

# Safety Data Sheet

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Issue Date:	03/12/2018	Supersedes date:	21/04/2013

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

# **IDENTIFICATION:**

**1.1. Product identifier** 3M<sup>™</sup> ESPE<sup>™</sup> Imprint<sup>™</sup> 4 Light Refill

#### **Product Identification Numbers** 70-2011-4143-2

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

**Recommended use** Dental Product, Impression Material

**Restrictions on use** For use by dental professionals only.

#### 1.3. Supplier's details

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

#### 1.4. Emergency telephone number

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

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

31-4863-2, 31-4872-3

One or more components of this KIT is classified as a hazardous substance in accordance with the relevant criteria of the HSNO Act 1996, the Hazardous Substances (Classification) Notice 2017 and the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017.

# **TRANSPORT INFORMATION**

#### NOT HAZARDOUS FOR TRANSPORT

#### **Revision information:**

Complete document review.

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Document group:	31-4863-2	Version number:	2.00
Issue Date:	03/12/2018	Supersedes date:	21/04/2013

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<sup>TM</sup> ESPE<sup>TM</sup> IMPRINT<sup>TM</sup> 4 LIGHT BASE

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

#### **Recommended use**

Dental Product, Impression Material

#### Restrictions on use

For use by dental professionals only.

#### 1.3. Supplier's details

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

#### 1.4. Emergency telephone number

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

# **SECTION 2: Hazard identification**

Classified as hazardous in accordance with the relevant criteria of the HSNO Act 1996, 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
Skin Sensitiser: Category 1	6.5B Skin sensitiser

**2.2. Label elements SIGNAL WORD** WARNING!

#### **Symbols:** Exclamation mark |

#### Pictograms



# HAZARD STATEMENTS: H317

May cause an allergic skin reaction.

#### PRECAUTIONARY STATEMENTS

Prevention:	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280E	Wear protective gloves.
P272A	Contaminated work clothing must not be allowed out of the workplace.
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.
P321	Specific treatment (see Notes to Physician on this label).
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
Cristobalite	14464-46-1	20 - 40
Vinyl-polydimethyl siloxane	68083-19-2	30 - 40
Dimethyl methyl hydrogen silicone fluid	68037-59-2	10 - 20
Silica, vitreous	60676-86-0	1 - 10
Polyethyleneglycol, siloxane terminated	27306-78-1	1 - 10
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis	67762-90-7	1 - 10
products with silica		
Allyltrimethylsilane	762-72-1	< 5
Fluorinated polyether	Trade Secret	< 5
Tridymite	15468-32-3	< 2
Cornmint oil	68917-18-0	< 0.5
Quartz	14808-60-7	< 0.5

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

#### Skin contact

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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

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

Material will not burn.

# 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.

#### <u>Condition</u> During combustion. During combustion. During combustion.

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

No special protective actions for fire-fighters are anticipated.

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

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

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

Evacuate area. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

#### **6.2.** Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

# **SECTION 7: Handling and storage**

Refer to Section 15 - Controls for more information

#### 7.1. Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) 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. Store away from amines.

#### 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 Cristobalite	<b>CAS Nbr</b> 14464-46-1	<b>Agency</b> ACGIH
Silica, crystalline (airborne particles of respirable size)	14464-46-1	New Zealand WES
Quartz	14808-60-7	ACGIH
Silica, crystalline (airborne particles of respirable size)	14808-60-7	New Zealand WES
Silica, crystalline (airborne particles of respirable size)	15468-32-3	New Zealand WES
Silica, vitreous	60676-86-0	New Zealand WES

ACGIH : American Conference of Governmental Industrial Hygienists

CMRG : Chemical Manufacturer's Recommended Guidelines New Zealand WES : New Zealand Workplace Exposure Standards. Limit type TWA(respirable fraction):0.025 mg/m3 TWA(as respirable dust)(8 hours): 0.1 mg/m3 TWA(respirable fraction):0.025 mg/m3 TWA(as respirable dust)(8 hours): 0.1 mg/m3 TWA(as respirable dust)(8 hours): 0.1 mg/m3 TWA(as respirable dust)(8 hours): 0.2 mg/m3

#### **Additional comments**

A2: Suspected human carcin.

