



## Safety Data Sheet

© 2022, 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.

<b>Document group:</b>	24-2410-9	<b>Version number:</b>	3.00
<b>Issue Date:</b>	11/10/2022	<b>Supersedes date:</b>	19/09/2018

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™ Dynatron Putty-Cote 592, 593

#### Product Identification Numbers

70-0080-0354-6

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

##### Recommended use

Automotive., Autobody repair.

#### 1.3. Supplier's details

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

#### 1.4. Emergency telephone number

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

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

24-2371-3, 29-5993-0

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

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

**UN No.:** UN3269

**Proper shipping name:** POLYESTER RESIN KIT

**Class/Division:** 3

**Packing Group:** III

**Marine Pollutant:** Not applicable.

**Hazchem Code:** -2YE

**Land Transport Rule: Dangerous Goods - Road/Rail Transport**

**Special Instructions:** Limited quantity may apply

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

**Special Instructions:** Forbidden, package size exceeds IATA quantity limitations

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

**Special Instructions:** Limited quantity may apply

**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

© 2022, 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.

<b>Document group:</b>	24-2371-3	<b>Version number:</b>	3.00
<b>Issue Date:</b>	11/10/2022	<b>Supersedes date:</b>	19/09/2018

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™ DYNATRON® PUTTY-COTE 592, 592T, 593

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

##### Recommended use

Automotive., Autobody repair.

For Industrial or Professional use only

#### 1.3. Supplier's details

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

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazard identification

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

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

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

Flammable Liquid: Category 3  
Serious Eye Damage/Irritation: Category 1  
Skin Sensitizer: Category 1B.  
Carcinogenicity: Category 1  
Specific Target Organ Toxicity (single exposure): Category 1  
Specific Target Organ Toxicity (repeated exposure): Category 1  
Chronic Aquatic Toxicity: Category 3

#### 2.2. Label elements

**SIGNAL WORD**

Danger

**Symbols:**

Flame | Corrosion | Exclamation mark | Health Hazard |

**Pictograms**



**HAZARD STATEMENTS:**

H226	Flammable liquid and vapour.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H350	May cause cancer.
H370	Causes damage to organs: liver   sensory organs.
H372	Causes damage to organs through prolonged or repeated exposure: sensory organs.
H412	Harmful to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS**

**General**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

**Prevention**

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280B	Wear protective gloves and eye/face protection.

**Response**

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry

chemical or carbon dioxide to extinguish.

**Storage**

P403 + P235  
P405

Store in a well-ventilated place. Keep cool.  
Store locked up.

**Disposal**

P501

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

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

Ingredient	CAS Nbr	% by Weight
Proprietary polyester resin	Trade Secret	15 - 40
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-	25322-69-4	10 - 30
Styrene	100-42-5	10 - 30
Defoamer	Trade Secret	10 - 30
2,4,7,9-tetramethyldec-5-yne-4,7-diol	126-86-3	5 - 10
Limestone	1317-65-3	3 - 7
Talc	14807-96-6	1 - 5
Titanium dioxide	13463-67-7	1 - 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**

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

**Eye contact**

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

A product risk assessment is recommended to determine if eye wash facilities may be required when using this product in the workplace.

**If swallowed**

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

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

The most important symptoms and effects based on the CLP classification include:

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

Not applicable

**SECTION 5: Fire-fighting measures****5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

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

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

## 5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

5.4. Hazchem code: -3Y

## SECTION 6: Accidental release measures

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

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

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

Contain spill. Cover spill area with a fire-extinguishing foam. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

## SECTION 7: Handling and storage

Refer to Section 15 - Controls for more information

### 7.1. Precautions for safe handling

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. 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. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (eg. gloves, respirators...) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

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

Store in a well-ventilated place. Keep cool. Keep container tightly closed to prevent loss of stabilizing materials. Protect from sunlight. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from areas where product may come into contact with food or pharmaceuticals. Store in a dry place.

**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.

<b>Ingredient</b>	<b>CAS Nbr</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional comments</b>
Styrene	100-42-5	ACGIH	TWA:10 ppm;STEL:20 ppm	A3: Confirmed animal carcin., Ototoxicant
Styrene	100-42-5	New Zealand WES	TWA(8 hours):85 mg/m <sup>3</sup> (20 ppm);STEL(15 minutes):170 mg/m <sup>3</sup> (40 ppm)	Class-subclass 6.7, carc HCB
Limestone	1317-65-3	New Zealand WES	TWA(8 hours):10 ppm	
Titanium dioxide	13463-67-7	ACGIH	TWA:10 mg/m <sup>3</sup>	A4: Not class. as human carcinogen
Titanium dioxide	13463-67-7	New Zealand WES	TWA(8 hours):10 mg/m <sup>3</sup>	
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m <sup>3</sup>	A4: Not class. as human carcinogen
Talc	14807-96-6	New Zealand WES	TWA(as respirable dust)(8 hours):2 mg/m <sup>3</sup>	
Quartz	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m <sup>3</sup>	A2: Suspected human carcin.
Silica, crystalline (airborne particles of respirable size)	14808-60-7	New Zealand WES	TWA(as respirable dust)(8 hours):0.05 mg/m <sup>3</sup>	Class-subclass 6.7, carc HCA
Poly[oxy(methyl-1,2-ethanediy)], .alpha.-hydro-.omega.-hydroxy-	25322-69-4	AIHA	TWA(as aerosol):10 mg/m <sup>3</sup>	

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

**8.2. Exposure controls****8.2.1. Engineering controls**

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

**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:

Full face shield.

