

# Safety Data Sheet

© 2023, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

 Document group:
 31-6693-1
 Version number:
 3.00

 Issue Date:
 18/06/2023
 Supersedes date:
 03/12/2018

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

## **IDENTIFICATION:**

#### 1.1. Product identifier

3M<sup>TM</sup> Imprint<sup>TM</sup> 4 Heavy Refill (71492)

#### **Product Identification Numbers**

70-2011-4147-3

#### 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:

31-4838-4, 31-4841-8

One or more components of this KIT is classified as a hazardous substance in accordance with the relevant criteria of the HSNO Act 1996 and the Hazardous Substances (Hazard Classification) Notice 2020.

## TRANSPORT INFORMATION

NOT HAZARDOUS FOR TRANSPORT

#### **Revision information:**

Complete document review.

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date of issue. TO THE EXTENT PERMITTED BY LAW, 3M MAKES NO WARRANTY, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. 3M provides information in electronic form as a service to customers. Due to the remote possibility of electronic transfer may have resulted in errors, omissions or alterations in this information; 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.

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



# **Safety Data Sheet**

© 2023, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

**Document group:** 31-4841-8 **Version number:** 3.00

**Issue Date:** 14/06/2023 **Supersedes date:** 03/12/2018

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

# **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> Imprint<sup>TM</sup> 4 Heavy Catalyst

#### 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 New Zealand Ltd, 94 Apollo Drive, Rosedale 0632, Auckland

**Telephone:** (09) 477 4040

E Mail: innovation@nz.mmm.com

Website: 3m.co.nz

## 1.4. Emergency telephone number

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

## **SECTION 2: Hazard identification**

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

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

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

Not classified as hazardous.

# 2.2. Label elements SIGNAL WORD

Not applicable.

#### **Symbols:**

Not applicable.

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

Ingredient	CAS Nbr	% by Weight
Cristobalite	14464-46-1	40 - 60
Vinyl terminated polydimethylsiloxane	68083-19-2	30 - 40
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		
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	< 0.2
1,3-Divinyltetramethyldisiloxane	2627-95-4	< 0.2

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### Inhalation

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

#### Skin contact

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

#### **Eve 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**

<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.

**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. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

#### 6.2. Environmental precautions

Avoid release to the environment.

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

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

# **SECTION 7: Handling and storage**

Refer to Section 15 - Controls for more information

#### 7.1. Precautions for safe handling

Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

## 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	<b>Additional comments</b>
Cristobalite	14464-46-1	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Dust, inert or nuisance	14464-46-1	New Zealand WES	TWA(as respirable dust)(8 hours):3 mg/m3;TWA(as inhalable dust)(8 hours):10 mg/m3	
Glass filaments	14464-46-1	New Zealand WES	TWA(Respirable fibers)(8 hours):1 f/mL;TWA(as respirable dust)(8 hours):1 f/mL;TWA(as inhalable dust)(8 hours):5 mg/m3	
Kieselguhr, soda ash flux-calcined	14464-46-1	New Zealand WES	TWA(8 hours):10 mg/m3	
Silica, crystalline (airborne particles of respirable size)	14464-46-1	New Zealand WES	TWA(as respirable dust)(8 hours):0.05 mg/m3	Class-subclass 6.7, carc HCA
Copper compounds	147-14-8	ACGIH	TWA(as Cu, fume):0.2	

mg/m3;TWA(as Cu dust or mist):1 mg/m3

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

Thiormation on basic physical and chemical properties		
Physical state	Solid.	
Specific Physical Form:	Paste	
Colour	Blue	
Odour	Slight Odour, Characteristic Odour	
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	Flash point > 93 °C (200 °F)	
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.	
Vapor Density and/or Relative Vapor Density	No data available.	
Density	1.4 g/cm3 - 1.6 g/cm3	
Relative density	1.4 - 1.6 [ <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/Kinematic Viscosity	No data available.
Volatile organic compounds (VOC)	Not applicable.
Percent volatile	Not applicable.
VOC less H2O & exempt solvents	Not applicable.
Molecular weight	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**

Condition

None known.