A2: Suspected human carcin.

#### ppm: parts per million mg/m<sup>3</sup>: milligrams per cubic metre CEIL: Ceiling

AIHA : American Industrial Hygiene Association

#### 8.2. Exposure controls

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

#### 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**

Respiratory protection is not required.

# **SECTION 9: Physical and chemical properties**

Information on basic physical and chemical propertie	25
Physical state	Solid.
Specific Physical Form:	Paste
Appearance/Odour	mint scented, white coloured paste
Odour threshold	No data available.
рН	No data available.
Melting point/Freezing point	Not applicable.
Boiling point/Initial boiling point/Boiling range	Not applicable.
Flash point	No flash point
Evaporation rate	No data available.
Flammability (solid, gas)	Not classified
Flammable Limits(LEL)	Not applicable.
Flammable Limits(UEL)	Not applicable.
Vapour pressure	No data available.
Vapour density	No data available.
Density	1.1 g/cm3 - 1.3 g/cm3
Relative density	1.1 - 1.3 [ <i>Ref Std</i> :WATER=1]
Water solubility	Negligible
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	Not applicable.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Volatile organic compounds (VOC)	Not applicable.
Percent volatile	Not applicable.
VOC less H2O & exempt solvents	Not applicable.

# **SECTION 10: Stability and reactivity**

#### **10.1 Reactivity**

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

#### 10.2 Chemical stability

Stable.

#### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

#### **10.4 Conditions to avoid**

Heat.

**10.5 Incompatible materials** Amines. Strong acids. Strong bases. Strong oxidising agents.

#### 10.6 Hazardous decomposition products

Substance None known.

#### Condition

Refer to Section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

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

**11.1 Information on Toxicological effects** 

Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Skin contact

Contact with the skin during product use is not expected to result in significant irritation. 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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Vinyl-polydimethyl siloxane	Dermal	Rabbit	LD50 > 15,440 mg/kg

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Vinyl-polydimethyl siloxane	Ingestion	Rat	LD50 > 15,440 mg/kg
Cristobalite	Dermal		LD50 estimated to be > 5,000 mg/kg
Cristobalite	Ingestion		LD50 estimated to be > 5,000 mg/kg
Dimethyl methyl hydrogen silicone fluid	Dermal	Rabbit	LD50 > 2,000 mg/kg
Dimethyl methyl hydrogen silicone fluid	Ingestion	Rat	LD50 > 2,000  mg/kg
Silica, vitreous	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silica, vitreous	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		
	(4 hours)		
Silica, vitreous	Ingestion	Rat	LD50 > 5,110 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,	Inhalation-	Rat	LC50 > 0.691 mg/l
hydrolysis products with silica	Dust/Mist		
	(4 hours)	-	
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Polyethyleneglycol, siloxane terminated	Dermal	Rabbit	LD50 > 2,000 mg/kg
Polyethyleneglycol, siloxane terminated	Inhalation-	Rat	LC50 2 mg/l
	Dust/Mist		
	(4 hours)	D.	
Polyethyleneglycol, siloxane terminated	Ingestion Dermal	Rat Professio	LD50 > 2,000 mg/kg LD50 estimated to be 2,000 - 5,000 mg/kg
Allyltrimethylsilane	Dermai	nal	LD50 estimated to be 2,000 - 5,000 mg/kg
		judgeme	
		nt	
Allyltrimethylsilane	Ingestion	similar	LD50 estimated to be 2,000 - 5,000 mg/kg
5 5	Ũ	compoun	
		ds	
Fluorinated polyether	Dermal	Professio	LD50 estimated to be $>$ 5,000 mg/kg
		nal	
		judgeme	
Fluorinated polyether	Ingestion	nt Rat	LD50 > 1,000 mg/kg
Tridymite	Dermal	Nai	LD50 $> 1,000$ mg/kg LD50 estimated to be $> 5,000$ mg/kg
Tridymite	Ingestion		LD50 estimated to be > 5,000 mg/kg
Quartz	Dermal		LD50 estimated to be $> 5,000 \text{ mg/kg}$
Quartz	Ingestion		LD50 estimated to be > 5,000 mg/kg
Cornmint oil	Dermal	Rabbit	LD50 > 5,000 mg/kg
Cornmint oil	Ingestion	Rat	LD50 1,240 mg/kg
$\Delta TE = acute toxicity estimate$	mgestion	1.00	1,2 /0 iii.g/ Kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
Vinyl-polydimethyl siloxane	Rabbit	No significant irritation
Cristobalite	Professio	No significant irritation
	nal	
	judgemen	
	t	
Silica, vitreous	Rabbit	No significant irritation
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products	Rabbit	No significant irritation
with silica		-
Polyethyleneglycol, siloxane terminated	Rabbit	No significant irritation
Tridymite	Professio	No significant irritation
	nal	-
	judgemen	
	t	
Quartz	Professio	No significant irritation
	nal	-
	judgemen	
	t	
Cornmint oil	Rabbit	Mild irritant

