

### **Safety Data Sheet**

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 Document group:
 25-3938-5
 Version number:
 6.01

 Revision date:
 26/08/2019
 Supersedes date:
 02/08/2019

**Transportation version number:** 7.01 (29/08/2019)

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

# IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Scotch-Weld DP-804, Clear

### **Product Identification Numbers**

FS-9100-5007-9 UU-0101-3344-3

7000080196 7100200508

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

### **Identified uses**

Structural adhesive.

#### 1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

 Telephone:
 +44 (0)1344 858 000

 E Mail:
 tox.uk@mmm.com

 Website:
 www.3M.com/uk

### 1.4. Emergency telephone number

+44 (0)1344 858 000

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

### TRANSPORTATION INFORMATION

FS-9100-5007-9

ADR/RID: UN1133, ADHESIVES, LIMITED QUANTITY, 3., III, (E), ADR Classification Code: F1.

IMDG-CODE: UN1133, ADHESIVES, 3., III, IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS:

FE,SD.

### Scotch-Weld DP-804, Clear

ICAO/IATA: UN1133, ADHESIVES, 3., III.

UU-0101-3344-3

ADR/RID: UN1133, ADHESIVES, LIMITED QUANTITY, 3., III, (E), ADR Classification Code: F1.

IMDG-CODE: UN1133, ADHESIVES, 3., III, IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS:

FE,SD.

ICAO/IATA: UN1133, ADHESIVES, 3., III.

### KIT LABEL

## 2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

#### **CLASSIFICATION:**

Flammable Liquid, Category 3 - Flam. Liq. 3; H226

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

Skin Sensitization, Category 1 - Skin Sens. 1; H317

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335

Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

#### SIGNAL WORD

DANGER.

#### **Symbols:**

GHS02 (Flame) |GHS05 (Corrosion) | GHS07 (Exclamation mark) | GHS08 (Health Hazard) |

### **Pictograms**



#### Contains:

Methacrylic acid;  $\alpha,\alpha$ -Dimethylbenzyl hydroperoxide; Methyl methacrylate

### **HAZARD STATEMENTS:**

H226 Flammable liquid and vapour. H318 Causes serious eye damage. H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure:

nervous system | respiratory system |

### Scotch-Weld DP-804, Clear

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.

P260A Do not breathe vapours.

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 CENTRE or doctor/physician.

Disposal:

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

regulations.

### For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:

<=125 ml Hazard statements

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

### <=125 ml Precautionary statements

**Prevention:** 

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 CENTRE or doctor/physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Refer to Safety Data Sheet for component % unknown values (www.3M.com/msds).

### **Revision information:**

Section 1: Product identification numbers information was modified. Section 01: SAP Material Numbers information was modified.



### **Safety Data Sheet**

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 Document group:
 25-3509-4
 Version number:
 5.00

 Revision date:
 02/08/2019
 Supersedes date:
 29/11/2018

**Transportation version number:** 1.00 (07/05/2010)

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

# **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

### 1.1. Product identifier

3M Scotch-Weld DP-804, Clear, Part A

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### **Identified uses**

Structural adhesive.

### 1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

**Telephone:** +44 (0)1344 858 000 **E Mail:** tox.uk@mmm.com **Website:** www.3M.com/uk

### 1.4. Emergency telephone number

+44 (0)1344 858 000

### **SECTION 2: Hazard identification**

## 2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

### **CLASSIFICATION:**

Flammable Liquid, Category 3 - Flam. Liq. 3; H226

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

Skin Sensitization, Category 1 - Skin Sens. 1; H317

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335

Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

### SIGNAL WORD

DANGER.

**Symbols:** 

GHS02 (Flame) |GHS05 (Corrosion) | GHS07 (Exclamation mark) | GHS08 (Health Hazard) |





**Ingredients:** 

Ingredient	CAS Nbr	EC No.	% by Wt
Methyl methacrylate	80-62-6	201-297-1	30 - 40
α,α-Dimethylbenzyl hydroperoxide	80-15-9	201-254-7	< 5

#### **HAZARD STATEMENTS:**

H226 Flammable liquid and vapour.
H318 Causes serious eye damage.
H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure: nervous system |

respiratory system |

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.

P260A Do not breathe vapours.

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 CENTRE or doctor/physician.

Disposal:

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

regulations.

### For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:

<=125 ml Hazard statements

H318 Causes serious eye damage. H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

### <=125 ml Precautionary statements

**Prevention:** 

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 CENTRE or doctor/physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

40% of the mixture consists of components of unknown acute dermal toxicity. 15% of the mixture consists of components of unknown acute inhalation toxicity.

