Safety Data Sheet

Document group:	19-8502-7	**Version number:**	5.00
Issue Date:	12/05/2022	**Supersedes date:**	09/06/2020

This Safety Data Sheet has been prepared in accordance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Safe Work Australia, December 2011)

IDENTIFICATION:

1.1. Product identifier
3M™Scotch-Weld™ Epoxy Adhesive DP100FR Cream

Product Identification Numbers
62-3531-1436-6

1.2. Recommended use and restrictions on use

Recommended use
Structural adhesive.

For Industrial or Professional use only.

1.3. Supplier's details

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

1.4. Emergency telephone number
Company Emergency Hotline:EMERGENCY: 1800 097 146 (Australia only)

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

19-8269-3, 19-8211-5

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

TRANSPORT INFORMATION

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

UN No.: UN3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (Epoxy Resin)
Class/Division: 9
Packing Group: III
Marine Pollutant: Epoxy Resin

Hazchem Code: -3Z
IERG: 47

Australian Dangerous Goods Code (ADG) - Road/Rail Transport
Special Instructions: Not restricted, environmentally hazardous substance exception.

International Air Transport Association (IATA)- Air Transport
Special Instructions: Not restricted, as per Special Provision A197, environmentally hazardous substance exception.

International Maritime Dangerous Goods Code (IMDG)- Marine Transport
Special Instructions: Not restricted, as per IMDG code 2.10.2.7, marine pollutant exception.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Safety Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.
Greenguard ® is a United States based program. The 'Low VOC' reference related to United States Federal and State regulations exemptions for some solvents.

3M Australia SDSs are available at www.3m.com.au

Safety Data Sheet

Document group:	19-8211-5	**Version number:**	5.00
Issue Date:	10/11/2021	**Supersedes date:**	01/11/2016

This Safety Data Sheet has been prepared in accordance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Safe Work Australia, December 2011)

SECTION 1: Identification

1.1. Product identifier
3M™ Scotch-Weld™ Epoxy Adhesive DP100FR Cream, Part A

1.2. Recommended use and restrictions on use

Recommended use
Structural adhesive., Structural adhesive.

For Industrial or Professional use only.

1.3. Supplier's details

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

1.4. Emergency telephone number
EMERGENCY: 1800 097 146 (Australia only)

SECTION 2: Hazard identification

This product is classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011, in accordance with applicable State and Territory legislation.

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

2.1. Classification of the substance or mixture
Skin Corrosion/Irritation: Category 2.
Serious Eye Damage/Irritation: Category 2.
Skin Sensitizer: Category 1B.
Carcinogenicity: Category 1B.

2.2. Label elements
The label elements below were prepared in accordance with the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals (Safe Work Australia, December 2011). This information may be different from the actual product label.

Signal word
Danger

Symbols
Exclamation mark |Health Hazard |

Pictograms

Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H350	May cause cancer.

Precautionary statements

Prevention:

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

Response:

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

Storage:

P405	Store locked up.

Disposal:

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

2.3. Other assigned/identified product hazards
All or part of the classification is based on toxicity test data.

2.4. Other hazards which do not result in classification
May be harmful if swallowed.
Harmful to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Weight
Mercaptan Polymer	72244-98-5	65 - 75
Ammonium Polyphosphate	68333-79-9	10 - 30
2,4,6-tris((Dimethylamino)Methyl)Phenol	90-72-2	5 - 10
Silane, trimethoxyoctyl-, hydrolysis products with silica	67762-90-7	1 - 5
bis((Dimethylamino)Methyl)Phenol	71074-89-0	0.1 - 5
Melamine	108-78-1	< 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. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

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

4.2. Most important symptoms and effects, both acute and delayed
No critical symptoms or effects. See Section 11.1, information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

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

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition
Aldehydes.	During combustion.
Hydrocarbons.	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Ketones.	During combustion.
Ammonia	During combustion.
Oxides of nitrogen.	During combustion.
Oxides of sulphur.	During combustion.
Toxic vapour, gas, particulate.	During combustion.