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### Serious Eye Damage/Irritation

Name	Species	Value
Vinyl-polydimethyl siloxane	Rabbit	Mild irritant
Silica, vitreous	Rabbit	No significant irritation
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products	Rabbit	No significant irritation
with silica		
Polyethyleneglycol, siloxane terminated	Rabbit	Severe irritant
Cornmint oil	In vitro	Severe irritant
	data	

#### **Skin Sensitisation**

Name	Species	Value
Silica, vitreous	Human	Not classified
	and	
	animal	
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products	Human	Not classified
with silica	and	
	animal	
Polyethyleneglycol, siloxane terminated	Guinea	Not classified
	pig	
Cornmint oil	Guinea	Sensitising
	pig	

**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
Cristobalite	In Vitro	Some positive data exist, but the data are not sufficient for classification
Cristobalite	In vivo	Some positive data exist, but the data are not sufficient for classification
Silica, vitreous	In Vitro	Not mutagenic
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	In Vitro	Not mutagenic
Polyethyleneglycol, siloxane terminated	In Vitro	Not mutagenic
Polyethyleneglycol, siloxane terminated	In vivo	Not mutagenic
Tridymite	In Vitro	Some positive data exist, but the data are not sufficient for classification
Tridymite	In vivo	Some positive data exist, but the data are not sufficient for classification
Quartz	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz	In vivo	Some positive data exist, but the data are not sufficient for classification

#### Carcinogenicity

Name	Route	Species	Value
Cristobalite	Inhalation	Human	Carcinogenic.
		and	
		animal	
Silica, vitreous	Not	Mouse	Some positive data exist, but the data are not
	specified.		sufficient for classification
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester,	Not	Mouse	Some positive data exist, but the data are not
hydrolysis products with silica	specified.		sufficient for classification
Tridymite	Inhalation	Human	Carcinogenic.
-		and	
		animal	
Quartz	Inhalation	Human	Carcinogenic.
		and	
		animal	

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### **Reproductive Toxicity**

#### **Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
Silica, vitreous	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silica, vitreous	Inhalation	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silica, vitreous	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Polyethyleneglycol, siloxane terminated	Ingestion	Not classified for reproduction and/or development	Rat	NOAEL 450 mg/kg/day	premating & during gestation
Fluorinated polyether	Ingestion	Not classified for reproduction and/or development	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Fluorinated polyether	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Fluorinated polyether	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation

### 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
Cristobalite	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Silica, vitreous	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
2-Propenoic acid, 2- methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Fluorinated polyether	Ingestion	auditory system   heart   endocrine system   hematopoietic system   liver   immune system   muscles   nervous system   eyes	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Tridymite	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

#### **Aspiration Hazard**

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

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

# **SECTION 12: Ecological information**

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

#### 12.1. Toxicity

No product test data available.

