



## Safety Data Sheet

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<b>Document group:</b>	22-7859-6	<b>Version number:</b>	9.00
<b>Revision date:</b>	06/09/2016	<b>Supersedes date:</b>	09/04/2015
<b>Transportation version number:</b>	1.00 (14/04/2010)		

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 TL70 Anaerobic Threadlocker

#### 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:

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
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 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

#### 2.2. Label elements

**CLP REGULATION (EC) No 1272/2008**

**SIGNAL WORD**

WARNING.

**Symbols:**

GHS07 (Exclamation mark) | GHS08 (Health Hazard) |GHS09 (Environment) |

**Pictograms**



**Ingredients:**

Ingredient	CAS Nbr	% by Wt
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0	40 - 70
2-Hydroxypropyl methacrylate	923-26-2	1 - 5
Acrylic acid	79-10-7	1 - 5
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	80-15-9	1 - 5
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	1 - 5
2'-Phenylacetohydrazide	114-83-0	0.1 - 1

**HAZARD STATEMENTS:**

H319	Causes serious eye irritation.
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
H411	Toxic to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS**

**Prevention:**

P260A	Do not breathe vapours.
P280E	Wear protective gloves.
P273	Avoid release to the environment.

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

**<=125 ml Hazard statements**

H317	May cause an allergic skin reaction.
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**<=125 ml Precautionary statements**

**3M Scotch-Weld TL70 Anaerobic Threadlocker****Prevention:**

P280E

Wear protective gloves.

**Response:**

P333 + P313

If skin irritation or rash occurs: Get medical advice/attention.

29% of the mixture consists of components of unknown acute oral toxicity.

4% of the mixture consists of components of unknown acute dermal toxicity.

7% of the mixture consists of components of unknown acute inhalation toxicity.

Contains 89% of components with unknown hazards to the aquatic environment.

**2.3. Other hazards**

None known.

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

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0	203-652-6	40 - 70	Skin Sens. 1, H317 (Self Classified)
Polyester resin	Trade Secret		15 - 40	Substance not classified as hazardous
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	248-666-3	1 - 5	Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335 (Vendor)
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	80-15-9	201-254-7	1 - 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 (CLP)
2-Hydroxypropyl methacrylate	923-26-2	213-090-3	1 - 5	Eye Irrit. 2, H319; Skin Sens. 1, H317 - Nota C,D (CLP)
Acrylic acid	79-10-7	201-177-9	1 - 5	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Corr. 1A, H314; STOT SE 3, H335; Aquatic Acute 1, H400,M=1 - Nota D (CLP)
1,2-Benzisothiazol-3(2H)-one 1,1-dioxide	81-07-2	201-321-0	0.5 - 1.5	Substance not classified as hazardous
2'-Phenylacetohydrazide	114-83-0	204-055-3	0.1 - 1	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335 (Vendor) Acute Tox. 3, H311; Acute Tox. 3, H301; Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=10 (Self Classified)
Cumene	98-82-8	202-704-5	0.1 - 1	Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H335; Aquatic Chronic 2, H411 - Nota C (CLP)
N,N-Dimethyl-p-toluidine	99-97-8	202-805-4	0.05 - 0.99	Acute Tox. 3, H331; Acute Tox. 3, H311; Acute Tox. 3, H301;

### 3M Scotch-Weld TL70 Anaerobic Threadlocker

				STOT RE 2, H373; Aquatic Chronic 3, H412 - Nota C (CLP)
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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.

#### Eye contact

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

#### If swallowed

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

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

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 ordinary combustible material such as water or foam to extinguish.

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

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

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Oxides of nitrogen.	During combustion.
Oxides of sulphur.	During combustion.

### 5.3. Advice for fire-fighters

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

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

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation

## 3M Scotch-Weld TL70 Anaerobic Threadlocker

to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

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

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

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

### 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

For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

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

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store away from heat. Store away from oxidising agents.

### 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
Acrylic acid	79-10-7	Manufacturer determined	STEL:5 ppm(15 mg/m <sup>3</sup> )	
Cumene	98-82-8	UK HSC	TWA:125 mg/m <sup>3</sup> (25 ppm);STEL:250 mg/m <sup>3</sup> (50 ppm)	SKIN

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

Curing enclosures must be exhausted to outdoors or to a suitable emission control device. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

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

Indirect vented goggles.