### 2.3. Other hazards

None known.

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

Ingredient	CAS Nbr	EC No.	REACH	% by Wt	Classification
			Registration No.		
Methacrylate copolymer	Trade Secret			30 - 40	Substance not classified as hazardous
Methyl methacrylate	80-62-6	201-297-1		30 - 40	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335 - Nota D
2-Phenoxyethyl methacrylate	10595-06-9	234-201-1		5 - 15	Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2, H319
α,α-Dimethylbenzyl hydroperoxide	80-15-9	201-254-7		< 5	Org. Perox. EF, H242; Acute Tox. 2, H330; Acute Tox. 3, H311; Acute Tox. 4, H302; Skin Corr. 1B, H314; STOT SE 3, H335; STOT RE 1, H372; Aquatic Chronic 2, H411
Cumene	98-82-8	202-704-5		< 1	Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H335; Aquatic Chronic 2, H411 - Nota C

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

### **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. 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. Advice 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. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours 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.

#### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

### **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. Aluminium, 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 acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

#### 7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

### Occupational exposure limits

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

Ingredient	CAS Nbr	Agency	Limit type	<b>Additional comments</b>
Methyl methacrylate	80-62-6	UK HSC	TWA:208 mg/m3(50	
			ppm);STEL:416 mg/m3(100	
			ppm)	
Cumene	98-82-8	UK HSC	TWA:125 mg/m <sup>3</sup> (25	SKIN
			ppm);STEL:250 mg/m <sup>3</sup> (50	
			ppm)	

UK HSC: UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

### **Biological limit values**

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

**Recommended monitoring procedures:**Information on recommended monitoring procedures can be obtained from UK HSC

### 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.

Applicable Norms/Standards

Use eye/face protection conforming to EN 166

### 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:

MaterialThickness (mm)Breakthrough TimePolymer laminateNo data availableNo data available

Applicable Norms/Standards Use gloves tested to EN 374

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.

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136: filter type A

### **SECTION 9: Physical and chemical properties**

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

Appearance

Physical state Liquid.

**Colour** Transparent Colorless

**Odor** Ester

Odour thresholdNo data available.pHNo data available.

Boiling point/boiling range > 100 °C

Melting pointNot applicable.Flammability (solid, gas)Not applicable.Explosive propertiesNot classifiedOxidising propertiesNot classifiedFlash point> 30 °C

Autoignition temperatureNo data available.Flammable Limits(LEL)2.1 % volumeFlammable Limits(UEL)12.5 % volumeVapour pressureNo data available.

**Relative density** 0.9 - 1.1 [@ 25 °C ] [*Ref Std*:WATER=1]

Water solubility Nil

Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Evaporation rateNo data available.Vapour densityNo data available.Decomposition temperatureNo data available.Viscosity7,500 mPa-s [@ 25 °C ]Density0.9 - 1.1 g/cm3 [@ 25 °C ]

9.2. Other information

**EU Volatile Organic Compounds No data available. Molecular weight**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 agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

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

#### Eve 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- Vapour(4		No data available; calculated ATE10 - 20 mg/l

	hr)		
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Methyl methacrylate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Methyl methacrylate	Inhalation-	Rat	LC50 29 mg/l
	Vapour (4 hours)		
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-	Rat	LC50 1.4 mg/l
	Vapour (4		
	hours)		
α,α-Dimethylbenzyl hydroperoxide	Ingestion	Rat	LD50 382 mg/kg
Cumene	Dermal	Rabbit	LD50 > 3,160  mg/kg
Cumene	Inhalation-	Rat	LC50 39.4 mg/l
	Vapour (4		
	hours)		
Cumene	Ingestion	Rat	LD50 1,400 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Methyl methacrylate	Human	Mild irritant
	and	
	animal	
2-Phenoxyethyl methacrylate	similar	Irritant
	compoun	
	ds	
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	Severe irritant
	compoun	
	ds	
α,α-Dimethylbenzyl hydroperoxide	Rabbit	Corrosive
Cumene	Rabbit	Mild irritant

### **Skin Sensitisation**

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

**Respiratory Sensitisation** 

Name	Species	Value
Note that the		27 . 1 . 7 . 1
Methyl methacrylate	Human	Not classified

**Germ Cell Mutagenicity** 

Ger in Cen Wittagemerty		
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	during
-		_		mg/l	organogenesis
Cumene	Inhalation	Not classified for development	Rabbit	NOAEL 11.3	during
		•		mg/l	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	Professio nal judgeme nt	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 agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

### 12.1. Toxicity

No product test data available.