Indirect vented goggles.

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

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

Refer AS/NZS 1715 - Selection, use and maintenance of respiratory protective equipment and AS/NZS 1716 - Respiratory protective devices.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Physical state</b>	Liquid.
<b>Specific Physical Form:</b>	Paste
<b>Colour</b>	White
<b>Odour</b>	Solvent
<b>Odour threshold</b>	<i>No data available.</i>
<b>pH</b>	<i>No data available.</i>
<b>Melting point/Freezing point</b>	<i>No data available.</i>
<b>Boiling point/Initial boiling point/Boiling range</b>	145 °C
<b>Flash point</b>	32.2 °C [Test Method: Closed Cup]
<b>Flash point</b>	32 °C [Test Method: Setflash]
<b>Evaporation rate</b>	<i>No data available.</i>
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Flammable Limits(LEL)</b>	<i>No data available.</i>
<b>Flammable Limits(UEL)</b>	<i>No data available.</i>
<b>Vapour pressure</b>	<i>No data available.</i>
<b>Vapor Density and/or Relative Vapor Density</b>	3.6 [Ref Std: AIR=1]
<b>Density</b>	2.75 g/ml
<b>Relative density</b>	2.75 [Ref Std: WATER=1]
<b>Water solubility</b>	<i>No data available.</i>
<b>Solubility- non-water</b>	<i>No data available.</i>
<b>Partition coefficient: n-octanol/water</b>	<i>No data available.</i>



<b>Autoignition temperature</b>	<i>No data available.</i>
<b>Decomposition temperature</b>	<i>No data available.</i>
<b>Viscosity/Kinematic Viscosity</b>	352,000 - 476,000 mPa-s
<b>Volatile organic compounds (VOC)</b>	15.1 % weight [ <i>Test Method:</i> calculated per CARB title 2]
<b>Volatile organic compounds (VOC)</b>	414 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]
<b>Percent volatile</b>	13.2 % weight
<b>VOC less H2O &amp; exempt solvents</b>	415 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]

## 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. Stable under normal conditions. May become unstable at elevated temperatures and/or pressure.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

Heat.

Sparks and/or flames.

### 10.5 Incompatible materials

Strong oxidising agents.

Strong acids.

Alkali and alkaline earth metals.

Strong oxidising agents.

Strong bases.

### 10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Hydrocarbons.	Not specified.
Carbon monoxide.	Not specified.
Carbon dioxide.	Not specified.

## SECTION 11: Toxicological information

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

### 11.1 Information on Toxicological effects

#### Signs and Symptoms of Exposure

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

#### Inhalation

May be harmful if inhaled. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

**Skin contact**

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

**Eye contact**

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

**Ingestion**

May be harmful if swallowed.

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

**Additional Health Effects:****Single exposure may cause target organ effects:**

Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Liver effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

**Prolonged or repeated exposure may cause target organ effects:**

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests. Ocular effects: Signs/symptoms may include blurred or significantly impaired vision.

Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Liver effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE >20 - =50 mg/l
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
Styrene	Dermal	Rat	LD50 > 2,000 mg/kg
Styrene	Inhalation-Vapor (4 hours)	Rat	LC50 11.8 mg/l
Styrene	Ingestion	Rat	LD50 5,000 mg/kg
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro.-omega.-hydroxy-	Dermal	Rabbit	LD50 > 10,000 mg/kg
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro.-omega.-hydroxy-	Ingestion	Rat	LD50 > 2,000 mg/kg
2,4,7,9-tetramethyldec-5-yne-4,7-diol	Dermal	Rat	LD50 > 2,000 mg/kg
2,4,7,9-tetramethyldec-5-yne-4,7-diol	Ingestion	Rat	LD50 > 500 mg/kg
Limestone	Dermal	Rat	LD50 > 2,000 mg/kg
Limestone	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Limestone	Ingestion	Rat	LD50 6,450 mg/kg
Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg

Talc	Ingestion		LD50 estimated to be > 5,000 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
Styrene	Professional judgement	Mild irritant
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro.-omega.-hydroxy-2,4,7,9-tetramethyldec-5-yne-4,7-diol	Rabbit	No significant irritation
Limestone	Rabbit	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation
Quartz	Professional judgement	No significant irritation

### Serious Eye Damage/Irritation

Name	Species	Value
Styrene	Professional judgement	Moderate irritant
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro.-omega.-hydroxy-2,4,7,9-tetramethyldec-5-yne-4,7-diol	Rabbit	No significant irritation
Limestone	Rabbit	Corrosive
Titanium dioxide	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation

### Sensitisation:

#### Skin Sensitisation

Name	Species	Value
Styrene	Guinea pig	Not classified
2,4,7,9-tetramethyldec-5-yne-4,7-diol	Mouse	Sensitising
Titanium dioxide	Human and animal	Not classified

#### Respiratory Sensitisation

Name	Species	Value
Talc	Human	Not classified

#### Germ Cell Mutagenicity

Name	Route	Value
Styrene	In Vitro	Some positive data exist, but the data are not sufficient for classification
Styrene	In vivo	Some positive data exist, but the data are not sufficient for classification
Titanium dioxide	In Vitro	Not mutagenic

Titanium dioxide	In vivo	Not mutagenic
Talc	In Vitro	Not mutagenic
Talc	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
Styrene	Ingestion	Mouse	Carcinogenic.
Styrene	Inhalation	Human and animal	Carcinogenic.
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Quartz	Inhalation	Human and animal	Carcinogenic.