Refer to Section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

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

### 11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

#### Inhalation

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
Cristobalite	Dermal		LD50 estimated to be > 5,000 mg/kg
Cristobalite	Ingestion		LD50 estimated to be > 5,000 mg/kg
Vinyl terminated polydimethylsiloxane	Dermal	Rabbit	LD50 > 15,440 mg/kg
Vinyl terminated polydimethylsiloxane	Ingestion	Rat	LD50 > 15,440 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
Poly(dimethylsiloxane)	Dermal	Rabbit	LD50 > 19,400 mg/kg
Poly(dimethylsiloxane)	Ingestion	Rat	LD50 > 17,000 mg/kg
1,3-Divinyltetramethyldisiloxane	Ingestion	Rat	LD50 > 5,000 mg/kg
1,3-Divinyltetramethyldisiloxane	Dermal	similar compoun ds	LD50 > 2,000 mg/kg
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Dermal		LD50 estimated to be > 5,000 mg/kg
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Rat	LD50 10,000 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Skiii Corrosion/Irritation		
Name	Species	Value
Cristobalite	Professio	No significant irritation
	nal	
	judgemen	
	t	
Vinyl terminated polydimethylsiloxane	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
1,3-Divinyltetramethyldisiloxane	Rabbit	No significant irritation
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species Value

Vinyl terminated polydimethylsiloxane	Rabbit	Mild irritant
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Rabbit	No significant irritation
Poly(dimethylsiloxane)	Rabbit	No significant irritation
1,3-Divinyltetramethyldisiloxane	similar compoun ds	No significant irritation
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Rabbit	No significant irritation

## **Sensitisation:**

## **Skin Sensitisation**

Name	Species	Value
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	Human and animal	Not classified
1,3-Divinyltetramethyldisiloxane	Guinea pig	Not classified
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Human	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

Germ Cen Mutagementy		
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
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica	In Vitro	Not mutagenic
1,3-Divinyltetramethyldisiloxane	In Vitro	Not mutagenic
1,3-Divinyltetramethyldisiloxane	In vivo	Not mutagenic
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	In Vitro	Not mutagenic

Carcinogenicity

Caremogenicity			
Name	Route	Species	Value
Cristobalite	Inhalation	Human	Carcinogenic.
		and	
		animal	
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
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Mouse	Not carcinogenic

## **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
1,3-Divinyltetramethyldisiloxane	Ingestion	Not classified for female reproduction	Rat	NOAEL 600	premating

				mg/kg/day	into lactation
1,3-Divinyltetramethyldisiloxane	Ingestion	Not classified for male reproduction	Rat	NOAEL 600	31 days
				mg/kg/day	
1,3-Divinyltetramethyldisiloxane	Ingestion	Not classified for development	Rat	NOAEL 150	during
				mg/kg/day	gestation
29H,31H-Phthalocyaninato(2-)-	Ingestion	Not classified for female reproduction	Rat	NOAEL	premating
N29,N30,N31,N32 copper				1,000	into lactation
				mg/kg/day	
29H,31H-Phthalocyaninato(2-)-	Ingestion	Not classified for male reproduction	Rat	NOAEL	42 days
N29,N30,N31,N32 copper				1,000	
				mg/kg/day	
29H,31H-Phthalocyaninato(2-)-	Ingestion	Not classified for development	Rat	NOAEL	premating
N29,N30,N31,N32 copper				1,000	into lactation
				mg/kg/day	

