



Safety Data Sheet

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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™ Lightweight Body Filler - PN 05800, 05801, 05803, 05804, 05805, 35801

Product Identification Numbers

60-9801-0558-3

1.2. Recommended use and restrictions on use

Recommended use

Automotive., Automotive Body Filler

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:

29-5993-0, 32-1433-5

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

Hazchem Code: 2YE

IERG: 15

Land Transport Rule: Dangerous Goods - Road/Rail Transport

Special Instructions: Limited quantity may apply

International Air Transport Association (IATA)- Air Transport

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

International Maritime Dangerous Goods Code (IMDG) - Marine Transport

Special Instructions: Limited quantity may apply

Revision information:

Complete document review.

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Safety Data Sheet

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Document group:	32-1433-5	Version number:	3.00
Issue Date:	13/07/2022	Supersedes date:	31/01/2018

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™ Lightweight Body Filler PNs 05800, 05801, 05804, 05805

1.2. Recommended use and restrictions on use

Recommended use

Automotive. Body 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 2

Carcinogenicity: Category 2

Reproductive Toxicity: Category 1B

Specific Target Organ Toxicity (single exposure): Category 1

Specific Target Organ Toxicity (repeated exposure): Category 1

2.2. Label elements

SIGNAL WORD

Danger

Symbols:

Flame | Exclamation mark | Health Hazard |

Pictograms



HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H370	Causes damage to organs: liver sensory organs.
H372	Causes damage to organs through prolonged or repeated exposure: respiratory system sensory organs.

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.
P280F	Wear respiratory 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.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P337 + P313	IF eye irritation persists: Get medical advice/attention.
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	Store in a well-ventilated place. Keep cool.
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P405

Store locked up.

Disposal

P501

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

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	% by Weight
1,3-Isobenzofurandione Polymer with 2,5-Furandione and 2,2-Oxybis[ethanol]	26123-45-5	15 - 40
Styrene	100-42-5	10 - 30
Talc	14807-96-6	10 - 30
Magnesium Carbonate	546-93-0	7 - 15
Chlorite(Mineral)	1318-59-8	< 5
Limestone	1317-65-3	1 - 5
Synthetic Crystalline-Free Silica Gel	112926-00-8	1 - 5
Titanium dioxide	13463-67-7	< 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 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.

Hazardous Decomposition or By-Products

Substance

Hydrocarbons.
Carbon monoxide.
Carbon dioxide.

Condition

During combustion.
During combustion.
During combustion.

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

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. Avoid release to the environment. 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. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents.

7.3. Certified handler

Not required

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
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 ³ (20 ppm);STEL(15 minutes):170 mg/m ³ (40 ppm)	Class-subclass 6.7, carc HCB
Synthetic Crystalline-Free Silica Gel	112926-00-8	New Zealand WES	TWA(8 hours):10 mg/m ³	
Limestone	1317-65-3	New Zealand WES	TWA(8 hours):10 ppm	
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	1317-65-3	ACGIH	TWA(inhalable particulates):10 mg/m ³	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	1317-65-3	ACGIH	TWA(respirable particles):3 mg/m ³	
Titanium dioxide	13463-67-7	ACGIH	TWA:10 mg/m ³	A4: Not class. as human carcinogen
Titanium dioxide	13463-67-7	New Zealand WES	TWA(8 hours):10 mg/m ³	
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m ³	A4: Not class. as human carcinogen
Talc	14807-96-6	New Zealand WES	Limit value not established:	
Talc	14807-96-6	New Zealand WES	TWA(as respirable dust)(8 hours):2 mg/m ³	
Magnesium Carbonate	546-93-0	New Zealand WES	TWA(8 hours):10 mg/m ³	
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	546-93-0	ACGIH	TWA(inhalable particulates):10 mg/m ³	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	546-93-0	ACGIH	TWA(respirable particles):3 mg/m ³	

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 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:

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: Fluoroelastomer

Polyvinyl alcohol (PVA).