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
Styrene	Ingestion	Not classified for female reproduction	Rat	NOAEL 21 mg/kg/day	3 generation
Styrene	Inhalation	Not classified for female reproduction	Rat	NOAEL 2.1 mg/l	2 generation
Styrene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.1 mg/l	2 generation
Styrene	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	60 days
Styrene	Ingestion	Not classified for development	Rat	NOAEL 400 mg/kg/day	during gestation
Styrene	Inhalation	Not classified for development	Multiple animal species	NOAEL 2.1 mg/l	during gestation
Limestone	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	prematuring & during gestation
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Styrene	Inhalation	auditory system	Causes damage to organs	Multiple animal species	LOAEL 4.3 mg/l	not available
Styrene	Inhalation	liver	Causes damage to organs	Mouse	LOAEL 2.1 mg/l	not available
Styrene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	occupational exposure
Styrene	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	
Styrene	Inhalation	endocrine system	Not classified	Rat	NOAEL Not available	not available

Styrene	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2.1 mg/l	not available
Limestone	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Styrene	Inhalation	auditory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL not available	occupational exposure
Styrene	Inhalation	eyes	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Styrene	Inhalation	liver	May cause damage to organs though prolonged or repeated exposure	Mouse	LOAEL 0.85 mg/l	13 weeks
Styrene	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	LOAEL 1.1 mg/l	not available
Styrene	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 0.85 mg/l	7 days
Styrene	Inhalation	endocrine system	Not classified	Rat	NOAEL 0.6 mg/l	10 days
Styrene	Inhalation	respiratory system	Not classified	Multiple animal species	LOAEL 0.09 mg/l	not available
Styrene	Inhalation	heart   gastrointestinal tract   bone, teeth, nails, and/or hair   muscles   kidney and/or bladder	Not classified	Multiple animal species	NOAEL 4.3 mg/l	2 years
Styrene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 500 mg/kg/day	8 weeks
Styrene	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
Styrene	Ingestion	liver   kidney and/or bladder	Not classified	Rat	NOAEL 677 mg/kg/day	6 months
Styrene	Ingestion	hematopoietic system	Not classified	Dog	NOAEL 600 mg/kg/day	470 days
Styrene	Ingestion	heart   respiratory system	Not classified	Rat	NOAEL 35 mg/kg/day	105 weeks
Limestone	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Titanium dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis   respiratory system	Not classified	Rat	NOAEL 18 mg/m3	113 weeks
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

Name	Value
Styrene	Aspiration hazard

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

**SECTION 12: Ecological information**

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

**12.1. Toxicity****Ecotoxic to the aquatic environment.**

Acute Aquatic Toxicity: Category 3

Chronic Aquatic Toxicity: Category 3

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-	25322-69-4	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-	25322-69-4	Green algae	Experimental	72 hours	ErC50	>100 mg/l
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-	25322-69-4	Water flea	Experimental	48 hours	EC50	105.8 mg/l
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-	25322-69-4	Zebra Fish	Experimental	96 hours	LC50	>100 mg/l
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-	25322-69-4	Green algae	Experimental	72 hours	NOEC	>100 mg/l
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-	25322-69-4	Water flea	Experimental	21 days	NOEC	>=10 mg/l
Styrene	100-42-5	Activated sludge	Experimental	30 minutes	EC50	500 mg/l
Styrene	100-42-5	Fathead	Experimental	96 hours	LC50	4.02 mg/l

		minnow				
Styrene	100-42-5	Green algae	Experimental	72 hours	EC50	4.9 mg/l
Styrene	100-42-5	Water flea	Experimental	48 hours	EC50	4.7 mg/l
Styrene	100-42-5	Green algae	Experimental	96 hours	EC10	0.28 mg/l
Styrene	100-42-5	Water flea	Experimental	21 days	NOEC	1.01 mg/l
2,4,7,9-tetramethyldec-5-yne-4,7-diol	126-86-3	Activated sludge	Experimental	30 minutes	EC50	630 mg/l
2,4,7,9-tetramethyldec-5-yne-4,7-diol	126-86-3	Fathead minnow	Experimental	96 hours	LC50	36 mg/l
2,4,7,9-tetramethyldec-5-yne-4,7-diol	126-86-3	Green algae	Experimental	72 hours	ErC50	82 mg/l
2,4,7,9-tetramethyldec-5-yne-4,7-diol	126-86-3	Water flea	Experimental	48 hours	EC50	88 mg/l
2,4,7,9-tetramethyldec-5-yne-4,7-diol	126-86-3	Green algae	Experimental	72 hours	ErC10	15 mg/l
Limestone	1317-65-3	Green algae	Estimated	72 hours	EC50	>100 mg/l
Limestone	1317-65-3	Rainbow trout	Estimated	96 hours	LC50	>100 mg/l
Limestone	1317-65-3	Water flea	Estimated	48 hours	EC50	>100 mg/l
Limestone	1317-65-3	Green algae	Estimated	72 hours	EC10	>100 mg/l
Talc	14807-96-6		Data not available or insufficient for classification			N/A
Titanium dioxide	13463-67-7	Activated sludge	Experimental	3 hours	NOEC	>=1,000 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	EC50	>10,000 mg/l
Titanium dioxide	13463-67-7	Fathead minnow	Experimental	96 hours	LC50	>100 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	NOEC	5,600 mg/l
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