## 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
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
1,3- Divinyltetramethyldisiloxa ne	Inhalation	hematopoietic system   liver   respiratory system	Not classified	Rat	NOAEL 1.875 mg/l	14 days
1,3- Divinyltetramethyldisiloxa ne	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 65 mg/kg/day	90 days
1,3- Divinyltetramethyldisiloxa ne	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 65 mg/kg/day	90 days
1,3- Divinyltetramethyldisiloxa ne	Ingestion	endocrine system   gastrointestinal tract   hematopoietic system   nervous system   eyes	Not classified	Rat	NOAEL 300 mg/kg/day	90 days
29H,31H- Phthalocyaninato(2-)- N29,N30,N31,N32 copper	Ingestion	endocrine system   hematopoietic system   respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
29H,31H- Phthalocyaninato(2-)- N29,N30,N31,N32 copper	Ingestion	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	not available

#### **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	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Vinyl terminated polydimethylsil oxane	68083-19-2	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Poly(dimethyls iloxane)	63148-62-9	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl) propyl ester, hydrolysis products with silica	67762-90-7	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
29H,31H- Phthalocyanina to(2-)- N29,N30,N31, N32 copper	147-14-8	Green algae	Estimated	72 hours	ErC50	>100 mg/l
29H,31H- Phthalocyanina to(2-)- N29,N30,N31, N32 copper	147-14-8	Water flea	Estimated	48 hours	EC50	>500 mg/l
29H,31H- Phthalocyanina to(2-)- N29,N30,N31, N32 copper	147-14-8	Activated sludge	Experimental	30 minutes	EC20	750 mg/l
29H,31H- Phthalocyanina to(2-)- N29,N30,N31, N32 copper	147-14-8	Bacteria	Experimental	30 minutes	EC10	>10,000 mg/l
29H,31H- Phthalocyanina to(2-)- N29,N30,N31, N32 copper	147-14-8	Rainbow trout	Experimental	96 hours	LC50	355.6 mg/l
29H,31H- Phthalocyanina	147-14-8	Green algae	Estimated	72 hours	ErC10	100 mg/l

to(2-)-						
N29,N30,N31,						
N32 copper						
29Н,31Н-	147-14-8	Water flea	Estimated	21 days	NOEC	>=1 mg/l
Phthalocyanina						
to(2-)-						
N29,N30,N31,						
N32 copper						
1,3-	2627-95-4	Green algae	Experimental	72 hours	No tox obs at	>100 mg/l
Divinyltetramet					lmt of water sol	
hyldisiloxane						
1,3-	2627-95-4	Rainbow trout	Experimental	96 hours	No tox obs at	>100 mg/l
Divinyltetramet					lmt of water sol	
hyldisiloxane						
1,3-	2627-95-4	Water flea	Experimental	48 hours	No tox obs at	>100 mg/l
Divinyltetramet					lmt of water sol	
hyldisiloxane						
1,3-	2627-95-4	Green algae	Experimental	72 hours	No tox obs at	>100 mg/l
Divinyltetramet					lmt of water sol	
hyldisiloxane						
1,3-	2627-95-4	Water flea	Experimental	21 days	No tox obs at	>100 mg/l
Divinyltetramet					lmt of water sol	
hyldisiloxane						
1,3-	2627-95-4	Activated	Experimental	3 hours	NOEC	1,000 mg/l
Divinyltetramet		sludge				
hyldisiloxane		_				

# 12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Cristobalite	14464-46-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Vinyl terminated polydimethylsil oxane	68083-19-2	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Poly(dimethyls iloxane)	63148-62-9	Data not availbl-insufficient	N/A	N/A	N/A	N/A
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl) propyl ester, hydrolysis products with silica	67762-90-7	Data not availbl- insufficient	N/A	N/A	N/A	N/A
29H,31H- Phthalocyanina to(2-)- N29,N30,N31, N32 copper	147-14-8	Experimental Biodegradation	28 days	BOD	<1 %BOD/ThO D	OECD 301F - Manometric respirometry
1,3- Divinyltetramet	2627-95-4	Experimental Biodegradation	28 days	BOD	0.9 %BOD/Th OD	OECD 301D - Closed bottle test

hyldisiloxane					
1,3-	2627-95-4	Experimental	Hydrolytic	5.8 days (t 1/2)	OECD 111 Hydrolysis
Divinyltetramet		Hydrolysis	half-life (pH 7)		func of pH
hyldisiloxane					