5.3. Special protective actions for fire-fighters
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment. 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. 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. Place in a closed 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

7.1. Precautions for safe handling
For industrial/occupational use only. Not for consumer sale or use. Do not handle until all safety precautions have been read and understood. 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.) Use personal protective equipment (eg. gloves, respirators…) as required.

7.2. Conditions for safe storage including any incompatibilities
Store away from heat. Store away from oxidising agents.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Melamine	108-78-1	AIHA	TWA(inhalable particulates):3 mg/m3	

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

8.2. Exposure controls

8.2.1. Engineering controls

Use 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.

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

Skin/hand protection
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

Select and use gloves according to AS/NZ 2161.

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 vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.
Select and use respirators according to AS/NZS 1715. Respirators should comply with AS/NZS 1716 performance specifications. For information about respirators, call 3M on 1800 024 464.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Viscous Liquid
Colour	White
Odour	Strong Mercaptan
Odour threshold	*No data available.*
pH	*Not applicable.*
Melting point/Freezing point	*Not applicable.*
Boiling point/Initial boiling point/Boiling range	*No data available.*
Flash point	> 93.9 ºC [*Test Method:*Closed Cup]
Evaporation rate	Negligible
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Vapour pressure	<=186,158.4 Pa [@ 55 ºC]
Vapor Density and/or Relative Vapor Density	*Not applicable.*

Density	1.3 g/ml [*Ref Std:*WATER=1]
Relative density	1.3 [*Ref Std:*WATER=1]
Water solubility	Nil
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	35,000 mPa-s - 85,000 mPa-s [*Test Method:*Brookfield]
Volatile organic compounds (VOC)	*No data available.*
Percent volatile	*No data available.*
VOC less H2O & exempt solvents	0 g/l [*Test Method:*calculated SCAQMD rule 443.1] [*Details:*when used as intended with Part B]
VOC less H2O & exempt solvents	0 g/l [*Test Method:*calculated SCAQMD rule 443.1] [*Details:*as supplied]
VOC less H2O & exempt solvents	0 % [*Test Method:*calculated SCAQMD rule 443.1] [*Details:*when used as intended with Part B]
Molecular weight	*No data available.*

Nanoparticles
This material contains nanoparticles.

SECTION 10: Stability and reactivity

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

10.2 Chemical stability
Stable.

10.3. Conditions to avoid
Heat.
Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

10.4. Possibility of hazardous reactions
Hazardous polymerisation will not occur.

10.5 Incompatible materials
Strong oxidising agents.

10.6 Hazardous decomposition products

Substance	**Condition**
None known.	

SECTION 11: Toxicological information

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

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

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

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

Eye contact
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:

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	Ingestion		No data available; calculated ATE300 - 2,000 mg/kg
Mercaptan Polymer	Dermal	Rabbit	LD50 > 10,200 mg/kg
Mercaptan Polymer	Ingestion	Rat	LD50 2,600 mg/kg
Ammonium Polyphosphate	Dermal	Rat	LD50 > 5,000 mg/kg
Ammonium Polyphosphate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.85 mg/l
Ammonium Polyphosphate	Ingestion	Rat	LD50 > 300, < 2,000 mg/kg
2,4,6-tris((Dimethylamino)Methyl)Phenol	Dermal	Rat	LD50 1,280 mg/kg
2,4,6-tris((Dimethylamino)Methyl)Phenol	Ingestion	Rat	LD50 1,000 mg/kg
Silane, trimethoxyoctyl-, hydrolysis products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silane, trimethoxyoctyl-, hydrolysis products with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
bis((Dimethylamino)Methyl)Phenol	Ingestion		LD50 estimated to be 300 - 2,000 mg/kg
Melamine	Dermal	Rabbit	LD50 > 1,000 mg/kg
Melamine	Ingestion	Rat	LD50 3,161 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Overall product	In vitro data	Irritant
Mercaptan Polymer	Rabbit	No significant irritation
Ammonium Polyphosphate	In vitro data	No significant irritation
2,4,6-tris((Dimethylamino)Methyl)Phenol	Rabbit	Corrosive
Silane, trimethoxyoctyl-, hydrolysis products with silica	Rabbit	No significant irritation
bis((Dimethylamino)Methyl)Phenol	similar compounds	Corrosive
Melamine	Guinea pig	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Overall product	In vitro data	Severe irritant
Mercaptan Polymer	Rabbit	Mild irritant
Ammonium Polyphosphate	Rabbit	Moderate irritant
2,4,6-tris((Dimethylamino)Methyl)Phenol	Rabbit	Corrosive
Silane, trimethoxyoctyl-, hydrolysis products with silica	Rabbit	No significant irritation
bis((Dimethylamino)Methyl)Phenol	similar compounds	Corrosive
Melamine	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
Mercaptan Polymer	Mouse	Sensitising
Ammonium Polyphosphate	similar compounds	Not classified
2,4,6-tris((Dimethylamino)Methyl)Phenol	Guinea pig	Not classified
Silane, trimethoxyoctyl-, hydrolysis products with silica	Human and animal	Not classified
Melamine	Guinea pig	Not classified

