Safety Data Sheet

Document group:	25-3938-5	**Version number:**	3.00
Issue Date:	17/10/2023	**Supersedes date:**	29/11/2018

This Safety Data Sheet has been prepared in accordance with the South African National Standard SANS 10234:2008.

IDENTIFICATION

1.1. Product identifier
Scotch-Weld DP-804, Clear

Product Identification Numbers
FS-9100-5006-1

1.2. Recommended use and restrictions on use
Structural adhesive.

1.3. Supplier's details

Address:	3M South Africa (Pty) Ltd, Private Bag X926, Rivonia 2128
Telephone:	011 806 2000
E Mail:	Not available.
Website:	www.3m.co.za

1.4. Emergency telephone number
011 806 2000

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 MSDSs for components of this product are:

25-3509-4, 25-3504-5

TRANSPORT INFORMATION

Compliance is required to South African Transport Information Road Traffic Act & Regulations and Railroad regulations, IATA Standards for airfreight and Maritime standards for ocean freight.

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 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.

3M South Africa SDSs are available at www.3m.co.za

Safety Data Sheet

Document group:	25-3504-5	**Version number:**	3.00
Issue Date:	08/08/2023	**Supersedes date:**	29/11/2018

This Safety Data Sheet has been prepared in accordance with the South African National Standard SANS 10234:2008.

SECTION 1: Identification

1.1. Product identifier
Scotch-Weld DP-804, Clear, Part B

1.2. Recommended use and restrictions on use

Recommended use
Adhesive, Two-part structural adhesive.

1.3. Supplier's details

Address:	3M South Africa (Pty) Ltd, Private Bag X926, Rivonia 2128
Telephone:	011 806 2000
E Mail:	Not available.
Website:	www.3m.co.za

1.4. Emergency telephone number
011 806 2000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
Flammable liquid: Category 3.
Acute Toxicity (dermal): Category 5.
Skin Corrosion/Irritation: Category 2.
Serious Eye Damage/Irritation: Category 1.
Skin Sensitizer: Category 1B.
Specific Target Organ Toxicity (repeated exposure): Category 1.
Specific Target Organ Toxicity (single exposure): Category 3.
Acute Aquatic Toxicity: Category 3.
Chronic Aquatic Toxicity: Category 3.

2.2. Label elements

Signal word
Danger

Symbols
Flame |Corrosion |Exclamation mark |Health Hazard |

Pictograms

HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure: sensory organs.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280B	Wear protective gloves and eye/face protection.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Acrylate/methacrylate copolymer	Trade Secret	25 - 45
Methyl methacrylate	80-62-6	30 - 40
acetyl-2-thiourea	591-08-2	< 2.5
2-Phenoxyethyl methacrylate	10595-06-9	5 - 15
Methacrylic acid	79-41-4	< 5

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

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

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

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

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

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

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

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

SECTION 5: Fire-fighting measures

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

5.2. Special hazards arising from the substance or mixture
Closed containers exposed to heat from fire may build pressure and explode.

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

SECTION 6: Accidental release measures

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

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

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

the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Vapours may travel long distances along the ground or floor to an ignition source and flash back. Do not use in a confined area with minimal air exchange. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Keep away from reactive metals (eg. Aluminum, zinc etc.) to avoid the formation of hydrogen gas that could create an explosion hazard.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Protect from sunlight. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

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
Methacrylic acid	79-41-4	ACGIH	TWA:20 ppm	
Methacrylic acid	79-41-4	South Africa RELs	TWA(8 hours):40 ppm	
Methyl methacrylate	80-62-6	ACGIH	TWA:50 ppm;STEL:100 ppm	A4: Not class. as human carcin, Dermal Sensitizer
Methyl methacrylate	80-62-6	South Africa RELs	TWA(8 hours):100 ppm;STEL(15 minutes):200 ppm	

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
South Africa CLs : South Africa. Control Limits. Regulations for Hazardous Chemical Substances, Table 1
South Africa RELs : South Africa. Recommended Exposure Limits (RELs) Regulations for Hazardous Chemical Substances, Table 2
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
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.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Full face shield.
Indirect vented goggles.