## 12.3: Bioaccumulative potential

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 terminated polydimethylsil oxane	68083-19-2	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	67762-90-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
29H,31H- Phthalocyanina to(2-)- N29,N30,N31, N32 copper	147-14-8	Experimental BCF - Fish	42 days	Bioaccumulatio n factor	<3.6	OECD305- Bioconcentration
1,3- Divinyltetramet hyldisiloxane	2627-95-4	Modeled Bioconcentrati on		Bioaccumulatio n factor	13	Catalogic™
1,3- Divinyltetramet hyldisiloxane	2627-95-4	Experimental Bioconcentrati on		Log Kow	5.4	OECD 117 log Kow HPLC method

## 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 number Not applicable Group standard name Not applicable

HSNO Hazard classification Refer to Section 2: Hazard identification

### NZ Inventory of Chemicals (NZIoC) Status

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

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

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

## **SECTION 16: Other information**

## **Revision information:**

Complete document review.

Document group:	31-4841-8	Version number:	3.00
Issue Date:	14/06/2023	Supersedes date:	03/12/2018

#### Key to abbreviations and acronyms

**GHS** refers to the Globally Harmonised System of Classification and Labelling of Chemicals, 7th revised edition of 2017 **HSNO** means Hazardous Substances and New Organisms Act 1996

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date of issue. TO THE EXTENT PERMITTED BY LAW, 3M MAKES NO WARRANTY, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. 3M provides information in electronic form as a service to customers. Due to the remote possibility of electronic transfer may have resulted in errors, omissions or alterations in this information; 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.

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



# **Safety Data Sheet**

© 2023, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

**Document group:** 31-4838-4 **Version number:** 3.00

**Issue Date:** 14/06/2023 **Supersedes date:** 03/12/2018

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

# **SECTION 1: Identification**

#### 1.1. Product identifier

3MTM IMPRINTTM 4 HEAVY BASE

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

#### Recommended use

Dental Product, Impression Material

#### Restrictions on use

3M<sup>TM</sup> ESPE<sup>TM</sup> IMPRINT<sup>TM</sup> 4 HEAVY BASE

#### 1.3. Supplier's details

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

**Telephone:** (09) 477 4040

E Mail: innovation@nz.mmm.com

Website: 3m.co.nz

## 1.4. Emergency telephone number

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

## **SECTION 2: Hazard identification**

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

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

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

Hazardous to the aquatic environment chronic: Category 3

# 2.2. Label elements SIGNAL WORD

Not applicable.

#### **Symbols:**

Not applicable.

## 3MTM IMPRINTTM 4 HEAVY BASE

## **HAZARD STATEMENTS:**

H412 Harmful to aquatic life with long lasting effects.

#### 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
Cristobalite	14464-46-1	40 - 60
Vinyl-polydimethyl siloxane	68083-19-2	20 - 40
Dimethyl methyl hydrogen silicone fluid	68037-59-2	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
Poly(dimethylsiloxane)	63148-62-9	< 5
Polyethyleneglycol, siloxane terminated	27306-78-1	< 5
Quartz	14808-60-7	< 1
Oils, mint, Mentha arvensis piperascens	90063-97-1	< 0.5

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation

No need for first aid is anticipated. If symptoms develop, remove the affected person to fresh air. 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**

SubstanceConditionCarbon 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.

**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

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. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

#### 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.

IngredientCAS NbrAgencyLimit typeAdditional commentsCristobalite14464-46-1ACGIHTWA(respirable fraction):0.025 mg/m3A2: Suspected human carcin.