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

Physical state	Liquid.
Specific Physical Form:	Paste
Colour	Grey
Odour	Pungent Styrene
Odour threshold	<i>No data available.</i>
pH	<i>No data available.</i>
Melting point/Freezing point	<i>No data available.</i>
Boiling point/Initial boiling point/Boiling range	145 °C
Flash point	31.1 °C [Test Method: Closed Cup]
Evaporation rate	<i>No data available.</i>
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	0.9 % [Details: based on styrene]
Flammable Limits(UEL)	6.8 % [Details: based on styrene]

Vapour pressure	No data available.
Vapor Density and/or Relative Vapor Density	3.6 [Ref Std: AIR=1]
Density	1.14 g/ml
Relative density	1.14 [Ref Std: WATER=1]
Water solubility	Negligible
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity/Kinematic Viscosity	200,000 - 244,000 mPa-s
Volatile organic compounds (VOC)	17.6 % weight [Test Method:calculated per CARB title 2]
Volatile organic compounds (VOC)	200 g/l [Test Method:calculated SCAQMD rule 443.1]
Percent volatile	17.9 % weight
VOC less H2O & exempt solvents	201 g/l [Test Method: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

Sparks and/or flames.

Heat.

10.5 Incompatible materials

Strong acids.

Strong oxidising agents.

Alkali and alkaline earth metals.

Strong bases.

10.6 Hazardous decomposition products

Substance

None known.

Condition

Refer to Section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation

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.

Eye contact

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

Reproductive/Developmental Toxicity:

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

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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
1,3-Isobenzofurandione Polymer with 2,5-Furandione and 2,2-Oxybis[ethanol]	Dermal		LD50 estimated to be > 5,000 mg/kg
1,3-Isobenzofurandione Polymer with 2,5-Furandione and 2,2-Oxybis[ethanol]	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 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
Magnesium Carbonate	Dermal	Professional judgement	LD50 estimated to be 2,000 - 5,000 mg/kg
Magnesium Carbonate	Ingestion	Rat	LD50 > 2,000 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
Synthetic Crystalline-Free Silica Gel	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic Crystalline-Free Silica Gel	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic Crystalline-Free Silica Gel	Ingestion	Rat	LD50 > 5,110 mg/kg
Chlorite(Mineral)	Dermal		LD50 estimated to be > 5,000 mg/kg
Chlorite(Mineral)	Ingestion		LD50 estimated to be > 5,000 mg/kg
Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Talc	Rabbit	No significant irritation
Styrene	Professional judgement	Mild irritant
Magnesium Carbonate	In vitro data	No significant irritation
Limestone	Rabbit	No significant irritation
Synthetic Crystalline-Free Silica Gel	Rabbit	No significant irritation
Chlorite(Mineral)	Professional judgement	No significant irritation
Titanium dioxide	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Talc	Rabbit	No significant irritation
Styrene	Professional judgement	Moderate irritant
Magnesium Carbonate	Rabbit	Mild irritant
Limestone	Rabbit	No significant irritation
Synthetic Crystalline-Free Silica Gel	Rabbit	No significant irritation
Chlorite(Mineral)	Professional judgement	No significant irritation
Titanium dioxide	Rabbit	No significant irritation

Sensitisation:

Skin Sensitisation

Name	Species	Value
Styrene	Guinea pig	Not classified
Synthetic Crystalline-Free Silica Gel	Human and animal	Not classified
Titanium dioxide	Human and animal	Not classified

Respiratory Sensitisation

Name	Species	Value
Talc	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
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
Synthetic Crystalline-Free Silica Gel	In Vitro	Not mutagenic
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Styrene	Ingestion	Mouse	Carcinogenic.
Styrene	Inhalation	Human and animal	Carcinogenic.
Synthetic Crystalline-Free Silica Gel	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis
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	NOAEL 2.1 mg/l	during gestation

			species		
Limestone	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
Synthetic Crystalline-Free Silica Gel	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic Crystalline-Free Silica Gel	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic Crystalline-Free Silica Gel	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
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
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
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	Rat	LOAEL 500	8 weeks

			data are not sufficient for classification		mg/kg/day	
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
Synthetic Crystalline-Free Silica Gel	Inhalation	respiratory system silicosis	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