#### 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:

Material	Thickness (mm)	Breakthrough Time
Butyl rubber.	No data available	No data available
Fluoroelastomer	No data available	No data available
Neoprene.	No data available	No data available
Nitrile rubber.	No data available	No data available
Polymer laminate	No data available	No data available

#### Respiratory protection

Wear respiratory protection if ventilation is inadequate to prevent overexposure. 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

Half facepiece or full facepiece supplied-air respirator

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.
Specific Physical Form:	Thixotropic liquid.
Appearance/Odour	Green liquid. Slightly sweet odour.
Odour threshold	<i>No data available.</i>
pH	<i>Not applicable.</i>
Boiling point/boiling range	$\geq 204.4$ °C
Melting point	<i>Not applicable.</i>
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	$\geq 100$ °C [ <i>Test Method: Closed Cup</i> ]
Autoignition temperature	<i>No data available.</i>

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Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Vapour pressure	$\leq 13.3$ Pa [ @ 20 °C ]
Relative density	1.04 [Ref Std: WATER=1]
Water solubility	Slight (less than 10%)
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Evaporation rate	Negligible
Vapour density	1.01 [Ref Std: AIR=1]
Decomposition temperature	No data available.
Viscosity	500 mPa-s [ @ 23 °C ]
Density	1.04 g/ml

### 9.2. Other information

Data is not available for other physical and chemical parameters.

## 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. May occur in large quantities only.

### 10.4 Conditions to avoid

Heat.

Light.

### 10.5 Incompatible materials

Strong oxidising agents.

Avoid temperatures in excess of 150F. Avoid contamination.

### 10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## 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

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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

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

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision. Vapours from heated material may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy 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:

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 ATE >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
2,2'-ethylenedioxydiethyl dimethacrylate	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Rat	LD50 10,837 mg/kg
2-Hydroxypropyl methacrylate	Dermal		LD50 estimated to be > 5,000 mg/kg
2-Hydroxypropyl methacrylate	Ingestion	Rat	LD50 > 2,000 mg/kg
Methacrylic acid, monoester with propane-1,2-diol	Dermal	Rabbit	LD50 > 5,000 mg/kg
Methacrylic acid, monoester with propane-1,2-diol	Ingestion	Rat	LD50 11,200 mg/kg
Acrylic acid	Dermal	Rabbit	LD50 295 mg/kg
Acrylic acid	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3.8 mg/l
Acrylic acid	Ingestion	Rat	LD50 1,250 mg/kg
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	Dermal	Rat	LD50 500 mg/kg
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	Inhalation-Vapour (4	Rat	LC50 1.4 mg/l



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	hours)		
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	Ingestion	Rat	LD50 382 mg/kg
1,2-Benzisothiazol-3(2H)-one 1,1-dioxide	Dermal		LD50 estimated to be > 5,000 mg/kg
1,2-Benzisothiazol-3(2H)-one 1,1-dioxide	Ingestion	Mouse	LD50 17,000 mg/kg
2'-Phenylacetohydrazide	Dermal		LD50 estimated to be 200 - 1,000 mg/kg
2'-Phenylacetohydrazide	Ingestion	Mouse	LD50 270 mg/kg
Cumene	Dermal	Rabbit	LD50 > 3,160 mg/kg
Cumene	Inhalation-Vapour (4 hours)	Rat	LC50 39.4 mg/l
Cumene	Ingestion	Rat	LD50 1,400 mg/kg
N,N-Dimethyl-p-toluidine	Dermal	Rabbit	LD50 > 2,000 mg/kg
N,N-Dimethyl-p-toluidine	Inhalation-Dust/Mist (4 hours)	Rat	LC50 1.4 mg/l
N,N-Dimethyl-p-toluidine	Ingestion	Rat	LD50 1,650 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
2,2'-ethylenedioxydiethyl dimethacrylate	Guinea pig	Mild irritant
Acrylic acid	Rabbit	Corrosive
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	Rabbit	Corrosive
Cumene	Rabbit	Minimal irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
2,2'-ethylenedioxydiethyl dimethacrylate	Professional judgement	Moderate irritant
Acrylic acid	Rabbit	Corrosive
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	Rabbit	Corrosive
Cumene	Rabbit	Mild irritant

**Skin Sensitisation**

Name	Species	Value
2,2'-ethylenedioxydiethyl dimethacrylate	Human and animal	Sensitising
Acrylic acid	Guinea pig	Some positive data exist, but the data are not sufficient for classification
Cumene	Guinea pig	Not sensitising

**Respiratory Sensitisation**

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

**Germ Cell Mutagenicity**

Name	Route	Value
2,2'-ethylenedioxydiethyl dimethacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Acrylic acid	In vivo	Not mutagenic
Acrylic acid	In Vitro	Some positive data exist, but the data are not sufficient for classification
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	In vivo	Not mutagenic
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	In Vitro	Some positive data exist, but the data are not

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		sufficient for classification
Cumene	In Vitro	Not mutagenic
Cumene	In vivo	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
2,2'-ethylenedioxydiethyl dimethacrylate	Dermal	Mouse	Not carcinogenic
Acrylic acid	Ingestion	Rat	Not carcinogenic
Acrylic acid	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Cumene	Inhalation	Multiple animal species	Carcinogenic.
N,N-Dimethyl-p-toluidine	Ingestion	Multiple animal species	Carcinogenic.