## 3MTM IMPRINTTM 4 HEAVY BASE

Dust, inert or nuisance 14464-46-1 New Zealand TWA(as respirable dust)(8

WES hours):3 mg/m3;TWA(as

inhalable dust)(8 hours):10

mg/m3

Glass filaments 14464-46-1 New Zealand TWA(Respirable fibers)(8

WES hours):1 f/mL;TWA(as respirable dust)(8 hours):1

f/mL;TWA(as inhalable dust)(8

hours):5 mg/m3

Kieselguhr, soda ash flux-calcined 14464-46-1 New Zealand TWA(8 hours):10 mg/m3

WES

Silica, crystalline (airborne 14464-46-1 New Zealand TWA(as respirable dust)(8 Class-subclass 6.7, carc

WES hours):0.05 mg/m3 HCA

Quartz 14808-60-7 ACGIH TWA(respirable A2: Suspected human

fraction):0.025 mg/m3 carcin.

Silica, crystalline (airborne 14808-60-7 New Zealand TWA(as respirable dust)(8 Class-subclass 6.7, carc

particles of respirable size) WES hours):0.05 mg/m3 HCA

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

particles of respirable size)

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	Solid.
Specific Physical Form:	Paste
Colour	White
Odour	Minty

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.
Vapor Density and/or Relative Vapor Density	No data available.
Density	1.3 g/cm3 - 1.5 g/cm3
Relative density	1.3 - 1.5 [ <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/Kinematic Viscosity	No data available.
Volatile organic compounds (VOC)	Not applicable.
Percent volatile	Not applicable.
VOC less H2O & exempt solvents	Not applicable.
Molecular weight	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

Strong acids.

Strong bases.

None known.

Strong oxidising agents.

Amines.

## 10.6 Hazardous decomposition products

Substance

**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

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

#### 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
Cristobalite	Dermal		LD50 estimated to be > 5,000 mg/kg
Cristobalite	Ingestion		LD50 estimated to be > 5,000 mg/kg
Vinyl-polydimethyl siloxane	Dermal	Rabbit	LD50 > 15,440 mg/kg
Vinyl-polydimethyl siloxane	Ingestion	Rat	LD50 > 15,440 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
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester,	Dermal	Rabbit	LD50 > 5,000 mg/kg
hydrolysis products with silica			
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,	Ingestion	Rat	LD50 > 5,110 mg/kg
hydrolysis products with silica			
Allyltrimethylsilane	Dermal	Professio	LD50 estimated to be 2,000 - 5,000 mg/kg
		nal	
		judgeme	
		nt	
Allyltrimethylsilane	Ingestion	similar	LD50 estimated to be 2,000 - 5,000 mg/kg
		compoun	
		ds	
Polyethyleneglycol, siloxane terminated	Dermal	Rabbit	LD50 > 2,000 mg/kg

## 3MTM IMPRINTTM 4 HEAVY BASE

Polyethyleneglycol, siloxane terminated	Inhalation-	Rat	LC50 2 mg/l
	Dust/Mist		
	(4 hours)		
Polyethyleneglycol, siloxane terminated	Ingestion	Rat	LD50 > 2,000 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
Oils, mint, Mentha arvensis piperascens	Dermal	Rabbit	LD50 > 5,000 mg/kg
Oils, mint, Mentha arvensis piperascens	Ingestion	Rat	LD50 1,240 mg/kg

 $\overline{ATE}$  = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Cristobalite	Professio	No significant irritation
	nal	
	judgemen	
Vinyl nalydimathyl allayana	Rabbit	No significant imitation
Vinyl-polydimethyl siloxane		No significant irritation
Dimethyl methyl hydrogen silicone fluid	Rabbit	No significant irritation
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products	Rabbit	No significant irritation
with silica		
Allyltrimethylsilane	Not	Irritant
	available	
Polyethyleneglycol, siloxane terminated	Rabbit	No significant irritation
Poly(dimethylsiloxane)	Rabbit	No significant irritation
Quartz	Professio	No significant irritation
	nal	
	judgemen	
	t	
Oils, mint, Mentha arvensis piperascens	Rabbit	Mild irritant