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
Mercaptan Polymer	In Vitro	Not mutagenic
2,4,6-tris((Dimethylamino)Methyl)Phenol	In Vitro	Not mutagenic
Silane, trimethoxyoctyl-, hydrolysis products with silica	In Vitro	Not mutagenic
Melamine	In Vitro	Not mutagenic
Melamine	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Silane, trimethoxyoctyl-, hydrolysis products with silica	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
Melamine	Ingestion	Multiple animal species	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Melamine	Ingestion	Not classified for development	Rat	NOAEL 1,060 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
Ammonium Polyphosphate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
2,4,6-tris((Dimethylamino)Methyl)Phenol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Mercaptan Polymer	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 75 mg/kg/day	90 days
Mercaptan Polymer	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 250 mg/kg/day	90 days
Mercaptan Polymer	Ingestion	endocrine system | heart | skin | immune system | nervous system | eyes | kidney and/or bladder | respiratory system | vascular system	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days
2,4,6-tris((Dimethylamino)Methyl)Phenol	Dermal	skin | liver | nervous system | auditory system | hematopoietic	Not classified	Rat	NOAEL 125 mg/kg/day	28 days

		system | eyes				
Silane, trimethoxyoctyl-, hydrolysis products with silica	Inhalation	respiratory system | silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Melamine	Ingestion	kidney and/or bladder	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 63 mg/kg/day	13 weeks

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

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

Interactive Effects
Not determined.

SECTION 12: Ecological information

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

12.1. Toxicity

Acute aquatic hazard:
GHS Acute 3: Harmful to aquatic life.

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

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Mercaptan Polymer	72244-98-5	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Mercaptan Polymer	72244-98-5	Green algae	Experimental	72 hours	EC50	>733 mg/l
Mercaptan Polymer	72244-98-5	Water flea	Experimental	48 hours	EC50	12 mg/l
Mercaptan Polymer	72244-98-5	Zebra Fish	Experimental	96 hours	LC50	87 mg/l
Mercaptan Polymer	72244-98-5	Green algae	Experimental	72 hours	NOEC	338 mg/l
Mercaptan Polymer	72244-98-5	Water flea	Experimental	21 days	NOEC	3.5 mg/l
Ammonium Polyphosphate	68333-79-9	Activated sludge	Estimated	3 hours	EC50	>100 mg/l
Ammonium Polyphosphate	68333-79-9	Green Algae	Estimated	72 hours	EC50	>97.1 mg/l