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 vapours and particulates

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Transparent Colorless
Odor	Ester
Odour threshold	*No data available.*
pH	*No data available.*
Melting point/Freezing point	*Not applicable.*
Boiling point/Initial boiling point/Boiling range	> 100 ºC
Flash point	> 30 ºC [*Test Method:*Closed Cup]
Evaporation rate	*No data available.*
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	2,1 %
Flammable Limits(UEL)	12,5 %
Vapour pressure	*No data available.*
Vapor Density and/or Relative Vapor Density	*No data available.*
Density	0,9 - 1,1 g/cm3 [@ 25 ºC]
Relative density	0,9 - 1,1 [@ 25 ºC] [*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	<=7 500 mPa-s [@ 25 ºC]
Volatile organic compounds (VOC)	*No data available.*
Percent volatile	*No data available.*
VOC less H2O & exempt solvents	*No data available.*

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 Possibility of hazardous reactions
Hazardous polymerisation may occur. At elevated temperatures.

10.4 Conditions to avoid
Avoid curing large quantities of material to prevent a premature reaction (exotherm) with production of intense heat and smoke.
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.
High shear and high temperature conditions
Sparks and/or flames.
Light.
Temperatures above the boiling point.

10.5 Incompatible materials
Aluminium or magnesium powder and high/shear temperature conditions.
Amines.
Metal powder
Reducing agents.
Strong oxidising agents.
Combustibles.
Drugs, medicines and/or food supplies.
Strong acids.
Strong bases.

10.6 Hazardous decomposition products

Substance	Condition
Carbon monoxide.	Not specified.
Carbon dioxide.	Not specified.

SECTION 11: Toxicological information

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

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation
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
May be harmful in contact with skin. 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
Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:
Olfactory effects: Signs/symptoms may include decreased ability to detect odours and complete loss of smell.

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-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5 000 mg/kg
Methyl methacrylate	Dermal	Rabbit	LD50 > 5 000 mg/kg
Methyl methacrylate	Inhalation-Vapor (4 hours)	Rat	LC50 29,8 mg/l
Methyl methacrylate	Ingestion	Rat	LD50 7 900 mg/kg
2-Phenoxyethyl methacrylate	Dermal		LD50 estimated to be 2 000 - 5 000 mg/kg
2-Phenoxyethyl methacrylate	Ingestion		LD50 estimated to be 2 000 - 5 000 mg/kg
Methacrylic acid	Dermal	Rabbit	LD50 > 500 mg/kg
Methacrylic acid	Inhalation-Dust/Mist (4 hours)	Rat	LC50 7,1 mg/l
Methacrylic acid	Ingestion	Rat	LD50 1 320 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Methyl methacrylate	Rabbit	Irritant
2-Phenoxyethyl methacrylate	similar compounds	Irritant
Methacrylic acid	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Methyl methacrylate	Rabbit	Mild irritant

2-Phenoxyethyl methacrylate	similar compoun ds	Severe irritant
Methacrylic acid	Rabbit	Corrosive

Sensitization:

Skin Sensitisation

Name	Species	Value
Methyl methacrylate	Human and animal	Sensitising
Methacrylic acid	Guinea pig	Not classified

Respiratory Sensitisation

Name	Species	Value
Methyl methacrylate	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Methyl methacrylate	In vivo	Not mutagenic
Methyl methacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
2-Phenoxyethyl methacrylate	In Vitro	Not mutagenic
Methacrylic acid	In Vitro	Not mutagenic
Methacrylic acid	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Methyl methacrylate	Ingestion	Rat	Not carcinogenic
Methyl methacrylate	Inhalation	Human and animal	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Methyl methacrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
Methyl methacrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
Methyl methacrylate	Ingestion	Not classified for development	Rabbit	NOAEL 450 mg/kg/day	during gestation
Methyl methacrylate	Inhalation	Not classified for development	Rat	NOAEL 8,3 mg/l	during organogenesis
Methacrylic acid	Inhalation	Not classified for development	Rat	NOAEL 1,076 mg/l	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Methyl methacrylate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure

Methacrylic acid	Inhalation	respiratory irritation	May cause respiratory irritation	Rat	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Methyl methacrylate	Dermal	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
Methyl methacrylate	Inhalation	olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Methyl methacrylate	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	14 weeks
Methyl methacrylate	Inhalation	liver	Not classified	Mouse	NOAEL 12,3 mg/l	14 weeks
Methyl methacrylate	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Methyl methacrylate	Ingestion	kidney and/or bladder | heart | skin | endocrine system | gastrointestinal tract | hematopoietic system | liver | muscles | nervous system | respiratory system	Not classified	Rat	NOAEL 90,3 mg/kg/day	2 years
Methacrylic acid	Inhalation	respiratory system	Not classified	Rat	NOAEL 0,352 mg/l	90 days
Methacrylic acid	Inhalation	blood | nervous system | eyes | kidney and/or bladder	Not classified	Rat	NOAEL 1,232 mg/l	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

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 Nbr	Organism	Type	Exposure	Test endpoint	Test result
Acrylate/methacrylate copolymer	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

Methyl methacrylate	80-62-6	Green algae	Experimental	72 hours	EC50	>110 mg/l
Methyl methacrylate	80-62-6	Rainbow trout	Experimental	96 hours	LC50	>79 mg/l
Methyl methacrylate	80-62-6	Water flea	Experimental	48 hours	EC50	69 mg/l
Methyl methacrylate	80-62-6	Green algae	Experimental	72 hours	NOEC	110 mg/l
Methyl methacrylate	80-62-6	Water flea	Experimental	21 days	NOEC	37 mg/l
Methyl methacrylate	80-62-6	Activated sludge	Experimental	30 minutes	EC20	150 mg/l
Methyl methacrylate	80-62-6	Soil microbes	Experimental	28 days	NOEC	>1 000 mg/kg (Dry Weight)
acetyl-2-thiourea	591-08-2	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
2-Phenoxyethyl methacrylate	10595-06-9	Activated sludge	Analogous Compound	3 hours	EC50	177 mg/l
2-Phenoxyethyl methacrylate	10595-06-9	Golden Orfe	Analogous Compound	96 hours	LC50	10 mg/l
2-Phenoxyethyl methacrylate	10595-06-9	Green algae	Analogous Compound	96 hours	ErC50	4,4 mg/l
2-Phenoxyethyl methacrylate	10595-06-9	Water flea	Analogous Compound	48 hours	EC50	1,21 mg/l
2-Phenoxyethyl methacrylate	10595-06-9	Green algae	Analogous Compound	96 hours	ErC10	0,74 mg/l
Methacrylic acid	79-41-4	Bacteria	Experimental	17 hours	EC50	270 mg/l
Methacrylic acid	79-41-4	Green algae	Experimental	72 hours	EC50	45 mg/l
Methacrylic acid	79-41-4	Water flea	Experimental	48 hours	EC50	>130 mg/l
Methacrylic acid	79-41-4	Green algae	Experimental	72 hours	NOEC	8,2 mg/l
Methacrylic acid	79-41-4	Water flea	Experimental	21 days	NOEC	53 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Acrylate/methacrylate copolymer	Trade Secret	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Methyl methacrylate	80-62-6	Experimental Biodegradation	14 days	BOD	94 %BOD/ThOD	OECD 301C - MITI test (I)
acetyl-2-thiourea	591-08-2	Modeled Biodegradation	28 days	BOD	41 %BOD/ThOD	Catalogic™
2-Phenoxyethyl methacrylate	10595-06-9	Analogous Compound Biodegradation	28 days	BOD	22.3 %BOD/ThOD	OECD 301D - Closed bottle test
2-Phenoxyethyl methacrylate	10595-06-9	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	1 years (t 1/2)	OECD 111 Hydrolysis func of pH
Methacrylic acid	79-41-4	Experimental Biodegradation	28 days	BOD	86 %BOD/ThOD	OECD 301D - Closed bottle test

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Acrylate/methacrylate copolymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Methyl methacrylate	80-62-6	Experimental Bioconcentration		Log Kow	1.38	OECD 107 log Kow shke flsk mtd
acetyl-2-thiourea	591-08-2	Modeled Bioconcentration		Bioaccumulation factor	3	Catalogic™
acetyl-2-thiourea	591-08-2	Modeled		Log Kow	-0.69	Episuite™

		Bioconcentration				
2-Phenoxyethyl methacrylate	10595-06-9	Modeled Bioconcentration		Bioaccumulation factor	5.8	Catalogic™
2-Phenoxyethyl methacrylate	10595-06-9	Experimental Bioconcentration		Log Kow	3.137	OECD 117 log Kow HPLC method
Methacrylic acid	79-41-4	Experimental Bioconcentration		Log Kow	0.93	

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
Product must only be disposed of by an authorized/permitted waste disposal contractor or incinerated in an industrial or commercial facility in the presence of a combustible material.