Material	CAS Number	Organism	Туре	Exposure	Test endpoint	Test result
Cristobalite	14464-46-1		Data not available or insufficient for classification			
Vinyl- polydimethyl siloxane	68083-19-2		Data not available or insufficient for classification			
Dimethyl methyl hydrogen silicone fluid	68037-59-2		Data not available or insufficient for classification			
Silica, vitreous Polyethylenegl ycol, siloxane terminated	60676-86-0 27306-78-1	Common Carp	Experimental Data not available or insufficient for classification	72 hours	LC50	>10,000 mg/l
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl) propyl ester, hydrolysis products with silica	67762-90-7		Data not available or insufficient for classification			
Allyltrimethyls ilane	762-72-1		Data not available or insufficient for classification			
Fluorinated polyether	Trade Secret		Data not available or insufficient for classification			
Tridymite	15468-32-3		Data not available or insufficient for			

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		classification		
Cornmint oil	68917-18-0	Data not		
		available or		
		insufficient for		
		classification		
Quartz	14808-60-7	Data not		
		available or		
		insufficient for		
		classification		

# 12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Cristobalite	14464-46-1	Data not			N/A	
		availbl-				
		insufficient				
Vinyl-	68083-19-2	Data not			N/A	
polydimethyl		availbl-				
siloxane		insufficient				
Dimethyl	68037-59-2	Data not			N/A	
methyl		availbl-				
hydrogen		insufficient				
silicone fluid						
Silica, vitreous	60676-86-0	Data not			N/A	
		availbl-				
		insufficient				
	27306-78-1	Data not			N/A	
ycol, siloxane		availbl-				
terminated		insufficient				
	67762-90-7	Data not			N/A	
acid, 2-methyl-,		availbl-				
3-		insufficient				
(trimetoxysilyl)						
propyl ester,						
hydrolysis						
products with						
silica						
Allyltrimethyls	762-72-1	Estimated	28 days	BOD	9 %	OECD 301F -
ilane		Biodegradation			BOD/ThBOD	Manometric
						respirometry
Fluorinated	Trade Secret	Data not			N/A	
polyether		availbl-				
		insufficient				
Tridymite	15468-32-3	Data not			N/A	
		availbl-				
		insufficient				
Cornmint oil	68917-18-0	Data not			N/A	
		availbl-				
		insufficient				
Quartz	14808-60-7	Data not			N/A	
		availbl-				
		insufficient				

### **12.3 : Bioaccumulative potential**

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Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Cristobalite	14464-46-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Vinyl- polydimethyl siloxane	68083-19-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Dimethyl methyl hydrogen silicone fluid	68037-59-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Silica, vitreous	60676-86-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyethylenegl ycol, siloxane terminated	27306-78-1	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		Data not available or insufficient for classification	N/A	N/A	N/A	N/A
	762-72-1	Estimated Bioconcentrati on		Bioaccumulatio n factor	269	Estimated: Bioconcentration factor
Fluorinated polyether	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Tridymite	15468-32-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Cornmint oil	68917-18-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

**12.4. Mobility in soil** Please contact manufacturer for more details

# 12.5 Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

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

# **SECTION 14: Transport Information**

New Zealand Land Transport Rule: Dangerous Goods - Road/Rail Transport UN No.: Not applicable. Proper Shipping Name: Not applicable. Class/Division: Not applicable. Sub Risk: Not applicable. Packing Group: Not applicable.

Hazchem Code: Not applicable. IERG: Not applicable.

International Air Transport Association (IATA) - Air Transport UN No.: Not applicable. Proper Shipping Name: Not applicable. Class/Division: Not applicable. Sub Risk: Not applicable. Packing Group: Not applicable.

International Maritime Dangerous Goods Code (IMDG) - Marine Transport UN No.: Not applicable. Proper Shipping Name: Not applicable. Class/Division: Not applicable. Sub Risk: Not applicable. Packing Group: Not applicable. Marine Pollutant: Not applicable.

# **SECTION 15: Regulatory information**

HSNO Approval numberHSR002558Group standard nameDental Products (Subsidiary Hazard) Group Standard 2017HSNO Hazard classificationRefer 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

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Certified handler	Not required
Location Compliance Certificate	Not required
Hazardous atmosphere zone	Not required
Fire extinguishers	Not required
Emergency response plan	100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a
	HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg
	(for a HSNO 6.6A, 6.8A, 6.9A, 8.3A, 9.1D substance)
Secondary containment	100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a
	HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg
	(for a HSNO 6.6A, 6.8A, 6.9A, 8.3A, 9.1D substance)
Tracking	Not required
Warning signage	100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a
	HSNO 8.3A, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg (for a HSNO
	6.1D or 9.1D substance)

# **SECTION 16: Other information**

#### **Revision information:**

Complete document review.