**Serious Eye Damage/Irritation** 

Name	Species	Value
Vinyl-polydimethyl siloxane	Rabbit	Mild irritant
Dimethyl methyl hydrogen silicone fluid	Rabbit	Mild irritant
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products	Rabbit	No significant irritation
with silica		
Allyltrimethylsilane	Not	Severe irritant
	available	
Polyethyleneglycol, siloxane terminated	Rabbit	Severe irritant
Poly(dimethylsiloxane)	Rabbit	No significant irritation
Oils, mint, Mentha arvensis piperascens	In vitro	Severe irritant
	data	

## **Sensitisation:**

## **Skin Sensitisation**

Name	Species	Value
Dimethyl methyl hydrogen silicone fluid	Guinea	Not classified
	pig	
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	
Oils, mint, Mentha arvensis piperascens	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
Dimethyl methyl hydrogen silicone fluid	In Vitro	Not mutagenic
2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products	In Vitro	Not mutagenic
with silica		
Allyltrimethylsilane	In Vitro	Not mutagenic
Polyethyleneglycol, siloxane terminated	In Vitro	Not mutagenic
Polyethyleneglycol, siloxane terminated	In vivo	Not mutagenic
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	
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
Quartz	Inhalation	Human	Carcinogenic.
		and	
		animal	

## 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
Polyethyleneglycol, siloxane terminated	Ingestion	Not classified for reproduction and/or development	Rat	NOAEL 450 mg/kg/day	premating & during gestation

# Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Allyltrimethylsilane	Inhalation	respiratory irritation	May cause respiratory irritation	Not available	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure** 

Specific Turget Organ	I OMITOIOJ	epeuteu 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

2-Propenoic acid, 2-	Inhalation	respiratory system	Not classified	Human	NOAEL Not	occupational
methyl-, 3-		silicosis			available	exposure
(trimetoxysilyl)propyl						
ester, hydrolysis products						
with silica						
Quartz	Inhalation	silicosis	Causes damage to organs through	Human	NOAEL Not	occupational
			prolonged or repeated exposure		available	exposure

### **Aspiration Hazard**

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

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

# **SECTION 12: Ecological information**

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

## 12.1. Toxicity

### Ecotoxic to the aquatic environment.

Hazardous to the aquatic environment chronic: Category 3

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Cristobalite	14464-46-1	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Vinyl- polydimethyl siloxane	68083-19-2	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Dimethyl methyl hydrogen silicone fluid	68037-59-2	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl) propyl ester, hydrolysis products with silica	67762-90-7	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Allyltrimethyls ilane	762-72-1	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Poly(dimethyls iloxane)	63148-62-9	N/A	Data not available or insufficient for	N/A	N/A	N/A

			classification			
Polyethylenegl ycol, siloxane terminated	27306-78-1	Green algae	Estimated	96 hours	EC50	32 mg/l
Polyethylenegl ycol, siloxane terminated	27306-78-1	Rainbow trout	Estimated	96 hours	LC50	4.5 mg/l
Polyethylenegl ycol, siloxane terminated	27306-78-1	Water flea	Estimated	48 hours	LC50	23.4 mg/l
Quartz	14808-60-7	Green algae	Estimated	72 hours	EC50	440 mg/l
Quartz	14808-60-7	Water flea	Estimated	48 hours	EC50	7,600 mg/l
Quartz	14808-60-7	Zebra Fish	Estimated	96 hours	LC50	5,000 mg/l
Quartz	14808-60-7	Green algae	Estimated	72 hours	NOEC	60 mg/l
Oils, mint, Mentha arvensis piperascens	90063-97-1	N/A	Data not available or insufficient for classification	N/A	N/A	NA