Ammonium Polyphosphate	68333-79-9	Rainbow trout	Estimated	96 hours	LC50	>100 mg/l
Ammonium Polyphosphate	68333-79-9	Water flea	Estimated	48 hours	EC50	>100 mg/l
Ammonium Polyphosphate	68333-79-9	Green Algae	Estimated	72 hours	NOEC	97.1 mg/l
2,4,6-tris((Dimethylamino)Methyl)Phenol	90-72-2		Experimental	96 hours	LC50	718 mg/l
2,4,6-tris((Dimethylamino)Methyl)Phenol	90-72-2	Common Carp	Experimental	96 hours	LC50	>100 mg/l
2,4,6-tris((Dimethylamino)Methyl)Phenol	90-72-2	Green algae	Experimental	72 hours	EC50	46.7 mg/l
2,4,6-tris((Dimethylamino)Methyl)Phenol	90-72-2	Water flea	Experimental	48 hours	EC50	>100 mg/l
2,4,6-tris((Dimethylamino)Methyl)Phenol	90-72-2	Green algae	Experimental	72 hours	NOEC	6.44 mg/l
Silane, trimethoxyoctyl-, hydrolysis products with silica	67762-90-7		Data not available or insufficient for classification			N/A
bis((Dimethylamino)Methyl)Phenol	71074-89-0		Data not available or insufficient for classification			NA
Melamine	108-78-1	Bacteria	Experimental	30 minutes	EC50	>10,000 mg/l
Melamine	108-78-1	Green Algae	Experimental	96 hours	EC50	325 mg/l
Melamine	108-78-1	Guppy	Experimental	96 hours	LC50	>3,000 mg/l
Melamine	108-78-1	Water flea	Experimental	48 hours	EC50	48 mg/l
Melamine	108-78-1	Fathead minnow	Experimental	36 days	NOEC	>=5.1 mg/l
Melamine	108-78-1	Green Algae	Experimental	96 hours	NOEC	98 mg/l
Melamine	108-78-1	Water flea	Experimental	21 days	NOEC	>=11 mg/l

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Mercaptan Polymer	72244-98-5	Experimental Biodegradation	28 days	CO2 evolution	5 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
Ammonium Polyphosphate	68333-79-9	Data not available-insufficient			N/A	
2,4,6-	90-72-2	Experimental	28 days	BOD	4 %	OECD 301D - Closed

tris((Dimethylamino)Methyl)Phenol		Biodegradation			BOD/ThBOD	bottle test
Silane, trimethoxyoctyl-, hydrolysis products with silica	67762-90-7	Data not available-insufficient			N/A	
bis((Dimethylamino)Methyl)Phenol	71074-89-0	Modeled Biodegradation	28 days	BOD	41 %CO2 evolution/THCO2 evolution	Catalogic™
Melamine	108-78-1	Experimental Biodegradation	14 days	BOD	0 % BOD/ThBOD	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Mercaptan Polymer	72244-98-5	Estimated Bioconcentration		Log Kow	>1.2	Estimated: Octanol-water partition coefficient
Ammonium Polyphosphate	68333-79-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,4,6-tris((Dimethylamino)Methyl)Phenol	90-72-2	Experimental Bioconcentration		Log Kow	-0.66	830.7550 Part.Coef Shake Flask
Silane, trimethoxyoctyl-, hydrolysis products with silica	67762-90-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
bis((Dimethylamino)Methyl)Phenol	71074-89-0	Modeled Bioconcentration		Log Kow	-2.34	ACD/Labs ChemSketch™
Melamine	108-78-1	Experimental BCF-Carp	42 days	Bioaccumulation factor	<3.8	OECD 305E - Bioaccumulation flow-through fish test

12.4. Mobility in soil
Please contact manufacturer for more details

12.5 Other adverse effects
No information available.

SECTION 13: Disposal considerations

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

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. Proper destruction may require the use of additional fuel during incineration processes.

SECTION 14: Transport Information

Australian Dangerous Goods Code (ADG) - Road/Rail Transport
UN No.: Not applicable.
Proper shipping name: Not applicable.
Class/Division: Not applicable.
Sub Risk: Not applicable.
Packing Group: Not applicable.

Hazchem Code: Not applicable
IERG: Not applicable.

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

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

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Australian Inventory Status:
All components of this product are listed on or exempt from the Australian Inventory of Industrial Chemicals (AIIC). Conditions may apply prior to introduction for direct importers of this product, Please contact 3M Australia on 136 136 for further details.

