & exempt solvents	
Molecular weight	<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 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Sparks and/or flames.
Heat.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide.	Oxidation, heat or reaction
Carbon dioxide.	Oxidation, heat or reaction

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. May cause additional health effects (see below).

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. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

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

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Ethyl acetate	Dermal	Rabbit	LD50 > 18,000 mg/kg
Ethyl acetate	Inhalation-Vapor (4 hours)	Rat	LC50 70.5 mg/l
Ethyl acetate	Ingestion	Rat	LD50 5,620 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Ethyl acetate	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
Ethyl acetate	Rabbit	Mild irritant

Sensitisation:**Skin Sensitisation**

Name	Species	Value
Ethyl acetate	Guinea pig	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
Ethyl acetate	In Vitro	Not mutagenic
Ethyl acetate	In vivo	Not mutagenic

Carcinogenicity

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

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

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

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Ethyl acetate	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Ethyl acetate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Ethyl acetate	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Ethyl acetate	Inhalation	endocrine system	Not classified	Rat	NOAEL	90 days

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		liver nervous system			0.043 mg/l	
Ethyl acetate	Inhalation	hematopoietic system	Not classified	Rabbit	LOAEL 16 mg/l	40 days
Ethyl acetate	Ingestion	hematopoietic system liver kidney and/or bladder	Not classified	Rat	NOAEL 3,600 mg/kg/day	90 days

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

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Ethyl acetate	141-78-6	Crustacea	Experimental	48 hours	EC50	165 mg/l
Ethyl acetate	141-78-6	Fish	Experimental	96 hours	LC50	212.5 mg/l
Ethyl acetate	141-78-6	Green Algae	Experimental	72 hours	NOEC	>100 mg/l
Ethyl acetate	141-78-6	Water flea	Experimental	21 days	NOEC	2.4 mg/l

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Ethyl acetate	141-78-6	Experimental Photolysis		Photolytic half-life (in air)	20.0 days (t _{1/2})	Other methods
Ethyl acetate	141-78-6	Experimental Biodegradation	14 days	BOD	94 % BOD/ThBOD	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Ethyl acetate	141-78-6	Experimental Bioconcentration		Log Kow	0.68	Other methods

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

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.: UN1133

Proper Shipping Name: Adhesives

Class/Division: 3

Sub Risk: Not applicable.

Packing Group: II

Special Instructions: Excepted quantity may be applied

Hazchem Code: -3Y

IERG: 14

International Air Transport Association (IATA) - Air Transport

UN No.: UN1133

Proper Shipping Name: Adhesives

Class/Division: 3

Sub Risk: Not applicable.

Packing Group: II

Special Instructions: Excepted Quantity may apply

International Maritime Dangerous Goods Code (IMDG) - Marine Transport

UN No.: UN1133

Proper Shipping Name: Adhesives

Class/Division: 3

Sub Risk: Not applicable.

Packing Group: II

Marine Pollutant: Not applicable.

Special Instructions: Forbidden by this mode of transport

SECTION 15: Regulatory information

HSNO Approval number HSR002556

Group standard name Dental Products (Flammable) Group Standard 2017

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 (Hazardous Substances) Regulations 2017

Certified handler	Not required
Location Compliance Certificate	100 L (closed containers greater than 5 L) 250 L (closed containers up to and including 5 L) 50 L (open containers)
Hazardous atmosphere zone	100 L (closed containers) 25 L (decanting) 5 L (open occasionally) 1 L (open containers in continuous use)
Fire extinguishers	Two required for 250 L
Emergency response plan	100 L (for a HSNO 9.1A substance) or 1,000 L (for all other substances)

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Secondary containment	100 L (for a HSNO 9.1A substance) or 1,000 L (for all other substances)
Tracking	Not required
Warning signage	100 L (for a HSNO 9.1A substance), or 250 L (for all other substances)

SECTION 16: Other information**Revision information:**

Complete document review.

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Key to abbreviations and acronyms**GHS** means the Globally Harmonised System of Classification and Labelling of Chemicals, 5th revised edition 2013**HSNO** means Hazardous Substances and New Organisms Act 1996

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