SECTION 14: Transport Information

Compliance is required to South African Transport Information Road Traffic Act & Regulations and Railroad regulations, IATA Standards for airfreight and Maritime standards for ocean freight.

SECTION 15: Regulatory information

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

Global inventory status
Contact 3M for more information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information.

SECTION 16: Other information

Revision information:
US Section 01 Product Use - Recommended Use information was modified.
Label: GHS Classification information was modified.
Label: GHS Precautionary - Disposal information was deleted.
Label: GHS Precautionary - Prevention information was modified.
Label: GHS Precautionary - Response information was modified.
Label: GHS Target Organ Hazard Statement information was modified.
Label: Signal Word information was modified.
Label: Symbol information was modified.
Section 2: Ingredient table information was modified.
Section 04: First Aid - Symptoms and Effects (GHS) information was added.
Section 04: Information on toxicological effects information was deleted.
Section 6: Accidental release clean-up information information was modified.
Section 8: Occupational exposure limit table information was modified.
Section 09: Color information was added.
Section 9: Flash point information information was modified.
Section 09: Odor information was added.
Sections 3 and 9: Odour, colour, grade information information was deleted.
Section 09: Percent Volatile information was added.
Section 9: Property description for optional properties information was added.

Section 9: Property description for optional properties information was deleted.
Section 09: Vapor Density Value information was added.
Section 9: Vapour density value information was deleted.
Section 9: Viscosity information information was deleted.
Section 09: Viscosity information was added.
Section 09: VOC Less H2O & Exempt Solvents information was added.
Section 09: Volatile Organic Compounds information was added.
Section 11: Acute Toxicity table information was modified.
Section 11: Germ Cell Mutagenicity Table information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Skin Corrosion/Irritation Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Target Organs - Repeated Table information was modified.
Section 11: Target Organs - Single Table information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Sectio 16: UK disclaimer information was deleted.

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 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.

3M South Africa SDSs are available at www.3m.co.za

Safety Data Sheet

Document group:	25-3509-4	**Version number:**	1.02
Issue Date:	29/11/2018	**Supersedes date:**	19/01/2017

This Safety Data Sheet has been prepared in accordance with the South African National Standard SANS 10234:2008.

SECTION 1: Identification

1.1. Product identifier
3M Scotch-Weld DP-804, Clear, Part A

1.2. Recommended use and restrictions on use

Recommended use
Structural adhesive.

1.3. Supplier's details

Address:	3M South Africa (Pty) Ltd, Private Bag X926, Rivonia 2128
Telephone:	011 806 2000
E Mail:	Not available.
Website:	www.3m.co.za

1.4. Emergency telephone number
011 806 2000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
Flammable liquid: Category 3.
Acute Toxicity (inhalation): Category 3.
Acute Toxicity (dermal): Category 5.
Serious Eye Damage/Irritation: Category 1.
Skin Corrosion/Irritation: Category 2.
Skin Sensitizer: Category 1.
Carcinogenicity: Category 2.
Specific Target Organ Toxicity (single exposure): Category 3.
Specific Target Organ Toxicity (repeated exposure): Category 1.
Acute Aquatic Toxicity: Category 3.
Chronic Aquatic Toxicity: Category 3.

2.2. Label elements

Signal word
DANGER!

Symbols
Flame |Corrosion | Skull and crossbones | Health Hazard |

Pictograms

HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H331	Toxic if inhaled.
H313	May be harmful in contact with skin.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure: nervous system respiratory system sensory organs
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P210A	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280E	Wear protective gloves.

Response:

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P311	Call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P370 + P378G	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal:

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

2.3. Other hazards
None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Methyl methacrylate	80-62-6	30 - 40
Methacrylate copolymer	Trade Secret	30 - 40
2-Phenoxyethyl methacrylate	10595-06-9	5 - 15
α,α-Dimethylbenzyl hydroperoxide	80-15-9	< 5
Cumene	98-82-8	< 1

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
Remove person to fresh air. 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.