Poison Schedule: This product is intended for Industrial or Professional Use only and therefore is not packaged and labelled in accordance with the requirements of the Standard for the Uniform Scheduling of Medicines and Poisons.

SECTION 16: Other information

Revision information:
Complete document review.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Safety Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.
Greenguard ® is a United States based program. The ‘Low VOC’ reference related to United States Federal and State regulations exemptions for some solvents.

3M Australia SDSs are available at www.3m.com.au

Safety Data Sheet

Document group:	19-8269-3	**Version number:**	5.00
Issue Date:	12/05/2022	**Supersedes date:**	09/06/2020

This Safety Data Sheet has been prepared in accordance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Safe Work Australia, December 2011)

SECTION 1: Identification

1.1. Product identifier
3M™ Scotch-Weld™ Epoxy Adhesive DP100FR Cream, Part B

1.2. Recommended use and restrictions on use

Recommended use
Adhesive, Structural adhesive.

For Industrial or Professional use only.

1.3. Supplier's details

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

1.4. Emergency telephone number
EMERGENCY: 1800 097 146 (Australia only)

SECTION 2: Hazard identification

This product is classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011, in accordance with applicable State and Territory legislation.

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

2.1. Classification of the substance or mixture
Serious Eye Damage/Irritation: Category 2.
Skin Sensitizer: Category 1.
Carcinogenicity: Category 1B.

2.2. Label elements
The label elements below were prepared in accordance with the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals (Safe Work Australia, December 2011). This information may be different from the actual product label.

Signal word
Danger

Symbols
Exclamation mark |Health Hazard |

Pictograms

Hazard statements

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H350	May cause cancer.

Precautionary statements

Prevention:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.

Response:

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

Storage:

P405	Store locked up.

Disposal:

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

2.3. Other assigned/identified product hazards
Although titanium dioxide is classified as a carcinogen, exposures associated with this health effect are not expected during normal, intended use of this product.

2.4. Other hazards which do not result in classification
May be harmful if swallowed.
Causes mild skin irritation.
Toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Weight
Epoxy Resin	25068-38-6	70 - 80
Ammonium Polyphosphate	68333-79-9	10 - 30
Titanium dioxide	13463-67-7	1 - 5
Melamine	108-78-1	<= 0.5
Methylene Chloride	75-09-2	< 0.01

SECTION 4: First aid measures

4.1. Description of first aid measures

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

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

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

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

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

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

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

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

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition
Aldehydes.	During combustion.
Hydrocarbons.	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Hydrogen Chloride	During combustion.
Ketones.	During combustion.
Ammonia	During combustion.
Oxides of nitrogen.	During combustion.
Toxic vapour, gas, particulate.	During combustion.

5.3. Special protective actions for fire-fighters
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment. 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. 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. Place in a closed 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

7.1. Precautions for safe handling
For industrial/occupational use only. Not for consumer sale or use. Do not handle until all safety precautions have been read and understood. 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.) Use personal protective equipment (eg. gloves, respirators…) as required.

7.2. Conditions for safe storage including any incompatibilities
Store away from heat. Store away from acids. Store away from oxidising agents.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Melamine	108-78-1	AIHA	TWA(inhalable particulates):3 mg/m3	
Titanium dioxide	13463-67-7	ACGIH	TWA:10 mg/m³	A4: Not class. as human carcin
Titanium dioxide	13463-67-7	Australia OELs	TWA(Inspirable dust)(8 hours):10 mg/m3	
Methylene Chloride	75-09-2	ACGIH	TWA:50 ppm	A3: Confirmed animal carcinogen.
Methylene Chloride	75-09-2	Australia OELs	TWA(8 hours): 174 mg/m3 (50 ppm)	SKIN

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
Australia OELs : Australia. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment
CMRG : Chemical Manufacturer's Recommended Guidelines

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

8.2. Exposure controls

8.2.1. Engineering controls
Use 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.

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

Skin/hand protection
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

Select and use gloves according to AS/NZ 2161.