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Poly[oxy(methyl-1,2-ethanediyl)], alpha-hydro-omega-hydroxy-	25322-69-4	Experimental Biodegradation	28 days	BOD	89 %BOD/ThOD	OECD 301F - Manometric respirometry
Styrene	100-42-5	Experimental Biodegradation	28 days	BOD	70.9 %BOD/ThOD	

Styrene	100-42-5	Experimental Photolysis		Photolytic half-life (in air)	6.64 hours (t 1/2)	
2,4,7,9-tetramethyldec-5-yne-4,7-diol	126-86-3	Experimental Biodegradation	28 days	CO2 evolution	5 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
2,4,7,9-tetramethyldec-5-yne-4,7-diol	126-86-3	Experimental Aquatic Inherent Biodegrad.	28 days	Dissolv. Organic Carbon Deplet	6 % removal of DOC	OECD 302B Zahn-Wellens/EVPA
2,4,7,9-tetramethyldec-5-yne-4,7-diol	126-86-3	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	OECD 111 Hydrolysis func of pH
Limestone	1317-65-3	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Talc	14807-96-6	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Quartz	14808-60-7	Data not availbl-insufficient	N/A	N/A	N/A	N/A

**12.3 : Bioaccumulative potential**

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-	25322-69-4	Experimental Bioconcentration		Log Kow	<0.9	EC A.8 Partition Coefficient
Styrene	100-42-5	Experimental Bioconcentration		Log Kow	2.96	
2,4,7,9-tetramethyldec-5-yne-4,7-diol	126-86-3	Experimental Bioconcentration		Log Kow	2.8	OECD 117 log Kow HPLC method
Limestone	1317-65-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Talc	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Experimental BCF - Fish	42 days	Bioaccumulation factor	9.6	
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. As a disposal alternative, incinerate uncured product 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.: UN1866

Proper Shipping Name: RESIN SOLUTION

Class/Division: 3

Sub Risk: Not applicable.

Packing Group: III

Hazchem Code: -3Y

IERG: Not applicable.

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

UN No.: UN1866

Proper Shipping Name: RESIN SOLUTION

Class/Division: 3

Sub Risk: Not applicable.

Packing Group: III

Special Instructions: FORBIDDEN BY THIS MODE OF TRANSPORT, 3M DIVISION POLICY

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

UN No.: UN1866

Proper Shipping Name: RESIN SOLUTION

Class/Division: 3

Sub Risk: Not applicable.

Packing Group: III

Marine Pollutant: Not applicable.

### SECTION 15: Regulatory information

HSNO Approval number HSR002669

Group standard name Surface Coatings and Colourants (Flammable, Carcinogenic) 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	500 L (closed containers greater than 5 L) 1,500 L (closed containers up to and including 5 L) 250 L (open containers)
Hazardous atmosphere zone	100 L (closed containers) 25 L (decanting) 5 L (open occasionally) 1 L (open containers in continuous use)
Fire extinguishers	Two required for 500 L
Emergency response plan	100 L (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L (for all other substances)
Secondary containment	100 L (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L (for all other substances)
Tracking	Not required
Warning signage	100 L (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L (for all other substances)

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

Complete document review.

<b>Document group:</b>	24-2371-3	<b>Version number:</b>	3.00
<b>Issue Date:</b>	11/10/2022	<b>Supersedes date:</b>	19/09/2018

**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

© 2022, 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.

<b>Document group:</b>	29-5993-0	<b>Version number:</b>	5.00
<b>Issue Date:</b>	04/12/2022	<b>Supersedes date:</b>	22/11/2020

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™ Cream Hardener (Red, White & Blue)

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

##### Recommended use

Automotive., Hardener for body fillers and glazes

For Industrial or Professional use only

#### 1.3. Supplier's details

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

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazard identification

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

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

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

Organic Peroxide: Type E  
Serious Eye Damage/Irritation: Category 2  
Skin Sensitizer: Category 1B.  
Specific Target Organ Toxicity (single exposure): Category 2  
Acute Aquatic Toxicity: Category 1  
Chronic Aquatic Toxicity: Category 1

#### 2.2. Label elements

##### SIGNAL WORD

Warning

**Symbols:**

Flame | Exclamation mark | Health Hazard | Environment |

**Pictograms**



**HAZARD STATEMENTS:**

- H242 Heating may cause a fire.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H371 May cause damage to organs: cardiovascular system | kidney/urinary tract | nervous system | respiratory system.
- H410 Very toxic to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS**

**General**

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.

**Prevention**

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P234 Keep only in original packaging.
- P235 Keep cool.
- P240 Ground and bond container and receiving equipment.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280B Wear protective gloves and eye/face protection.

**Response**

- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor/physician.
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337 + P313 IF eye irritation persists: Get medical advice/attention.
- P362 + P364 Take off contaminated clothing and wash it before reuse.
- P391 Collect spillage.

**Storage**

- P403 Store in a well-ventilated place.
- P405 Store locked up.
- P410 Protect from sunlight.
- P411 Store at temperatures not exceeding 32 °C.
- P420 Store separately.