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

4.2. Most important symptoms and effects, both acute and delayed
See Section 11.1 Information on toxicological effects

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

SECTION 5: Fire-fighting measures

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

5.2. Special hazards arising from the substance or mixture
Closed containers exposed to heat from fire may build pressure and explode.

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

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. WARNING ! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

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

6.3. Methods and material for containment and cleaning up
Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. 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

7.1. Precautions for safe handling
Vapours may travel long distances along the ground or floor to an ignition source and flash back. Do not use in a confined area with minimal air exchange. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Keep away from reactive metals (eg. Aluminum, zinc etc.) to avoid the formation of hydrogen gas that could create an explosion hazard. Use personal protective equipment (eg. gloves, respirators…) as required.

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. Store away from amines.

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
α,α-Dimethylbenzyl hydroperoxide	80-15-9	AIHA	TWA:6 mg/m3(1 ppm)	SKIN
Methyl methacrylate	80-62-6	ACGIH	TWA:50 ppm;STEL:100 ppm	Dermal Sensitizer
Methyl methacrylate	80-62-6	South Africa RELs	TWA(8 hours):410 mg/m3(100 ppm);STEL(15 minutes):510 mg/m3(125 ppm)	
Cumene	98-82-8	ACGIH	TWA:50 ppm	
Cumene	98-82-8	South Africa RELs	TWA(8 hours):120 mg/m3(25 ppm);STEL(15 minutes):370	SKIN

			mg/m3(75 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
South Africa CLs : South Africa. Control Limits. Regulations for Hazardous Chemical Substances, Table 1
South Africa RELs : South Africa. Recommended Exposure Limits (RELs) Regulations for Hazardous Chemical Substances, Table 2
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
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.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Full face shield.
Indirect vented goggles.

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.
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 vapours

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Appearance/Odour	Ester odour; semi-transparent.
Odour threshold	*No data available.*
pH	*No data available.*
Melting point/Freezing point	*Not applicable.*
Boiling point/Initial boiling point/Boiling range	> 100 ºC
Flash point	> 30 ºC
Evaporation rate	*No data available.*

Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	2,1 % volume
Flammable Limits(UEL)	12,5 % volume
Vapour pressure	*No data available.*
Vapour density	*No data available.*
Density	0,9 - 1,1 g/cm3 [@ 25 ºC]
Relative density	0,9 - 1,1 [@ 25 ºC] [*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	7 500 mPa-s [@ 25 ºC]
Molecular weight	*No data available.*
Volatile organic compounds (VOC)	*No data available.*
VOC less H2O & exempt solvents	*No data available.*

SECTION 10: Stability and reactivity

10.1 Reactivity
This material is considered to be non reactive under normal use conditions

10.2 Chemical stability
Stable.

10.3 Possibility of hazardous reactions
Hazardous polymerisation may occur. At elevated temperatures.

10.4 Conditions to avoid
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.
High shear and high temperature conditions
Sparks and/or flames.
Light.
Temperatures above the boiling point.

10.5 Incompatible materials
Strong acids.
Amines.
Metal powder
Reducing agents.
Strong oxidising agents.
Strong bases.
Combustibles.
Drugs, medicines and/or food supplies.

10.6 Hazardous decomposition products

Substance	Condition
Carbon monoxide.	Not specified.
Carbon dioxide.	Not specified.

SECTION 11: Toxicological information

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

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

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

Skin contact
May be harmful in contact with skin. 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
Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

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

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:
Olfactory effects: Signs/symptoms may include decreased ability to detect odours and complete loss of smell. 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.

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 ATE2 000 - 5 000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE2 - 10 mg/l
Overall product	Ingestion		No data available; calculated ATE >5 000 mg/kg
Methyl methacrylate	Dermal	Rabbit	LD50 > 5 000 mg/kg
Methyl methacrylate	Inhalation-Vapor (4 hours)	Rat	LC50 29 mg/l
Methyl methacrylate	Ingestion	Rat	LD50 7 900 mg/kg