Material	CAS#	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 methacrylate	10595-06-9	Golden Orfe	Experimental	96 hours	LC50	10 mg/l
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 No.	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. Results of the PBT and vPvB assessment

This material does not contain any substances that are assessed to be a PBT or vPvB

### 12.6. Other adverse effects

No information available.

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

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

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

### EU waste code (product as sold)

08 04 09\* Waste adhesives and sealants containing organic solvents or other dangerous substances

20 01 27\* Paint, inks, adhesives and resins containing dangerous substances

### **SECTION 14: Transportation information**

ADR: UN1133; Adhesives; 3; III; (E); F1.

IMDG: UN1133; Adhesives; 3; III; EMS: FE, SD.

IATA: UN1133; Adhesives; 3; III.

### **SECTION 15: Regulatory information**

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

#### Carcinogenicity

<u>Ingredient</u>	CAS Nbr	<u>Classification</u>	<b>Regulation</b>
Cumene	98-82-8	Grp. 2B: Possible human	International Agency
		carc.	for Research on Cancer
Methyl methacrylate	80-62-6	Gr. 3: Not classifiable	International Agency
			for Research on Cancer

#### 15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended.

### **SECTION 16: Other information**

### List of relevant H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H242	Heating may cause a fire.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.

H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H330 Fatal if inhaled. H335 May cause respiratory irritation. H372 Causes damage to organs through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure. H374 H375 H376 H377 H377 H377 H377 H377 H377 H377	H314	Causes severe skin burns and eye damage.
H318 Causes serious eye damage. H319 Causes serious eye irritation. H330 Fatal if inhaled. H335 May cause respiratory irritation. H372 Causes damage to organs through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure. H374 Toxic to aquatic life with long lasting effects.	H315	Causes skin irritation.
H319 Causes serious eye irritation. H330 Fatal if inhaled. H335 May cause respiratory irritation. H372 Causes damage to organs through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure H411 Toxic to aquatic life with long lasting effects.	H317	May cause an allergic skin reaction.
H330 Fatal if inhaled. H335 May cause respiratory irritation. H372 Causes damage to organs through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure H411 Toxic to aquatic life with long lasting effects.	H318	Causes serious eye damage.
<ul> <li>H335 May cause respiratory irritation.</li> <li>H372 Causes damage to organs through prolonged or repeated exposure.</li> <li>H373 May cause damage to organs through prolonged or repeated exposure</li> <li>H411 Toxic to aquatic life with long lasting effects.</li> </ul>	H319	Causes serious eye irritation.
H372 Causes damage to organs through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure H411 Toxic to aquatic life with long lasting effects.	H330	Fatal if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure H411 Toxic to aquatic life with long lasting effects.	H335	May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.	H372	Causes damage to organs through prolonged or repeated exposure.
	H373	May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.	H411	Toxic to aquatic life with long lasting effects.
	H412	Harmful to aquatic life with long lasting effects.

#### **Revision information:**

Label: CLP Classification information was modified.

Label: CLP Percent Unknown information was modified.

Label: CLP Precautionary - Disposal information was added.

Label: CLP Precautionary - Response information was modified.

Section 6: Accidental release personal information information was modified.

Section 7: Conditions safe storage information was modified.

Section 8: Personal Protection - Skin/hand information information was modified.

Section 09: Color information was added.

Section 09: Odor information was added.

Sections 3 and 9: Odour, colour, grade information information was deleted.

Section 11: Acute Toxicity table information was modified.

Section 15: Regulations - Inventories information was deleted.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. 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 United Kingdom MSDSs are available at www.3M.com/uk



### **Safety Data Sheet**

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 Document group:
 25-3504-5
 Version number:
 5.00

 Revision date:
 29/11/2018
 Supersedes date:
 19/01/2017

**Transportation version number:** 1.00 (07/05/2010)

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

# **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

### 1.1. Product identifier

Scotch-Weld DP-804, Clear, Part B

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### **Identified uses**

Two-part structural adhesive.

### 1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

**Telephone:** +44 (0)1344 858 000 **E Mail:** tox.uk@mmm.com **Website:** www.3M.com/uk

### 1.4. Emergency telephone number

+44 (0)1344 858 000

### **SECTION 2: Hazard identification**

## 2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

### **CLASSIFICATION:**

Flammable Liquid, Category 3 - Flam. Liq. 3; H226

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

Skin Sensitization, Category 1 - Skin Sens. 1; H317

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335

Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

### SIGNAL WORD

DANGER.