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 vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.
Select and use respirators according to AS/NZS 1715. Respirators should comply with AS/NZS 1716 performance specifications. For information about respirators, call 3M on 1800 024 464.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Viscous Liquid
Colour	White
Odour	Epoxy
Odour threshold	*No data available.*
pH	*No data available.*
Melting point/Freezing point	*Not applicable.*
Boiling point/Initial boiling point/Boiling range	*No data available.*

Flash point	> 93.9 ºC [@ 101,325 Pa] [*Test Method:*Closed Cup]
Evaporation rate	Negligible
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Vapour pressure	*No data available.*
Vapor Density and/or Relative Vapor Density	*No data available.*
Density	1.2 g/ml [*Ref Std:*WATER=1]
Relative density	1.2 [*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	60,000 - 80,000 mPa-s [*Test Method:*Brookfield]
Volatile organic compounds (VOC)	*No data available.*
Percent volatile	*No data available.*
VOC less H2O & exempt solvents	0 g/l [*Test Method:*calculated SCAQMD rule 443.1] [*Details:*when used as intended with Part A]
VOC less H2O & exempt solvents	0 g/l [*Test Method:*calculated SCAQMD rule 443.1] [*Details:*as supplied]
VOC less H2O & exempt solvents	0 % [*Test Method:*calculated SCAQMD rule 443.1] [*Details:*when used as intended with Part A]
Molecular weight	*No data available.*

SECTION 10: Stability and reactivity

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

10.2 Chemical stability
Stable.

10.3. Conditions to avoid
Heat.
Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

10.4. Possibility of hazardous reactions
Hazardous polymerisation will not occur.

10.5 Incompatible materials
Strong acids.
Strong oxidising agents.

10.6 Hazardous decomposition products

Substance	**Condition**
None known.	

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be

reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

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

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

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

Ingestion
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:

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	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
Epoxy Resin	Dermal	Rat	LD50 > 1,600 mg/kg
Epoxy Resin	Ingestion	Rat	LD50 > 1,000 mg/kg
Ammonium Polyphosphate	Dermal	Rat	LD50 > 5,000 mg/kg
Ammonium Polyphosphate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.85 mg/l
Ammonium Polyphosphate	Ingestion	Rat	LD50 > 300, < 2,000 mg/kg
Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Melamine	Dermal	Rabbit	LD50 > 1,000 mg/kg
Melamine	Ingestion	Rat	LD50 3,161 mg/kg
Methylene Chloride	Dermal	Rat	LD50 > 2,000 mg/kg
Methylene Chloride	Inhalation-Vapour (4 hours)	Rat	LC50 63.7 mg/l
Methylene Chloride	Ingestion	Rat	LD50 1,410 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Epoxy Resin	Rabbit	Mild irritant
Ammonium Polyphosphate	In vitro data	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
Melamine	Guinea pig	No significant irritation
Methylene Chloride	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Epoxy Resin	Rabbit	Moderate irritant
Ammonium Polyphosphate	Rabbit	Moderate irritant
Titanium dioxide	Rabbit	No significant irritation
Melamine	Rabbit	No significant irritation
Methylene Chloride	Rabbit	Severe irritant

Skin Sensitisation

Name	Species	Value
Epoxy Resin	Human and animal	Sensitising
Ammonium Polyphosphate	similar compounds	Not classified
Titanium dioxide	Human and animal	Not classified
Melamine	Guinea pig	Not classified