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

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
1,3-Isobenzofurandione Polymer with 2,5-Furandione and 2,2-Oxybis[ethanol]	26123-45-5		Data not available or insufficient for classification			N/A
Styrene	100-42-5	Activated sludge	Experimental	30 minutes	EC50	500 mg/l
Styrene	100-42-5	Fathead minnow	Experimental	96 hours	LC50	4.02 mg/l
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
Talc	14807-96-6		Data not available or insufficient for classification			N/A
Magnesium Carbonate	546-93-0	Activated sludge	Estimated	3 hours	EC50	>900 mg/l
Magnesium Carbonate	546-93-0	Fathead minnow	Estimated	96 hours	LC50	1,880 mg/l
Magnesium Carbonate	546-93-0	Green algae	Estimated	72 hours	EC50	>100 mg/l
Magnesium Carbonate	546-93-0	Water flea	Estimated	48 hours	LC50	486 mg/l
Magnesium Carbonate	546-93-0	Green algae	Estimated	72 hours	NOEC	100 mg/l
Magnesium Carbonate	546-93-0	Water flea	Estimated	21 days	EC10	284 mg/l
Chlorite(Mineral)	1318-59-8		Data not available or insufficient for classification			N/A
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
Synthetic Crystalline-Free Silica Gel	112926-00-8	Green algae	Analogous Compound	72 hours	ErC50	>173.1 mg/l
Synthetic Crystalline-Free Silica Gel	112926-00-8	Sediment organism	Experimental	96 hours	EC50	8,500 mg/kg (Dry Weight)
Synthetic Crystalline-Free Silica Gel	112926-00-8	Water flea	Experimental	24 hours	EL50	>10,000 mg/l
Synthetic Crystalline-Free Silica Gel	112926-00-8	Zebra Fish	Experimental	96 hours	LL50	>10,000 mg/l
Synthetic Crystalline-Free Silica Gel	112926-00-8	Green algae	Analogous Compound	72 hours	NOEC	173.1 mg/l
Synthetic Crystalline-Free Silica Gel	112926-00-8	Water flea	Analogous Compound	21 days	NOEC	68 mg/l
Synthetic Crystalline-Free Silica Gel	112926-00-8	Activated sludge	Analogous Compound	3 hours	EC50	>1,000 mg/l
Titanium dioxide	13463-67-7	Activated sludge	Experimental	3 hours	NOEC	>=1,000 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	EC50	>10,000 mg/l
Titanium dioxide	13463-67-7	Fathead minnow	Experimental	96 hours	LC50	>100 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l

Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	NOEC	5,600 mg/l
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12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
1,3-Isobenzofurandione Polymer with 2,5-Furandione and 2,2-Oxybis[ethanol]	26123-45-5	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Styrene	100-42-5	Experimental Photolysis		Photolytic half-life (in air)	6.64 hours (t _{1/2})	Non-standard method
Styrene	100-42-5	Experimental Biodegradation	28 days	BOD	70.9 %BOD/Th BOD	Non-standard method
Talc	14807-96-6	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Magnesium Carbonate	546-93-0	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Chlorite(Mineral)	1318-59-8	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Limestone	1317-65-3	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Synthetic Crystalline-Free Silica Gel	112926-00-8	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

12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
1,3-Isobenzofurandione Polymer with 2,5-Furandione and 2,2-Oxybis[ethanol]	26123-45-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Styrene	100-42-5	Experimental Bioconcentration		Log Kow	2.96	Non-standard method
Talc	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

Magnesium Carbonate	546-93-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Chlorite(Mineral)	1318-59-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Limestone	1317-65-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Synthetic Crystalline-Free Silica Gel	112926-00-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Experimental BCF - Carp	42 days	Bioaccumulation factor	9.6	Non-standard method

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: 14

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**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 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 (for all other substances)
Secondary containment	100 L (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L (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 (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.

Document group:	32-1433-5	Version number:	3.00
Issue Date:	13/07/2022	Supersedes date:	31/01/2018

Key to abbreviations and acronyms

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

HSNO means Hazardous Substances and New Organisms Act 1996

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Safety Data Sheet

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Document group:	29-5993-0	Version number:	6.01
Issue Date:	14/10/2024	Supersedes date:	07/07/2024

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
Eye irritation: Category 2
Skin sensitisation: Category 1
Specific target organ toxicity – single exposure: Category 2
Hazardous to the aquatic environment acute: Category 1
Hazardous to the aquatic environment chronic: 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
Water	7732-18-5	10 - 30
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	10 - 30
Zinc Stearate	557-05-1	1 - 10
Calcium Sulfate	7778-18-9	1 - 10
Ethylene Glycol	107-21-1	<= 7.5
Iron oxide (FE2O3)	1309-37-1	<= 5
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	9038-95-3	<= 5
Ferric Ammonium Ferrocyanide	25869-00-5	<= 1
Ferric Ferrocyanide	14038-43-8	<= 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.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
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	
CYANIDES	14038-43-8	New Zealand WES	TWA(8 hours):5 mg/m3	Dermal sensitizer, SKIN
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/m³: 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