Document group:	31-4863-2	Version number:	2.00
Issue Date:	03/12/2018	Supersedes date:	21/04/2013

#### 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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# Safety Data Sheet

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Issue Date:	03/12/2018	Supersedes date:	21/04/2013

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<sup>TM</sup> ESPE<sup>TM</sup> IMPRINT<sup>TM</sup> 4 LIGHT CATALYST

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

#### **Recommended use**

Dental Product, Impression Material

For use only by dental professionals.

#### 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
No GHS Equivalent	9.4C Terrestrial invertebrate toxicity

**2.2. Label elements SIGNAL WORD** Not applicable.

#### Symbols:

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Not applicable.

# HAZARD STATEMENTS:H443Harmful to terrestrial invertebrates.

#### PRECAUTIONARY STATEMENTS

Prevention: P273

Avoid release to the environment.

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
Vinyl terminated polydimethylsiloxane	68083-19-2	40 - 60
Cristobalite	14464-46-1	20 - 40
Silica, vitreous	60676-86-0	5 - 20
Poly(dimethylsiloxane)	63148-62-9	1 - 10
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis	67762-90-7	1 - 10
products with silica		
Tridymite	15468-32-3	< 2
Quartz	14808-60-7	< 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

Wash with soap and water. If signs/symptoms develop, get medical attention.

#### Eye contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

#### If swallowed

Rinse mouth. If you feel unwell, get medical attention.

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

See Section 11.1 Information on toxicological effects

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

Not applicable

# **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable extinguishing media

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

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

None inherent in this product.

#### Hazardous Decomposition or By-Products

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

<u>Condition</u> During combustion. During combustion. During combustion.

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

No special protective actions for fire-fighters are anticipated.

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

# **SECTION 6: Accidental release measures**

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

Ventilate the area with fresh air. Observe precautions from other sections.

#### **6.2.** Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

# **SECTION 7: Handling and storage**

Refer to Section 15 - Controls for more information

#### 7.1. Precautions for safe handling

Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

#### 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. Store away from amines.

#### 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
Cristobalite	14464-46-1	ACGIH	TWA(respirable	A2: Suspected human
			fraction):0.025 mg/m3	carcin.
Silica, crystalline (airborne	14464-46-1	New Zealand	TWA(as respirable dust)(8	

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particles of respirable size) Quartz	14808-60-7	WES ACGIH		
Silica, crystalline (airborne particles of respirable size)	14808-60-7	New Zealand WES		
Silica, crystalline (airborne particles of respirable size)	15468-32-3	New Zealand WES		
Silica, vitreous	60676-86-0	New Zealand WES		
ACGIH · American Conference of Governmental Industrial Hygienists				

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/m<sup>3</sup>: milligrams per cubic metre CEIL: Ceiling hours): 0.1 mg/m3 TWA(respirable fraction):0.025 mg/m3 TWA(as respirable dust)(8 hours): 0.1 mg/m3 TWA(as respirable dust)(8 hours): 0.1 mg/m3 TWA(as respirable dust)(8 hours): 0.2 mg/m3

A2: Suspected human carcin.

#### **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

No chemical protective gloves are required. 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