**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
Dibenzoyl peroxide	94-36-0	30 - 60
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	10 - 30
Water	7732-18-5	10 - 30
Ethylene Glycol	107-21-1	<= 10
Zinc Stearate	557-05-1	3 - 7
Calcium Sulfate	7778-18-9	1 - 5
Iron oxide (FE2O3)	1309-37-1	1 - 5
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	9038-95-3	1 - 5
Ferric Ammonium Ferrocyanide	25869-00-5	0 - 1
Ferric Ferrocyanide	14038-43-8	0 - 1

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

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

**Skin contact**

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

**Eye contact**

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

A product risk assessment is recommended to determine if eye wash facilities may be required when using this product in the workplace.

**If swallowed**

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

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

The most important symptoms and effects based on the CLP classification include:

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

This product contains ethylene glycol. If there is reasonable suspicion of ethylene glycol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the medical management.

**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**

Closed containers exposed to heat from fire may build pressure and explode. Part of the oxygen for combustion is supplied by the peroxide itself.

### **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:** 1W

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

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

Evacuate area. Eliminate all ignition sources if safe to do so. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. **Warning!** A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### **6.2. Environmental precautions**

Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

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

Collect as much of the spilled material as possible using non-sparking tools. 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 use in a confined area with minimal air exchange. Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe dust/fume/gas/mist/vapours/spray. 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. Avoid release to the environment. Wash contaminated clothing before reuse.

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

Keep container tightly closed. Protect from sunlight. Store away from heat. Store at temperatures not exceeding 32C. Keep cool. Keep only in original container. Store away from other materials. Keep/store away from clothing and other combustible materials.

### **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.

<b>Ingredient</b>	<b>CAS Nbr</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional comments</b>
Ethylene Glycol	107-21-1	ACGIH	TWA(Vapour fraction):25 ppm;STEL(Vapour fraction):50 ppm;STEL(Inhalable aerosol):10 mg/m3	A4: Not class. as human carcinogen
Ethylene Glycol	107-21-1	New Zealand WES	CEIL(Vapor and mist):127 mg/m3(50 ppm)	
Iron oxide (FE2O3)	1309-37-1	ACGIH	TWA(respirable fraction):5 mg/m3	A4: Not class. as human carcinogen
Iron oxide (FE2O3)	1309-37-1	New Zealand WES	TWA(as Fe, dust and fume)(8 hours):5 mg/m3	
Dust, inert or nuisance	557-05-1	New Zealand WES	TWA(as respirable dust)(8 hours):3 mg/m3;TWA(as inhalable dust)(8 hours):10 mg/m3	
Calcium Sulfate	7778-18-9	ACGIH	TWA(inhalable fraction):10 mg/m3	
Calcium Sulfate	7778-18-9	New Zealand WES	TWA(8 hours):10 mg/m3	
Dibenzoyl peroxide	94-36-0	ACGIH	TWA:5 mg/m3	A4: Not class. as human carcinogen
Dibenzoyl peroxide	94-36-0	New Zealand WES	TWA(8 hours):5 mg/m3	Dermal sensitizer

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

## 8.2. Exposure controls

### 8.2.1. Engineering controls

Provide ventilation adequate to maintain dust concentration below minimum explosive concentrations. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

### 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:

Indirect vented goggles.

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

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

Refer AS/NZS 1715 - Selection, use and maintenance of respiratory protective equipment and AS/NZS 1716 - Respiratory protective devices.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Physical state</b>	Solid.
<b>Specific Physical Form:</b>	Paste
<b>Colour</b>	Red
<b>Odour</b>	Slight Ester
<b>Odour threshold</b>	<i>No data available.</i>
<b>pH</b>	<i>No data available.</i>
<b>Melting point/Freezing point</b>	<i>No data available.</i>
<b>Boiling point/Initial boiling point/Boiling range</b>	<i>No data available.</i>
<b>Flash point</b>	111 °C [ <i>Test Method: Estimated</i> ]
<b>Evaporation rate</b>	<i>No data available.</i>
<b>Flammability (solid, gas)</b>	Organic Peroxide: Type E.
<b>Flammable Limits(LEL)</b>	<i>Not applicable.</i>
<b>Flammable Limits(UEL)</b>	<i>Not applicable.</i>
<b>Vapour pressure</b>	<i>Not applicable.</i>
<b>Vapor Density and/or Relative Vapor Density</b>	<i>Not applicable.</i>
<b>Density</b>	1.2 g/cm <sup>3</sup>
<b>Relative density</b>	1.2 [ <i>@ 25 °C</i> ] [ <i>Ref Std: WATER=1</i> ]
<b>Water solubility</b>	Negligible
<b>Solubility- non-water</b>	<i>No data available.</i>
<b>Partition coefficient: n-octanol/water</b>	<i>No data available.</i>
<b>Autoignition temperature</b>	<i>No data available.</i>
<b>Decomposition temperature</b>	<i>No data available.</i>
<b>Viscosity/Kinematic Viscosity</b>	<i>No data available.</i>
<b>Volatile organic compounds (VOC)</b>	0 - 90 g/l [ <i>Test Method: calculated SCAQMD rule 443.1</i> ]
<b>Volatile organic compounds (VOC)</b>	0 % weight [ <i>Test Method: calculated per CARB title 2</i> ]
<b>Percent volatile</b>	21 - 28.5 %
<b>VOC less H<sub>2</sub>O &amp; exempt solvents</b>	0 - 121 g/l [ <i>Test Method: calculated SCAQMD rule 443.1</i> ]
<b>Molecular weight</b>	<i>Not applicable.</i>

## SECTION 10: Stability and reactivity

### 10.1 Reactivity



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

#### 10.2 Chemical stability

Stable. Stable unless exposed to heat, flames and drying conditions.

#### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

#### 10.4 Conditions to avoid

Heat.

#### 10.5 Incompatible materials

Accelerators

#### 10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide.	Not specified.
Carbon dioxide.	Not specified.
Toxic vapour, gas, particulate.	Not specified.

## SECTION 11: Toxicological information

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

### 11.1 Information on Toxicological effects

#### Signs and Symptoms of Exposure

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

##### Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

##### Skin contact

May be harmful in contact with skin.

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

##### Eye contact

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

##### Ingestion

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

#### Additional Health Effects:

##### Single exposure may cause target organ effects:

Cardiac effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal. Neurological effects: Signs/symptoms may include personality changes, lack of coordination,

sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate. Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure. Kidney/Bladder effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >2,000 - =5,000 mg/kg
Overall product	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Dibenzoyl peroxide	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Dibenzoyl peroxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 24.3 mg/l
Dibenzoyl peroxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Benzoic Acid, C9-11-Branched Alkyl Esters	Dermal	Rabbit	LD50 > 2,000 mg/kg
Benzoic Acid, C9-11-Branched Alkyl Esters	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5 mg/l
Benzoic Acid, C9-11-Branched Alkyl Esters	Ingestion	Rat	LD50 > 5,000 mg/kg
Calcium Sulfate	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Calcium Sulfate	Ingestion	Rat	LD50 > 5,000 mg/kg
Zinc Stearate	Dermal	Rabbit	LD50 > 2,000 mg/kg
Zinc Stearate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 50 mg/l
Zinc Stearate	Ingestion	Rat	LD50 > 5,000 mg/kg
Ethylene Glycol	Ingestion	Human	LD50 1,600 mg/kg
Ethylene Glycol	Inhalation-Dust/Mist (4 hours)	Other	LC50 estimated to be 5 - 12.5 mg/l
Ethylene Glycol	Dermal	Rabbit	9,530 mg/kg
Iron oxide (FE2O3)	Dermal	Not available	LD50 3,100 mg/kg
Iron oxide (FE2O3)	Ingestion	Not available	LD50 3,700 mg/kg
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Dermal	Rabbit	LD50 > 16,960 mg/kg
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5 mg/l
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Ingestion	Rat	LD50 4,240 mg/kg
Ferric Ferrocyanide	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Ferric Ammonium Ferrocyanide	Dermal	Rat	LD50 > 2,000 mg/kg
Ferric Ammonium Ferrocyanide	Ingestion	Rat	LD50 > 2,000 mg/kg
Ferric Ferrocyanide	Ingestion	similar compounds	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Dibenzoyl peroxide	Rabbit	Minimal irritation
Zinc Stearate	Rabbit	No significant irritation
Ethylene Glycol	Rabbit	Minimal irritation
Iron oxide (FE2O3)	Rabbit	No significant irritation
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Rabbit	Minimal irritation
Ferric Ammonium Ferrocyanide	Rabbit	No significant irritation
Ferric Ferrocyanide	similar compounds	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
Dibenzoyl peroxide	Rabbit	Severe irritant
Zinc Stearate	Rabbit	No significant irritation
Ethylene Glycol	Rabbit	Mild irritant
Iron oxide (FE2O3)	Rabbit	No significant irritation
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Rabbit	No significant irritation
Ferric Ammonium Ferrocyanide	Rabbit	Mild irritant
Ferric Ferrocyanide	similar compounds	No significant irritation

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

Name	Species	Value
Dibenzoyl peroxide	Guinea pig	Sensitising
Ethylene Glycol	Human	Not classified
Iron oxide (FE2O3)	Human	Not classified
Ferric Ammonium Ferrocyanide	Mouse	Not classified
Ferric Ferrocyanide	similar compounds	Not classified

**Respiratory Sensitisation**

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

**Germ Cell Mutagenicity**

Name	Route	Value
Dibenzoyl peroxide	In Vitro	Not mutagenic
Dibenzoyl peroxide	In vivo	Not mutagenic
Ethylene Glycol	In Vitro	Not mutagenic
Ethylene Glycol	In vivo	Not mutagenic
Iron oxide (FE2O3)	In Vitro	Not mutagenic
Ferric Ammonium Ferrocyanide	In Vitro	Not mutagenic
Ferric Ferrocyanide	In Vitro	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
Dibenzoyl peroxide	Ingestion	Multiple animal species	Not carcinogenic
Dibenzoyl peroxide	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification

**3M™ Cream Hardener (Red, White & Blue)**

Ethylene Glycol	Ingestion	Multiple animal species	Not carcinogenic
Iron oxide (FE2O3)	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Ingestion	Rat	Not carcinogenic