#### **Symbols:**

GHS02 (Flame) |GHS05 (Corrosion) | GHS07 (Exclamation mark) |

#### **Pictograms**



### **Ingredients:**

Ingredient	CAS Nbr	EC No.	% by Wt
Methyl methacrylate	80-62-6	201-297-1	30 - 40
Methacrylic Acid	79-41-4	201-204-4	< 5

#### **HAZARD STATEMENTS:**

H226	Flammable liquid and vapour.
H318	Causes serious eye damage.
H315	Causes skin irritation.

H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

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.

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 CENTRE or doctor/physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Disposal:

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

regulations.

### For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:

### <=125 ml Hazard statements

H318 Causes serious eye damage. H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

### <=125 ml Precautionary statements

**Prevention:** 

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 CENTRE or doctor/physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

2% of the mixture consists of components of unknown acute oral toxicity.

42% of the mixture consists of components of unknown acute dermal toxicity.

#### 2.3. Other hazards

None known.

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

Ingredient	CAS Nbr	EC No.	REACH	% by Wt	Classification
			Registration No.		
Acrylate/methacrylate copolymer	Trade Secret			30 - 40	Substance not classified as hazardous
Methyl methacrylate	80-62-6	201-297-1		30 - 40	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335 - Nota D
2-Phenoxyethyl methacrylate	10595-06-9	234-201-1		5 - 15	Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2, H319
Methacrylic Acid	79-41-4	201-204-4		< 5	Acute Tox. 3, H311; Acute Tox. 4, H302; Skin Corr. 1A, H314; STOT SE 3, H335 - Nota D
acetyl-2-thiourea	591-08-2	209-699-9		< 2.5	Substance not classified as hazardous

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

### **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.

#### Eve 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. 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. Advice 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 vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours 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.

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

### **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. Aluminium, 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 strong bases. Store away from oxidising agents. Store away from amines.

### 7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

### **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	UK HSC	TWA:72 mg/m <sup>3</sup> (20	
			ppm);STEL:143 mg/m³(40	
			ppm)	
Methyl methacrylate	80-62-6	UK HSC	TWA:208 mg/m3(50	
			ppm);STEL:416 mg/m3(100	
			ppm)	

UK HSC : UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

#### **Biological limit values**

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

### 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.

Applicable Norms/Standards

Use eye/face protection conforming to EN 166

### 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:

MaterialThickness (mm)Breakthrough TimePolymer laminateNo data availableNo data available

Applicable Norms/Standards
Use gloves tested to EN 374

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.

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136: filter types A & P

### **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.
Boiling point/boiling range > 100 °C

Melting pointNot applicable.Flammability (solid, gas)Not applicable.Explosive propertiesNot classifiedOxidising propertiesNot classifiedFlash point> 30 °C

**Autoignition temperature** *No data available.* 

Flammable Limits(LEL) 2.1 % Flammable Limits(UEL) 12.5 %

Vapour pressure No data available.

**Relative density** 0.9 - 1.1 [@ 25 °C ] [*Ref Std*:WATER=1]

Water solubility

Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Evaporation rateNo data available.Vapour densityNo data available.Decomposition temperatureNo data available.

 Viscosity
 <=7,500 mPa-s [@ 25 °C ]</td>

 Density
 0.9 - 1.1 g/cm3 [@ 25 °C ]

9.2. Other information

EU Volatile Organic Compounds

No data available.

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

SubstanceConditionCarbon monoxide.Not specified.Carbon dioxide.Not specified.

### **SECTION 11: Toxicological information**

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

### 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 localised 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 ATE2,000 - 5,000 mg/kg
Overall product	Inhalation- Vapour(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- Vapour (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
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	Human	Mild irritant
	and	
	animal	
2-Phenoxyethyl methacrylate	similar	Irritant
	compoun	

		ds	
--	--	----	--

**Serious Eye Damage/Irritation** 

Name	Species	Value
Methyl methacrylate	Rabbit	Moderate irritant
2-Phenoxyethyl methacrylate	similar	Severe irritant
	compoun	
	ds	

### **Skin Sensitisation**

Name	Species	Value
Methyl methacrylate	Human and	Sensitising
	animal	

**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

Carcinogenicity

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

### 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

### 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

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	Human	NOAEL Not	occupational

			prolonged or repeated exposure		available	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

### **Aspiration Hazard**

For the component/components, either no data is currently available or the data is 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 agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

#### 12.1. Toxicity

No product test data available.