# 12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Cristobalite	14464-46-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Vinyl- polydimethyl siloxane	68083-19-2	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Dimethyl methyl hydrogen silicone fluid	68037-59-2	Data not availbl- insufficient	N/A	N/A	N/A	N/A
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl) propyl ester, hydrolysis products with silica	67762-90-7	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Allyltrimethyls ilane	762-72-1	Estimated Biodegradation	28 days	BOD	9 %BOD/ThO D	OECD 301F - Manometric respirometry
Poly(dimethyls iloxane)	63148-62-9	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Polyethylenegl ycol, siloxane terminated	27306-78-1	Modeled Biodegradation	28 days	BOD	1 %BOD/ThO D	Catalogic <sup>TM</sup>
Quartz	14808-60-7	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Oils, mint, Mentha	90063-97-1	Data not availbl-	N/A	N/A	N/A	N/A

## 3MTM IMPRINTTM 4 HEAVY BASE

arvensis	insufficient		
piperascens			

# 12.3 : Bioaccumulative potential

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
2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl) propyl ester, hydrolysis products with silica	67762-90-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Allyltrimethyls ilane	762-72-1	Estimated Bioconcentrati on		Bioaccumulatio n factor	269	
Poly(dimethyls iloxane)	63148-62-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyethylenegl ycol, siloxane terminated	27306-78-1	Modeled Bioconcentrati on		Bioaccumulatio n factor	331	Catalogic™
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Oils, mint, Mentha arvensis piperascens	90063-97-1	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

#### 3MTM IMPRINTTM 4 HEAVY BASE

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. 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 number HSR002558

Group standard name Dental Products (Subsidiary Hazard) Group Standard 2020

HSNO Hazard classification Refer to Section 2: Hazard identification

## NZ Inventory of Chemicals (NZIoC) Status

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

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

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

Emergency response plan 100 L or 100 kg (for Hazardous to the aquatic environment Category 1

substances); or 1 000 L or 1 000 kg (for Acute toxicity Category 4, Skin sensitisation Category 1. Respiratory sensitisation Category 1. Hazardous to the aquatic environment Category 2 or Hazardous to the aquatic environment Category 3 substances); or 10 000 L or 10 000 kg (for Germ cell mutagenicity Category 1, Reproductive toxicity Category 1, Specific target organ toxicity Category 1, Serious eye damage Category 1, Hazardous to the aquatic

Secondary containment

100 L or 100 kg (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L or 1 000 kg (for Acute toxicity Category 4, Skin sensitisation Category 1, Respiratory sensitisation Category 1, Hazardous to the aquatic environment Category 2 or Hazardous to the aquatic environment Category 3 substances); or 10 000 L or 10 000 kg (for Germ cell mutagenicity Category 1, Reproductive toxicity Category 1, Specific target organ toxicity Category 1, Serious eye damage Category 1, Hazardous to the aquatic environment Category 4 substances)

Tracking

Not required

Warning signage

100 L or 100 kg (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L or 1 000 kg (for Serious eye damage Category 1, Hazardous to the aquatic environment Category 2 or Hazardous to the aquatic environment Category 3 substances); or 10 000 L or 10 000 kg (for Acute toxicity Category 4 or Hazardous to the aquatic environment Category 4 substances)

## **SECTION 16: Other information**

#### **Revision information:**

Complete document review.

Document group:	31-4838-4	Version number:	3.00
Issue Date:	14/06/2023	Supersedes date:	03/12/2018

#### Key to abbreviations and acronyms

GHS refers to the Globally Harmonised System of Classification and Labelling of Chemicals, 7th revised edition of 2017 **HSNO** means Hazardous Substances and New Organisms Act 1996

environment Category 4 substances)

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date of issue. TO THE EXTENT PERMITTED BY LAW, 3M MAKES NO WARRANTY, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application, 3M provides information in electronic form as a service to customers. Due to the remote possibility of electronic transfer may have resulted in errors, omissions or alterations in this information; 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.

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