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

Name	Route	Value	Species	Test result	Exposure Duration
Dibenzoyl peroxide	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Dibenzoyl peroxide	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	premating & during gestation
Dibenzoyl peroxide	Ingestion	Not classified for development	Rat	NOAEL 500 mg/kg/day	premating & during gestation
Ethylene Glycol	Dermal	Not classified for development	Mouse	NOAEL 3,549 mg/kg/day	during organogenesis
Ethylene Glycol	Ingestion	Not classified for development	Mouse	LOAEL 750 mg/kg/day	during organogenesis
Ethylene Glycol	Inhalation	Not classified for development	Mouse	NOAEL 1,000 mg/kg/day	during organogenesis
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Inhalation	Not classified for male reproduction	Rat	NOAEL 1 mg/l	2 weeks

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

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Ethylene Glycol	Ingestion	heart   nervous system   kidney and/or bladder   respiratory system	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
Ethylene Glycol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Ethylene Glycol	Ingestion	liver	Not classified	Human	NOAEL Not available	poisoning and/or abuse
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Ingestion	nervous system	Not classified	Rat	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Ethylene Glycol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 200 mg/kg/day	2 years
Ethylene Glycol	Ingestion	vascular system	Not classified	Rat	NOAEL 200 mg/kg/day	2 years
Ethylene Glycol	Ingestion	heart   hematopoietic system   liver   immune system   muscles	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
Ethylene Glycol	Ingestion	respiratory system	Not classified	Mouse	NOAEL 12,000 mg/kg/day	2 years

**3M™ Cream Hardener (Red, White & Blue)**

Ethylene Glycol	Ingestion	skin   endocrine system   bone, teeth, nails, and/or hair   nervous system   eyes	Not classified	Multiple animal species	NOAEL 1,000 mg/kg/day	2 years
Iron oxide (FE2O3)	Inhalation	pulmonary fibrosis   pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Inhalation	endocrine system   hematopoietic system   liver   nervous system	Not classified	Rat	NOAEL 1 mg/l	2 weeks
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 0.005 mg/l	2 weeks
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Inhalation	respiratory system	Not classified	Rat	LOAEL 0.001 mg/l	2 weeks
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Inhalation	heart	Not classified	Rat	NOAEL 0.5 mg/l	2 weeks
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Ingestion	liver   kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 145 mg/kg/day	90 days
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 500 mg/kg/day	2 years
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Ingestion	heart   endocrine system   respiratory system	Not classified	Rat	NOAEL 3,770 mg/kg/day	90 days

**Aspiration Hazard**

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

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

**SECTION 12: Ecological information**

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

**12.1. Toxicity****Ecotoxic to the aquatic environment.**

Acute Aquatic Toxicity: Category 1

Chronic Aquatic Toxicity: Category 1

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Dibenzoyl peroxide	94-36-0	Green algae	Experimental	72 hours	EC50	0.071 mg/l
Dibenzoyl peroxide	94-36-0	Rainbow trout	Experimental	96 hours	LC50	0.06 mg/l
Dibenzoyl peroxide	94-36-0	Water flea	Experimental	48 hours	EC50	0.11 mg/l
Dibenzoyl peroxide	94-36-0	Green algae	Experimental	72 hours	NOEC	0.02 mg/l

**3M™ Cream Hardener (Red, White & Blue)**

Dibenzoyl peroxide	94-36-0	Water flea	Experimental	21 days	EC10	0.001 mg/l
Dibenzoyl peroxide	94-36-0	Activated sludge	Experimental	30 minutes	EC50	35 mg/l
Dibenzoyl peroxide	94-36-0	Redworm	Experimental	14 days	LC50	>1,000 mg/kg (Dry Weight)
Dibenzoyl peroxide	94-36-0	Soil microbes	Experimental	28 days	EC50	2,300 mg/kg (Dry Weight)
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	Activated sludge	Experimental	3 hours	EC50	>100 mg/l
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Ethylene Glycol	107-21-1	Bacteria	Experimental	16 hours	EC50	10,000 mg/l
Ethylene Glycol	107-21-1	Fathead minnow	Experimental	96 hours	LC50	8,050 mg/l
Ethylene Glycol	107-21-1	Green algae	Experimental	72 hours	EC50	>1,000 mg/l
Ethylene Glycol	107-21-1	Water flea	Experimental	48 hours	EC50	>1,100 mg/l
Ethylene Glycol	107-21-1	Green algae	Experimental	72 hours	NOEC	1,000 mg/l
Ethylene Glycol	107-21-1	Water flea	Experimental	21 days	NOEC	100 mg/l
Zinc Stearate	557-05-1	Water flea	Experimental	48 hours	EC50	>100 mg/l
Zinc Stearate	557-05-1	Zebra Fish	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Calcium Sulfate	7778-18-9	Activated sludge	Estimated	3 hours	NOEC	1,000 mg/l
Calcium Sulfate	7778-18-9	Algae or other aquatic plants	Experimental	96 hours	EC50	3,200 mg/l
Calcium Sulfate	7778-18-9	Bluegill	Experimental	96 hours	LC50	>2,980 mg/l
Calcium Sulfate	7778-18-9	Water flea	Experimental	48 hours	LC50	>1,970 mg/l
Calcium Sulfate	7778-18-9	Water flea	Estimated	21 days	NOEC	1,270 mg/l
Iron oxide (FE2O3)	1309-37-1	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Iron oxide (FE2O3)	1309-37-1	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Iron oxide (FE2O3)	1309-37-1	Zebra Fish	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Iron oxide (FE2O3)	1309-37-1	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Iron oxide (FE2O3)	1309-37-1	Water flea	Experimental	21 days	No tox obs at lmt of water sol	>100 mg/l
Iron oxide (FE2O3)	1309-37-1	Activated sludge	Experimental	3 hours	EC50	>10,000 mg/l
Oxirane,	9038-95-3	Inland	Analogous	96 hours	LC50	650 mg/l