Respiratory Sensitisation

Name	Species	Value
Epoxy Resin	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Epoxy Resin	In vivo	Not mutagenic
Epoxy Resin	In Vitro	Some positive data exist, but the data are not sufficient for classification
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
Melamine	In Vitro	Not mutagenic
Melamine	In vivo	Not mutagenic
Methylene Chloride	In vivo	Not mutagenic
Methylene Chloride	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Epoxy Resin	Dermal	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.
Melamine	Ingestion	Multiple animal species	Carcinogenic.
Methylene Chloride	Inhalation	Multiple animal species	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Epoxy Resin	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Epoxy Resin	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Epoxy Resin	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
Epoxy Resin	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
Melamine	Ingestion	Not classified for development	Rat	NOAEL 1,060 mg/kg/day	during organogenesis
Methylene Chloride	Inhalation	Not classified for female reproduction	Rat	NOAEL 5.2 mg/l	2 generation
Methylene Chloride	Inhalation	Not classified for male reproduction	Rat	NOAEL 5.2 mg/l	2 generation
Methylene Chloride	Inhalation	Not classified for development	Multiple animal species	NOAEL 4.3 mg/l	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Ammonium Polyphosphate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Methylene Chloride	Dermal	blood	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	4 hours
Methylene Chloride	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	occupational exposure
Methylene Chloride	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Methylene Chloride	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Epoxy Resin	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
Epoxy Resin	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks

Epoxy Resin	Ingestion	auditory system | heart | endocrine system | hematopoietic system | liver | eyes | kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Titanium dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Melamine	Ingestion	kidney and/or bladder	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 63 mg/kg/day	13 weeks
Methylene Chloride	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 6.95 mg/l	2 years
Methylene Chloride	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.17 mg/l	2 years
Methylene Chloride	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	LOAEL 35 mg/l	8 weeks
Methylene Chloride	Inhalation	heart	Not classified	Human	NOAEL Not available	
Methylene Chloride	Inhalation	immune system	Not classified	Rat	NOAEL 18 mg/l	28 days
Methylene Chloride	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1,200 mg/kg/day	3 months
Methylene Chloride	Ingestion	blood	Not classified	Rat	NOAEL 249 mg/kg/day	2 years
Methylene Chloride	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 1,469 mg/kg/day	3 months
Methylene Chloride	Ingestion	eyes	Not classified	Rat	NOAEL 249 mg/kg/day	104 weeks

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

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

Interactive Effects
Not determined.

SECTION 12: Ecological information

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

12.1. Toxicity

Acute aquatic hazard:
GHS Acute 2: Toxic to aquatic life.

Chronic aquatic hazard:
GHS Chronic 2: Toxic to aquatic life with long lasting effects.

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Epoxy Resin	25068-38-6	Rainbow trout	Estimated	96 hours	LC50	2 mg/l
Epoxy Resin	25068-38-6	Water flea	Estimated	48 hours	LC50	1.8 mg/l
Epoxy Resin	25068-38-6	Activated sludge	Experimental	3 hours	IC50	>100 mg/l
Epoxy Resin	25068-38-6	Green algae	Experimental	72 hours	EC50	>11 mg/l
Epoxy Resin	25068-38-6	Green algae	Experimental	72 hours	NOEC	4.2 mg/l
Epoxy Resin	25068-38-6	Water flea	Experimental	21 days	NOEC	0.3 mg/l
Ammonium Polyphosphate	68333-79-9	Activated sludge	Estimated	3 hours	EC50	>100 mg/l
Ammonium Polyphosphate	68333-79-9	Green algae	Estimated	72 hours	EC50	>97.1 mg/l
Ammonium Polyphosphate	68333-79-9	Rainbow trout	Estimated	96 hours	LC50	>100 mg/l
Ammonium Polyphosphate	68333-79-9	Water flea	Estimated	48 hours	EC50	>100 mg/l
Ammonium Polyphosphate	68333-79-9	Green algae	Estimated	72 hours	NOEC	97.1 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
Melamine	108-78-1	Bacteria	Experimental	30 minutes	EC50	>10,000 mg/l
Melamine	108-78-1	Green algae	Experimental	96 hours	EC50	325 mg/l
Melamine	108-78-1	Guppy	Experimental	96 hours	LC50	>3,000 mg/l
Melamine	108-78-1	Water flea	Experimental	48 hours	EC50	48 mg/l
Melamine	108-78-1	Fathead minnow	Experimental	36 days	NOEC	>=5.1 mg/l
Melamine	108-78-1	Green algae	Experimental	96 hours	NOEC	98 mg/l
Melamine	108-78-1	Water flea	Experimental	21 days	NOEC	>=11 mg/l