Physical state	Solid.
Specific Physical Form:	Paste
Colour	Red
Odour	Slight Ester
Odour threshold	<i>No data available.</i>
pH	<i>No data available.</i>
Melting point/Freezing point	<i>No data available.</i>
Boiling point/Initial boiling point/Boiling range	<i>No data available.</i>
Flash point	111 °C [<i>Test Method</i> :Estimated]
Evaporation rate	<i>No data available.</i>
Flammability	Organic Peroxide: Type E.
Flammable Limits(LEL)	<i>Not applicable.</i>
Flammable Limits(UEL)	<i>Not applicable.</i>
Vapour pressure	<i>Not applicable.</i>
Vapor Density and/or Relative Vapor Density	<i>Not applicable.</i>
Density	1.2 g/cm ³
Relative density	1.2 [@ 25 °C] [<i>Ref Std</i> :WATER=1]
Water solubility	Negligible
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Autoignition temperature	<i>No data available.</i>
Decomposition temperature	<i>No data available.</i>
Kinematic Viscosity	<i>No data available.</i>
Volatile organic compounds (VOC)	0 - 90 g/l [<i>Test Method</i> :calculated SCAQMD rule 443.1]
Volatile organic compounds (VOC)	0 % weight [<i>Test Method</i> :calculated per CARB title 2]
Percent volatile	21 - 28.5 %
VOC less H₂O & exempt solvents	0 - 121 g/l [<i>Test Method</i> :calculated SCAQMD rule 443.1]
Molecular weight	<i>Not applicable.</i>

Particle Characteristics	<i>Not applicable.</i>
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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 > 5.5 mg/l
Benzoic Acid, C9-11-Branched Alkyl Esters	Ingestion	Rat	LD50 > 5,000 mg/kg
Calcium Sulfate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.61 mg/l
Calcium Sulfate	Ingestion	Rat	LD50 > 1,581 mg/kg
Calcium Sulfate	Dermal	similar health hazards	LD50 estimated to be > 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 > 2,000 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

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Ferric Ammonium Ferrocyanide	Dermal	Rat	LD50 > 2,000 mg/kg
Ferric Ammonium Ferrocyanide	Ingestion	Rat	LD50 > 2,000 mg/kg
Ferric Ferrocyanide	Ingestion	similar compound	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Dibenzoyl peroxide	Rabbit	Minimal irritation
Benzoic Acid, C9-11-Branched Alkyl Esters	Rabbit	Minimal irritation
Calcium Sulfate	Rabbit	No significant irritation
Zinc Stearate	Rabbit	No significant irritation
Ethylene Glycol	Rabbit	Minimal irritation
Iron oxide (Fe ₂ O ₃)	Rabbit	No significant irritation
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Rabbit	Minimal irritation
Ferric Ammonium Ferrocyanide	Rabbit	No significant irritation
Ferric Ferrocyanide	similar compound	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Dibenzoyl peroxide	Rabbit	Severe irritant
Benzoic Acid, C9-11-Branched Alkyl Esters	Rabbit	Mild irritant
Calcium Sulfate	Rabbit	Mild irritant
Zinc Stearate	Rabbit	No significant irritation
Ethylene Glycol	Rabbit	Mild irritant
Iron oxide (Fe ₂ O ₃)	Rabbit	No significant irritation
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	Rabbit	No significant irritation
Ferric Ammonium Ferrocyanide	Rabbit	Mild irritant
Ferric Ferrocyanide	similar compound	No significant irritation