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Not toxic to development	Mouse	NOAEL 1 mg/kg/day	1 generation
Acrylic acid	Ingestion	Not toxic to female reproduction	Rat	NOAEL 460 mg/kg/day	2 generation
Acrylic acid	Ingestion	Not toxic to male reproduction	Rat	NOAEL 460 mg/kg/day	2 generation
Acrylic acid	Inhalation	Not toxic to development	Rat	NOAEL 1.1 mg/l	during organogenesis
Acrylic acid	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 53 mg/kg/day	2 generation
Cumene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	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
Acrylic acid	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	occupational exposure
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgment	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

**3M Scotch-Weld TL70 Anaerobic Threadlocker****Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
2,2'-ethylenedioxydiethyl dimethacrylate	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 833 mg/kg/day	78 weeks
2,2'-ethylenedioxydiethyl dimethacrylate	Dermal	blood	All data are negative	Mouse	NOAEL 833 mg/kg/day	78 weeks
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	Inhalation	nervous system   respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.2 mg/l	7 days
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	Inhalation	heart   liver   kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.03 mg/l	90 days
Cumene	Inhalation	auditory system   endocrine system   hematopoietic system   liver   nervous system   eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 59 mg/l	13 weeks
Cumene	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 4.9 mg/l	13 weeks
Cumene	Inhalation	respiratory system	All data are negative	Rat	NOAEL 59 mg/l	13 weeks
Cumene	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 769 mg/kg/day	6 months
Cumene	Ingestion	heart   endocrine system   hematopoietic system   liver   respiratory system	All data are negative	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 Nbr	Organism	Type	Exposure	Test endpoint	Test result
2'-Phenylacetoxy drazide	114-83-0	Water flea	Analogous Compound	48 hours	EC50	<1.2 mg/l
2'-Phenylacetoxy drazide	114-83-0	Zebra Fish	Analogous Compound	96 hours	LC50	0.16 mg/l
2-Hydroxypropyl	923-26-2	Water flea	Analogous Compound	48 hours	EC50	380 mg/l

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methacrylate						
2-Hydroxypropyl methacrylate	923-26-2	Green Algae	Analogous Compound	72 hours	EC50	345 mg/l
2-Hydroxypropyl methacrylate	923-26-2	Ricefish	Analogous Compound	96 hours	LC50	>100 mg/l
Acrylic acid	79-10-7	Rainbow trout	Experimental	96 hours	LC50	27 mg/l
Acrylic acid	79-10-7	Water flea	Experimental	48 hours	EC50	47 mg/l
Acrylic acid	79-10-7	Green algae	Experimental	72 hours	EC50	0.13 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	EC50	2.6 mg/l
Cumene	98-82-8	Mysid Shrimp	Experimental	48 hours	EC50	1.6 mg/l
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	80-15-9	Water flea	Experimental	24 hours	EC50	7 mg/l
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	80-15-9	Rainbow trout	Experimental	96 hours	LC50	3.9 mg/l
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	Ricefish	Analogous Compound	96 hours	LC50	>100 mg/l
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	Water flea	Analogous Compound	48 hours	EC50	380 mg/l
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	Green Algae	Analogous Compound	72 hours	EC50	345 mg/l
N,N-Dimethyl-p-toluidine	99-97-8	Fathead minnow	Experimental	96 hours	LC50	46 mg/l
1,2-Benzisothiazol-3(2H)-one 1,1-dioxide	81-07-2	Fathead minnow	Experimental	96 hours	LC50	18,300 mg/l
2'-Phenylacetohydrazide	114-83-0	Zebra Fish	Analogous Compound	16 days	NOEC	0.00049 mg/l
2-Hydroxypropyl methacrylate	923-26-2	Water flea	Analogous Compound	21 days	NOEC	24.1 mg/l
2-Hydroxypropyl methacrylate	923-26-2	Green Algae	Analogous Compound	72 hours	NOEC	160 mg/l
Acrylic acid	79-10-7	Water flea	Experimental	21 days	NOEC	3.8 mg/l
Acrylic acid	79-10-7	Green algae	Experimental	72 hours	NOEC	0.025 mg/l
Cumene	98-82-8	Water flea	Experimental	21 days	NOEC	0.35 mg/l
Cumene	98-82-8	Green algae	Experimental	72 hours	NOEC	0.22 mg/l
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	Water flea	Analogous Compound	21 days	NOEC	24.1 mg/l

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Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	Green Algae	Analogous Compound	72 hours	NOEC	160 mg/l
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0		Data not available or insufficient for classification			