2-Phenoxyethyl methacrylate	Dermal		LD50 estimated to be 2 000 - 5 000 mg/kg
2-Phenoxyethyl methacrylate	Ingestion		LD50 estimated to be 2 000 - 5 000 mg/kg
α,α-Dimethylbenzyl hydroperoxide	Dermal	Rat	LD50 500 mg/kg
α,α-Dimethylbenzyl hydroperoxide	Inhalation-Vapor (4 hours)	Rat	LC50 1,4 mg/l
α,α-Dimethylbenzyl hydroperoxide	Ingestion	Rat	LD50 382 mg/kg
Cumene	Dermal	Rabbit	LD50 > 3 160 mg/kg
Cumene	Inhalation-Vapor (4 hours)	Rat	LC50 39,4 mg/l
Cumene	Ingestion	Rat	LD50 1 400 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Methyl methacrylate	Human and animal	Mild irritant
2-Phenoxyethyl methacrylate	similar compounds	Irritant
α,α-Dimethylbenzyl hydroperoxide	Rabbit	Corrosive
Cumene	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
Methyl methacrylate	Rabbit	Moderate irritant
2-Phenoxyethyl methacrylate	similar compounds	Severe irritant
α,α-Dimethylbenzyl hydroperoxide	Rabbit	Corrosive
Cumene	Rabbit	Mild irritant

Skin Sensitisation

Name	Species	Value
Methyl methacrylate	Human and animal	Sensitising
Cumene	Guinea pig	Not classified

Respiratory Sensitisation

Name	Species	Value
Methyl methacrylate	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Methyl methacrylate	In vivo	Not mutagenic
Methyl methacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
2-Phenoxyethyl methacrylate	In Vitro	Not mutagenic
α,α-Dimethylbenzyl hydroperoxide	In vivo	Not mutagenic
α,α-Dimethylbenzyl hydroperoxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Cumene	In Vitro	Not mutagenic
Cumene	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Methyl methacrylate	Ingestion	Rat	Not carcinogenic
Methyl methacrylate	Inhalation	Human and animal	Not carcinogenic
Cumene	Inhalation	Multiple animal species	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Methyl methacrylate	Inhalation	Not classified for male reproduction	Mouse	NOAEL 36,9 mg/l	
Methyl methacrylate	Inhalation	Not classified for development	Rat	NOAEL 8,3 mg/l	during organogenesis
Cumene	Inhalation	Not classified for development	Rabbit	NOAEL 11,3 mg/l	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Methyl methacrylate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure
α,α-Dimethylbenzyl hydroperoxide	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	occupational exposure
α,α-Dimethylbenzyl hydroperoxide	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure
α,α-Dimethylbenzyl hydroperoxide	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Cumene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
Cumene	Inhalation	respiratory irritation	May cause respiratory irritation	Human	LOAEL 0,2 mg/l	occupational exposure
Cumene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Methyl methacrylate	Dermal	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
Methyl methacrylate	Inhalation	olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Methyl methacrylate	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	14 weeks
Methyl methacrylate	Inhalation	liver	Not classified	Mouse	NOAEL 12,3 mg/l	14 weeks
Methyl methacrylate	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
α,α-Dimethylbenzyl hydroperoxide	Inhalation	nervous system | respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0,2 mg/l	7 days
α,α-Dimethylbenzyl hydroperoxide	Inhalation	heart | liver | kidney and/or bladder	Not classified	Rat	NOAEL 0,03 mg/l	90 days

Cumene	Inhalation	auditory system | endocrine system | hematopoietic system | liver | nervous system | eyes	Not classified	Rat	NOAEL 59 mg/l	13 weeks
Cumene	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4,9 mg/l	13 weeks
Cumene	Inhalation	respiratory system	Not classified	Rat	NOAEL 59 mg/l	13 weeks
Cumene	Ingestion	kidney and/or bladder | heart | endocrine system | hematopoietic system | liver | respiratory system	Not classified	Rat	NOAEL 769 mg/kg/day	6 months

Aspiration Hazard

Name	Value
Cumene	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

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 Nbr	Organism	Type	Exposure	Test endpoint	Test result
Methacrylate copolymer	Trade Secret		Data not available or insufficient for classification			
Methyl methacrylate	80-62-6	Green Algae	Experimental	72 hours	EC50	>110 mg/l
Methyl methacrylate	80-62-6	Rainbow trout	Experimental	96 hours	LC50	>79 mg/l
Methyl methacrylate	80-62-6	Water flea	Experimental	48 hours	EC50	69 mg/l
Methyl methacrylate	80-62-6	Green algae	Experimental	72 hours	NOEC	110 mg/l
Methyl methacrylate	80-62-6	Water flea	Experimental	21 days	NOEC	37 mg/l
2-Phenoxyethyl	10595-06-9	Golden Orfe	Experimental	96 hours	LC50	10 mg/l