Specific Physical Form:PasteAppearance/Odourslight characteristic odour, pink coloured pasteOdour thresholdNo data available.pHNo data available.Melting point/Freezing pointNot applicable.Boiling point/Initial boiling point/Boiling rangeNot applicable.Flash pointNo data available.Flash pointNo data available.Flammability (solid, gas)Not classifiedFlammable Limits(LEL)Not classifiedFlammable Limits(UEL)Not applicable.	Physical state	Solid.
Odour thresholdNo data available.pHNo data available.Melting point/Freezing pointNot applicable.Boiling point/Initial boiling point/Boiling rangeNot applicable.Flash pointNo flash pointEvaporation rateNo data available.Flammability (solid, gas)Not classifiedFlammable Limits(LEL)Not applicable.	Specific Physical Form:	Paste
pHNo data available.Melting point/Freezing pointNot applicable.Boiling point/Initial boiling point/Boiling rangeNot applicable.Flash pointNo flash pointEvaporation rateNo data available.Flammability (solid, gas)Not classifiedFlammable Limits(LEL)Not applicable.	Appearance/Odour	slight characteristic odour, pink coloured paste
Melting point/Freezing pointNot applicable.Boiling point/Initial boiling point/Boiling rangeNot applicable.Flash pointNo flash pointEvaporation rateNo data available.Flammability (solid, gas)Not classifiedFlammable Limits(LEL)Not applicable.	Odour threshold	No data available.
Boiling point/Initial boiling point/Boiling rangeNot applicable.Flash pointNo flash pointEvaporation rateNo data available.Flammability (solid, gas)Not classifiedFlammable Limits(LEL)Not applicable.	рН	No data available.
Flash pointNo flash pointEvaporation rateNo data available.Flammability (solid, gas)Not classifiedFlammable Limits(LEL)Not applicable.	Melting point/Freezing point	Not applicable.
Evaporation rateNo data available.Flammability (solid, gas)Not classifiedFlammable Limits(LEL)Not applicable.	Boiling point/Initial boiling point/Boiling range	Not applicable.
Flammability (solid, gas)Not classifiedFlammable Limits(LEL)Not applicable.	Flash point	No flash point
Flammable Limits(LEL) Not applicable.	Evaporation rate	No data available.
	Flammability (solid, gas)	Not classified
Flammable Limits(UEL) Not applicable.	Flammable Limits(LEL)	Not applicable.
	Flammable Limits(UEL)	Not applicable.

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Vapour pressure Vapour density Density Relative density Water solubility Solubility- non-water Partition coefficient: n-octanol/water Autoignition temperature Decomposition temperature Viscosity Volatile organic compounds (VOC) Percent volatile VOC less H2O & exempt solvents No data available. No data available. 1.2 g/cm3 - 1.4 g/cm3 1.2 - 1.4 [Ref Std:WATER=1] Negligible No data available. Not applicable. Not applicable. Not applicable. Not applicable.

# **SECTION 10: Stability and reactivity**

#### **10.1 Reactivity**

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

**10.2 Chemical stability** Stable.

#### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

**10.4 Conditions to avoid** Heat.

**10.5 Incompatible materials** Amines. Strong acids. Strong bases. Strong oxidising agents.

#### 10.6 Hazardous decomposition products

<u>Substance</u>

None known.

#### **Condition**

Refer to Section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

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

**11.1 Information on Toxicological effects** 

Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Skin contact

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.

#### **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
Vinyl terminated polydimethylsiloxane	Dermal	Rabbit	LD50 > 15,440 mg/kg
Vinyl terminated polydimethylsiloxane	Ingestion	Rat	LD50 > 15,440 mg/kg
Cristobalite	Dermal		LD50 estimated to be > 5,000 mg/kg
Cristobalite	Ingestion		LD50 estimated to be > 5,000 mg/kg
Silica, vitreous	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silica, vitreous	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Silica, vitreous	Ingestion	Rat	LD50 > 5,110 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
Tridymite	Dermal		LD50 estimated to be > 5,000 mg/kg
Tridymite	Ingestion		LD50 estimated to be > 5,000 mg/kg
Poly(dimethylsiloxane)	Dermal	Rabbit	LD50 > 19,400 mg/kg
Poly(dimethylsiloxane)	Ingestion	Rat	LD50 > 17,000 mg/kg
Quartz	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

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

Name	Species	Value
Vinyl terminated polydimethylsiloxane	Rabbit	No significant irritation
Cristobalite	Professio	No significant irritation
	nal	
	judgemen	

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	t	
Silica, vitreous	Rabbit	No significant irritation
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Rabbit	No significant irritation
Tridymite	Professio nal judgemen t	No significant irritation
Poly(dimethylsiloxane)	Rabbit	No significant irritation
Quartz	Professio nal judgemen t	No significant irritation

#### Serious Eye Damage/Irritation

Name	Species	Value
Vinyl terminated polydimethylsiloxane	Rabbit	Mild irritant
Silica, vitreous	Rabbit	No significant irritation
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products	Rabbit	No significant irritation
with silica		
Poly(dimethylsiloxane)	Rabbit	No significant irritation

#### **Skin Sensitisation**

Name	Species	Value
Silica, vitreous	Human	Not classified
	and	
	animal	
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products	Human	Not classified
with silica	and	
	animal	