Methylene Chloride	75-09-2	Fathead minnow	Experimental	96 hours	LC50	193 mg/l
Methylene Chloride	75-09-2	Green algae	Experimental	72 hours	EC50	242 mg/l
Methylene Chloride	75-09-2	Water flea	Experimental	48 hours	LC50	27 mg/l
Methylene Chloride	75-09-2	Fathead minnow	Experimental	28 days	NOEC	83 mg/l
Methylene Chloride	75-09-2	Green algae	Experimental	72 hours	EC10	115 mg/l
Methylene Chloride	75-09-2	Activated sludge	Experimental	40 minutes	EC50	2,590 mg/l

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Epoxy Resin	25068-38-6	Experimental Hydrolysis		Hydrolytic half-life	117 hours (t 1/2)	Non-standard method
Epoxy Resin	25068-38-6	Experimental Biodegradation	28 days	BOD	5 %BOD/COD	OECD 301F - Manometric respirometry
Ammonium Polyphosphate	68333-79-9	Data not available-insufficient	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Data not available-insufficient	N/A	N/A	N/A	N/A
Melamine	108-78-1	Experimental Biodegradation	14 days	BOD	0 %BOD/ThBOD	OECD 301C - MITI test (I)
Methylene Chloride	75-09-2	Experimental Photolysis		Photolytic half-life (in air)	226 days (t 1/2)	
Methylene Chloride	75-09-2	Experimental Biodegradation	28 days	BOD	68 %BOD/ThBOD	OECD 301D - Closed bottle test

12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Epoxy Resin	25068-38-6	Experimental Bioconcentration		Log Kow	3.242	Non-standard method
Ammonium Polyphosphate	68333-79-9	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
Melamine	108-78-1	Experimental BCF - Carp	42 days	Bioaccumulation factor	<3.8	OECD 305E - Bioaccumulation flow-through fish test
Methylene Chloride	75-09-2	Experimental BCF - Carp	42 days	Bioaccumulation factor	≤40	OECD305-Bioconcentration
Methylene Chloride	75-09-2	Experimental Bioconcentration		Log Kow	1.25	

12.4. Mobility in soil
Please contact manufacturer for more details

12.5 Other adverse effects
No information available.

SECTION 13: Disposal considerations

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials.

SECTION 14: Transport Information

Australian Dangerous Goods Code (ADG) - Road/Rail Transport
UN No.: UN3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. , (Epoxy Resin)
Class/Division: 9
Sub Risk: Not applicable.
Packing Group: III
Special Instructions: Not restricted, environmentally hazardous substance exception.
Hazchem Code: Not applicable
IERG: Not applicable.

International Air Transport Association (IATA) - Air Transport
UN No.: UN3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. , (Epoxy Resin)
Class/Division: 9
Sub Risk: Not applicable.
Packing Group: III
Special Instructions: Not restricted, as per Special Provision A197, environmentally hazardous substance exception.

International Maritime Dangerous Goods Code (IMDG)- Marine Transport
UN No.: UN3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. , (Epoxy Resin)
Class/Division: 9
Sub Risk: Not applicable.
Packing Group: III
Marine Pollutant: Epoxy Resin
Special Instructions: Not restricted, as per IMDG code 2.10.2.7, marine pollutant exception.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Australian Inventory Status:
All components of this product are listed on or exempt from the Australian Inventory of Industrial Chemicals (AIIC). Conditions may apply prior to introduction for direct importers of this product, Please contact 3M Australia on 136 136 for further details.

Poison Schedule: This product is intended for Industrial or Professional Use only and therefore is not packaged and labelled in accordance with the requirements of the Standard for the Uniform Scheduling of Medicines and Poisons.

SECTION 16: Other information

Revision information:
Complete document review.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Safety Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.
Greenguard ® is a United States based program. The 'Low VOC' reference related to United States Federal and State regulations exemptions for some solvents.

3M Australia SDSs are available at www.3m.com.au