Material	CAS#	Organism	Type	Exposure	Test endpoint	Test result
Acrylate/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 methacrylate	10595-06-9	Golden Orfe	Experimental	96 hours	LC50	10 mg/l
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
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
acetyl-2-thiourea	591-08-2		Data not available or insufficient for classification			

### 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Acrylate/methacrylate	Trade Secret	Data not availbl-			N/A	
copolymer		insufficient				
Methyl methacrylate	80-62-6	Experimental	14 days	BOD	94 %	OECD 301C - MITI test (I)
		Biodegradation	-		BOD/ThBOD	
2-Phenoxyethyl	10595-06-9	Experimental	28 days	BOD	22.3 %	OECD 301D - Closed bottle
methacrylate		Biodegradation			BOD/ThBOD	test
Methacrylic Acid	79-41-4	Experimental	28 days	BOD	86 %	OECD 301D - Closed bottle
		Biodegradation			BOD/ThBOD	test
acetyl-2-thiourea	591-08-2	Estimated	28 days	BOD	41 % weight	OECD 301C - MITI test (I)
		Biodegradation				

### 12.3: Bioaccumulative potential

Material	Cas No.	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	Other methods
2-Phenoxyethyl methacrylate	10595-06-9	Estimated Bioconcentration		Bioaccumulation factor	5.8	Estimated: Bioconcentration factor
Methacrylic Acid	79-41-4	Experimental Bioconcentration		Log Kow	0.93	Other methods
acetyl-2-thiourea	591-08-2	Estimated Bioconcentration		Bioaccumulation factor	3	Estimated: Bioconcentration factor

#### 12.4. Mobility in soil

Please contact manufacturer for more details

### 12.5. Results of the PBT and vPvB assessment

This material does not contain any substances that are assessed to be a PBT or vPvB

### 12.6. Other adverse effects

No information available.

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

### EU waste code (product as sold)

08 04 09\* Waste adhesives and sealants containing organic solvents or other dangerous substances

20 01 27\* Paint, inks, adhesives and resins containing dangerous substances

### **SECTION 14: Transportation information**

ADR: UN1133; Adhesives; 3; III; (E); F1.

IMDG: UN1133; Adhesives; 3; III; EMS: FE, SD.

IATA: UN1133; Adhesives; 3; III.

### **SECTION 15: Regulatory information**

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

### Carcinogenicity

**Ingredient** CAS Nbr Classification Regulation Methyl methacrylate Gr. 3: Not classifiable International Agency for Research on Cancer

### 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.

### 15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended.

### **SECTION 16: Other information**

#### List of relevant H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### **Revision information:**

Section 2: <125ml Hazard - Environmental information was added.

Section 2: <125ml Precautionary - Prevention information was modified.

CLP: Ingredient table information was modified.

Label: CLP Classification information was modified.

Label: CLP Environmental Hazard Statements information was added.

Label: CLP Percent Unknown information was added.

Label: CLP Percent Unknown information was deleted.

Label: CLP Precautionary - Disposal information was added.

Label: CLP Precautionary - Prevention information was modified.

Section 3: Composition/Information of ingredients table information was added.

Section 3: Composition/Information of ingredients table information was deleted.

Section 4: First aid for eye contact information information was modified.

Section 5: Fire - Advice for fire fighters information information was modified.

Section 6: Accidental release environmental information information was modified.

Section 6: Accidental release personal information information was modified.

Section 8: Eye/face protection information information was modified.

Section 8: Personal Protection - Skin/hand information information was modified.

Section 9: Flammable limits (LEL) information information was modified.

Section 9: Flammable limits (UEL) information information was modified.

Section 9: Property description for optional properties information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Health Effects - Eye information information was modified.

Section 11: Health Effects - Inhalation information information was modified.

Section 11: Reproductive and/or Developmental Effects text information was deleted.

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Respiratory Sensitization Table information was modified.

Section 11: Target Organs - Repeated Table information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: No PBT/vPvB information available warning information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

Section 13: 13.1. Waste disposal note information was modified.

Section 13: Standard Phrase Category Waste GHS information was modified.

Section 14: Transportation classification information was modified.

Section 15: Chemical Safety Assessment information was modified.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. 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 United Kingdom MSDSs are available at www.3M.com/uk