#### **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
Cristobalite	In Vitro	Some positive data exist, but the data are not sufficient for classification
Cristobalite	In vivo	Some positive data exist, but the data are not sufficient for classification
Silica, vitreous	In Vitro	Not mutagenic
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	In Vitro	Not mutagenic
Tridymite	In Vitro	Some positive data exist, but the data are not sufficient for classification
Tridymite	In vivo	Some positive data exist, but the data are not sufficient for classification
Quartz	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz	In vivo	Some positive data exist, but the data are not sufficient for classification

### Carcinogenicity

Name	Route	Species	Value
Cristobalite	Inhalation	Human	Carcinogenic.
		and	
		animal	
Silica, vitreous	Not	Mouse	Some positive data exist, but the data are not
	specified.		sufficient for classification
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester,	Not	Mouse	Some positive data exist, but the data are not

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hydrolysis products with silica	specified.		sufficient for classification
Tridymite	Inhalation	Human	Carcinogenic.
		and	
		animal	
Quartz	Inhalation	Human	Carcinogenic.
		and	
		animal	

#### **Reproductive Toxicity**

#### **Reproductive and/or Developmental Effects**

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

#### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

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

#### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Cristobalite	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Silica, vitreous	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
2-Propenoic acid, 2- methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Tridymite	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

#### **Aspiration Hazard**

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

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

# **SECTION 12: Ecological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in

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

#### 12.1. Toxicity

#### Ecotoxic to terrestrial invertebrates

9.4C Terrestrial invertebrate toxicity

No product test data available.

Material	CAS Number	Organism	Туре	Exposure	Test endpoint	Test result
Vinyl terminated polydimethylsil oxane	68083-19-2		Data not available or insufficient for classification			
Cristobalite	14464-46-1		Data not available or insufficient for classification			
	60676-86-0	Common Carp	Experimental	72 hours	LC50	>10,000 mg/l
Poly(dimethyls iloxane)	63148-62-9		Data not available or insufficient for classification			
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl) propyl ester, hydrolysis products with silica			Data not available or insufficient for classification			
Tridymite	15468-32-3		Data not available or insufficient for classification			
Quartz	14808-60-7		Data not available or insufficient for classification			

#### 12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Vinyl	68083-19-2	Data not			N/A	
terminated		availbl-				
polydimethylsil		insufficient				
oxane						
Cristobalite	14464-46-1	Data not			N/A	
		availbl-				
		insufficient				
Silica, vitreous	60676-86-0	Data not			N/A	
		availbl-				
		insufficient				

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Poly(dimethyls iloxane)	63148-62-9	Data not availbl- insufficient	N/A	
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl) propyl ester, hydrolysis products with silica		Data not availbl- insufficient	N/A	
Tridymite	15468-32-3	Data not availbl- insufficient	N/A	
Quartz	14808-60-7	Data not availbl- insufficient	N/A	

# 12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Vinyl terminated polydimethylsil oxane	68083-19-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Cristobalite	14464-46-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Silica, vitreous	60676-86-0	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
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl) propyl ester, hydrolysis products with silica		Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Tridymite	15468-32-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

# 12.4. Mobility in soil

Please contact manufacturer for more details

#### 12.5 Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

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

# **SECTION 14: Transport Information**

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

UN No.: Not applicable. Proper Shipping Name: Not applicable. Class/Division: Not applicable. Sub Risk: Not applicable. Packing Group: Not applicable.

Hazchem Code: Not applicable. IERG: Not applicable.

International Air Transport Association (IATA) - Air Transport UN No.: Not applicable. Proper Shipping Name: Not applicable. Class/Division: Not applicable. Sub Risk: Not applicable. Packing Group: Not applicable.

International Maritime Dangerous Goods Code (IMDG) - Marine Transport UN No.: Not applicable. Proper Shipping Name: Not applicable. Class/Division: Not applicable. Sub Risk: Not applicable. Packing Group: Not applicable. Marine Pollutant: Not applicable.

# **SECTION 15: Regulatory information**

HSNO Approval numberHSR002558Group standard nameDental Products (Subsidiary Hazard) Group Standard 2017HSNO Hazard classificationRefer 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

# **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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