Sensitisation:**Skin Sensitisation**

Name	Species	Value
Dibenzoyl peroxide	Guinea pig	Sensitising
Benzoic Acid, C9-11-Branched Alkyl Esters	Guinea pig	Not classified
Calcium Sulfate	Guinea pig	Not classified
Zinc Stearate	Human	Not classified
Ethylene Glycol	Human	Not classified
Iron oxide (Fe ₂ O ₃)	Human	Not classified
Ferric Ammonium Ferrocyanide	Mouse	Not classified
Ferric Ferrocyanide	similar compound	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
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Dibenzoyl peroxide	In Vitro	Not mutagenic
Dibenzoyl peroxide	In vivo	Not mutagenic
Benzoic Acid, C9-11-Branched Alkyl Esters	In Vitro	Not mutagenic
Benzoic Acid, C9-11-Branched Alkyl Esters	In vivo	Not mutagenic
Calcium Sulfate	In Vitro	Not mutagenic
Calcium Sulfate	In vivo	Not mutagenic
Zinc Stearate	In Vitro	Not mutagenic
Ethylene Glycol	In Vitro	Not mutagenic
Ethylene Glycol	In vivo	Not mutagenic
Iron oxide (Fe ₂ O ₃)	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
Ethylene Glycol	Ingestion	Multiple animal species	Not carcinogenic
Iron oxide (Fe ₂ O ₃)	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
Benzoic Acid, C9-11-Branched Alkyl Esters	Ingestion	Not classified for female reproduction	Rat	NOAEL 641 mg/kg/day	2 generation
Benzoic Acid, C9-11-Branched Alkyl Esters	Ingestion	Not classified for male reproduction	Rat	NOAEL 676 mg/kg/day	2 generation
Benzoic Acid, C9-11-Branched Alkyl Esters	Ingestion	Not classified for development	Rat	NOAEL 191 mg/kg/day	2 generation
Calcium Sulfate	Ingestion	Not classified for female reproduction	Rat	NOAEL 790 mg/kg/day	premating into lactation
Calcium Sulfate	Ingestion	Not classified for male reproduction	Rat	NOAEL 790 mg/kg/day	35 days
Calcium Sulfate	Ingestion	Not classified for development	Multiple animal species	NOAEL 1,600 mg/kg/day	during organogenesis
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
Benzoic Acid, C9-11-Branched Alkyl Esters	Ingestion	heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	Rat	NOAEL 619 mg/kg/day	91 days
Calcium Sulfate	Ingestion	liver kidney and/or bladder heart endocrine system gastrointestinal tract hematopoietic system immune system nervous system respiratory system	Not classified	Rat	NOAEL 790 mg/kg/day	35 days
Zinc Stearate	Ingestion	heart endocrine system gastrointestinal tract hematopoietic system liver immune system nervous system eyes kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
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

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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 (Fe ₂ O ₃)	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

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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	Green algae	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	Rainbow trout	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	Fathead minnow	Experimental	33 days	No tox obs at lmt of water sol	>100 mg/l
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	Green algae	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	Midge	Experimental	28 days	NOEC	64.7 mg/kg (Dry Weight)
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	Water flea	Experimental	21 days	No tox obs at lmt of water sol	>100 mg/l
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	Activated sludge	Experimental	3 hours	EC50	>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
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
Ethylene	107-21-1	Bacteria	Experimental	16 hours	EC50	10,000 mg/l

Glycol						
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
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, Polymer with Methyloxirane, Monobutyl Ether	9038-95-3	Fathead minnow	Experimental	96 hours	LC50	24,500 mg/l
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	9038-95-3	Water flea	Experimental	48 hours	EC50	21,000 mg/l
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	25869-00-5	Water flea	Experimental	21 days	EC10	0.168 mg/l

Ammonium Ferrocyanide						
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	Experimental Biodegradation	28 days	BOD	77.7 %BOD/Th OD	OECD 301F - Manometric respirometry
Calcium Sulfate	7778-18-9	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Zinc Stearate	557-05-1	Experimental Biodegradation	28 days	BOD	14.6 %BOD/Th OD	OECD 301D - Closed bottle test
Ethylene Glycol	107-21-1	Experimental Biodegradation	14 days	BOD	90 %BOD/ThO D	OECD 301C - MITI test (I)
Iron oxide (FE2O3)	1309-37-1	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Oxirane, Polymer with Methyloxirane, Monobutyl Ether	9038-95-3	Experimental Biodegradation	28 days	CO2 evolution	45 %CO2 evolution/THC O2 evolution (does not pass 10-day window)	similar to OECD 301B
Ferric Ammonium Ferrocyanide	25869-00-5	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Ferric Ferrocyanide	14038-43-8	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
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	Modeled Bioconcentration		Bioaccumulation factor	288	Catalogic™
Benzoic Acid, C9-11- Branched Alkyl Esters	131298-44-7	Experimental Bioconcentration		Log Kow	4.61	EC A.8 Partition Coefficient
Calcium	7778-18-9	Data not	N/A	N/A	N/A	N/A

Sulfate		available or insufficient for classification				
Zinc Stearate	557-05-1	Experimental Bioconcentration		Log Kow	4.64	OECD 117 log Kow HPLC method
Ethylene Glycol	107-21-1	Experimental Bioconcentration		Log Kow	-1.36	
Iron oxide (Fe ₂ O ₃)	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.

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Key to abbreviations and acronyms

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

HSNO means Hazardous Substances and New Organisms Act 1996

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