Polymer with Methyloxirane, Monobutyl Ether		Silverside	Compound			
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	9038-95-3	Activated sludge	Experimental	16 hours	IC50	32,000 mg/l
Ferric Ammonium Ferrocyanide	25869-00-5	Water flea	Endpoint not reached	24 hours	EC50	>100 mg/l
Ferric Ammonium Ferrocyanide	25869-00-5	Activated sludge	Experimental	3 hours	NOEC	100 mg/l
Ferric Ammonium Ferrocyanide	25869-00-5	Common Carp	Experimental	96 hours	LC50	>100 mg/l
Ferric Ammonium Ferrocyanide	25869-00-5	Green algae	Experimental	72 hours	EC50	9.7 mg/l
Ferric Ammonium Ferrocyanide	25869-00-5	Green algae	Experimental	72 hours	NOEC	8 mg/l
Ferric Ammonium Ferrocyanide	25869-00-5	Water flea	Experimental	21 days	EC10	0.168 mg/l
Ferric Ferrocyanide	14038-43-8	Golden Orfe	Estimated	96 hours	LC50	>100 mg/l

## 12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Dibenzoyl peroxide	94-36-0	Experimental Biodegradation	28 days	BOD	71 %BOD/ThO D	OECD 301D - Closed bottle test
Dibenzoyl peroxide	94-36-0	Experimental Hydrolysis		Hydrolytic half-life	5.2 hours (t 1/2)	OECD 111 Hydrolysis func of pH
Benzoic Acid, C9-11- Branched Alkyl Esters	131298-44-7	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Ethylene Glycol	107-21-1	Experimental Biodegradation	14 days	BOD	90 %BOD/ThO D	OECD 301C - MITI test (I)
Zinc Stearate	557-05-1	Experimental Biodegradation	28 days	BOD	14.6 %BOD/Th OD	OECD 301D - Closed bottle test
Calcium Sulfate	7778-18-9	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Iron oxide (FE2O3)	1309-37-1	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Oxirane, Polymer with Methyloxirane, Monobutyl	9038-95-3	Data not availbl- insufficient	N/A	N/A	N/A	N/A

**3M™ Cream Hardener (Red, White & Blue)**

Ether						
Ferric Ammonium Ferrocyanide	25869-00-5	Data not available - insufficient	N/A	N/A	N/A	N/A
Ferric Ferrocyanide	14038-43-8	Data not available - insufficient	N/A	N/A	N/A	N/A

**12.3 : Bioaccumulative potential**

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Dibenzoyl peroxide	94-36-0	Experimental Bioconcentration		Log Kow	3.2	OECD 117 log Kow HPLC method
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Ethylene Glycol	107-21-1	Experimental Bioconcentration		Log Kow	-1.36	
Zinc Stearate	557-05-1	Experimental Bioconcentration		Log Kow	4.64	OECD 117 log Kow HPLC method
Calcium Sulfate	7778-18-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Iron oxide (FE2O3)	1309-37-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	9038-95-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Ferric Ammonium Ferrocyanide	25869-00-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Ferric Ferrocyanide	14038-43-8	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. Proper destruction may require the use of additional fuel during incineration processes. 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.: UN3108

**Proper Shipping Name:** ORGANIC PEROXIDE TYPE E, SOLID , ( Dibenzoyl Peroxide (as a paste), <= 52% )

**Class/Division:** 5.2

**Sub Risk:** Not applicable.

**Packing Group:** Not applicable.

**Special Instructions:**Limited quantity may apply

**Hazchem Code:** 1W

**IERG:** 32

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

UN No.: UN3108

**Proper Shipping Name:** ORGANIC PEROXIDE TYPE E, SOLID , ( Dibenzoyl Peroxide (as a paste), <= 52% )

**Class/Division:** 5.2

**Sub Risk:** Not applicable.

**Packing Group:** Not applicable.

**Special Instructions:**Forbidden packaging does not meet requirements for this mode of transport

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

UN No.: UN3108

**Proper Shipping Name:** ORGANIC PEROXIDE TYPE E, SOLID , ( Dibenzoyl Peroxide (as a paste), <= 52% )

**Class/Division:** 5.2

**Sub Risk:** Not applicable.

**Packing Group:** Not applicable.

**Marine Pollutant:** Dibenzoyl peroxide

**Special Instructions:**Limited quantity may apply

## SECTION 15: Regulatory information

HSNO Approval number	HSR002629
Group standard name	Organic Peroxides 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	25 kg
Hazardous atmosphere zone	Not required
Fire extinguishers	One required for 50 L or 50 kg
Emergency response plan	100 L or 100 kg
Secondary containment	100 L or 100 kg
Tracking	Not required
Warning signage	10 L or 10 kg

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

Complete document review.

<b>Document group:</b>	29-5993-0	<b>Version number:</b>	5.00
<b>Issue Date:</b>	04/12/2022	<b>Supersedes date:</b>	22/11/2020

**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>**