methacrylate						
2-Phenoxyethyl methacrylate	10595-06-9	Green algae	Experimental	96 hours	EC50	4,1 mg/l
2-Phenoxyethyl methacrylate	10595-06-9	Water flea	Experimental	48 hours	EC50	1,21 mg/l
2-Phenoxyethyl methacrylate	10595-06-9	Green algae	Experimental	96 hours	Effect Concentration 10%	0,42 mg/l
α,α-Dimethylbenzyl hydroperoxide	80-15-9	Green algae	Experimental	72 hours	EC50	3,1 mg/l
α,α-Dimethylbenzyl hydroperoxide	80-15-9	Rainbow trout	Experimental	96 hours	LC50	3,9 mg/l
α,α-Dimethylbenzyl hydroperoxide	80-15-9	Water flea	Experimental	48 hours	EC50	18,84 mg/l
α,α-Dimethylbenzyl hydroperoxide	80-15-9	Green algae	Experimental	72 hours	NOEC	1 mg/l
Cumene	98-82-8	Green algae	Experimental	72 hours	EC50	2,6 mg/l
Cumene	98-82-8	Mysid Shrimp	Experimental	96 hours	EC50	1,3 mg/l
Cumene	98-82-8	Rainbow trout	Experimental	96 hours	LC50	4,8 mg/l
Cumene	98-82-8	Green algae	Experimental	72 hours	NOEC	0,22 mg/l
Cumene	98-82-8	Water flea	Experimental	21 days	NOEC	0,35 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Methacrylate copolymer	Trade Secret	Data not availbl-insufficient			N/A	
Methyl methacrylate	80-62-6	Experimental Biodegradation	14 days	BOD	94 % BOD/ThBOD	OECD 301C - MITI test (I)
2-Phenoxyethyl methacrylate	10595-06-9	Experimental Biodegradation	28 days	BOD	22.3 % BOD/ThBOD	OECD 301D - Closed bottle test
α,α-Dimethylbenzyl hydroperoxide	80-15-9	Experimental Biodegradation	28 days	BOD	0 % BOD/ThBOD	OECD 301C - MITI test (I)
Cumene	98-82-8	Experimental Photolysis		Photolytic half-life (in air)	4.5 days (t 1/2)	Other methods
Cumene	98-82-8	Experimental Biodegradation	14 days	BOD	33 % weight	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Methacrylate copolymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Methyl methacrylate	80-62-6	Experimental Bioconcentration		Log Kow	1.38	Other methods

2-Phenoxyethyl methacrylate	10595-06-9	Estimated Bioconcentration		Bioaccumulation factor	5.8	Estimated: Bioconcentration factor
α,α-Dimethylbenzyl hydroperoxide	80-15-9	Experimental Bioconcentration		Log Kow	1.82	Other methods
Cumene	98-82-8	Estimated Bioconcentration		Bioaccumulation factor	140	Other methods

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
Product must only be disposed of by an authorized/permitted waste disposal contractor or incinerated in an industrial or commercial facility in the presence of a combustible material.

SECTION 14: Transport Information

Compliance is required to South African Transport Information Road Traffic Act & Regulations and Railroad regulations, IATA Standards for airfreight and Maritime standards for ocean freight.

SECTION 15: Regulatory information

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

Global inventory status
Contact 3M for more information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information.

SECTION 16: Other information

Revision information:
US Section 01 Product Use - Recommended Use information was added.
Label: GHS Precautionary - Prevention information was modified.
Section 5: Fire - Advice for fire fighters information information was modified.
Section 6: Accidental release clean-up information information was modified.
Section 7: Conditions safe storage information was modified.
Section 9: Density information information was modified.
Section 9: Flammable limits (LEL) information information was modified.
Section 9: Flammable limits (UEL) information information was modified.
Section 9: Relative density information information was modified.
Section 11: Acute Toxicity table information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Respiratory Sensitization Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Target Organs - Repeated Table information was modified.
Section 11: Target Organs - Single Table information was modified.

Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.

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 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.

3M South Africa SDSs are available at www.3m.co.za