**12.2. Persistence and degradability**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0	Calculated Photolysis		Photolytic half-life (in air)	5.67 hours (t 1/2)	Other methods
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	80-15-9	Estimated Photolysis		Photolytic half-life (in air)	3.36 days (t 1/2)	Other methods
Acrylic acid	79-10-7	Estimated Photolysis		Photolytic half-life (in air)	3.2 days (t 1/2)	Other methods
Cumene	98-82-8	Experimental Photolysis		Photolytic half-life (in air)	4.5 days (t 1/2)	Other methods
2-Hydroxypropyl methacrylate	923-26-2	Modeled Photolysis		Photolytic half-life (in air)	13.8 hours (t 1/2)	Other methods
2'-Phenylacetohydrazide	114-83-0	Modeled Photolysis		Photolytic half-life (in air)	8 hours (t 1/2)	Other methods
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	Modeled Photolysis		Photolytic half-life (in air)	14.7 hours (t 1/2)	Other methods
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	Experimental Hydrolysis		Hydrolytic half-life	73.3 days (t 1/2)	Other methods
2-Hydroxypropyl methacrylate	923-26-2	Experimental Hydrolysis		Hydrolytic half-life	73.3 days (t 1/2)	Other methods
Cumene	98-82-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	Experimental Biodegradation	28 days	BOD	81 % weight	OECD 301C - MITI test (I)
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	80-15-9	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)
2-Hydroxypropyl methacrylate	923-26-2	Experimental Biodegradation	28 days	BOD	81 % weight	OECD 301C - MITI test (I)
1,2-	81-07-2	Modeled	28 days	BOD	3.15 % weight	OECD 301C - MITI

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Benzisothiazol-3(2H)-one 1,1-dioxide		Biodegradation				test (I)
Acrylic acid	79-10-7	Experimental Biodegradation	28 days	BOD	81 % weight	OECD 301D - Closed bottle test
2'-Phenylacetohydrazide	114-83-0	Analogous Compound Biodegradation	28 days	Dissolv. Organic Carbon Deplet	97 % weight	OECD 301E - Modified OECD Scre
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0	Analogous Compound Biodegradation	28 days	BOD	60 % weight	Other methods
N,N-Dimethyl-p-toluidine	99-97-8	Analogous Compound Biodegradation	14 days	BOD	1.9 % weight	OECD 301C - MITI test (I)

**12.3 : Bioaccumulative potential**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Cumene	98-82-8	Estimated BCF - Other		Bioaccumulation factor	142	Other methods
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	80-15-9	Estimated Bioconcentration		Bioaccumulation factor	37.49	Other methods
2'-Phenylacetohydrazide	114-83-0	Modeled BCF - Other		Bioaccumulation factor	5	Other methods
2-Hydroxypropyl methacrylate	923-26-2	Experimental Bioconcentration		Log Kow	0.97	Other methods
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	Experimental Bioconcentration		Log Kow	0.97	Other methods
$\alpha,\alpha$ -Dimethylbenzyl hydroperoxide	80-15-9	Experimental Bioconcentration		Log Kow	1.82	Other methods
1,2-Benzisothiazol-3(2H)-one 1,1-dioxide	81-07-2	Experimental Bioconcentration		Log Kow	0.91	Other methods
Acrylic acid	79-10-7	Experimental Bioconcentration		Log Kow	0.35	Other methods
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0	Laboratory Bioaccumulation		Log Kow	1.88	Other methods
N,N-Dimethyl-p-toluidine	99-97-8	Experimental Bioconcentration		Log Kow	2.81	Other methods

**12.4. Mobility in soil**

Please contact manufacturer for more details

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

No information available at this time, contact manufacturer for more details

### 12.6. Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

Dispose of completely cured (or polymerised) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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/IMDG/IATA: Not hazardous for transport

## SECTION 15: Regulatory information

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

#### Carcinogenicity

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
Acrylic acid	79-10-7	Gr. 3: Not classifiable	International Agency for Research on Cancer
Cumene	98-82-8	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
N,N-Dimethyl-p-toluidine	99-97-8	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
1,2-Benzisothiazol-3(2H)-one 1,1-dioxide	81-07-2	Gr. 3: Not classifiable	International Agency for Research on Cancer

#### Global inventory status

Contact 3M for more information.

### 15.2. Chemical Safety Assessment

Not applicable

## SECTION 16: Other information

**List of relevant H statements**

H226	Flammable liquid and vapour.
H242	Heating may cause a fire.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful 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.
H400	Very toxic to aquatic life.
H410	Very toxic 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:**

Section 1: Product identification numbers information was deleted.  
CLP: Ingredient table information was modified.  
Section 2: Indication of danger information information was deleted.  
Label: CLP Target Organ Hazard Statement information was modified.  
Label: Graphic Text information was deleted.  
Label: Graphic information was deleted.  
Section 2: Label ingredient information information was deleted.  
Section 2: R phrase reference information was deleted.  
Risk phrase information was deleted.  
Safety phrase information was deleted.  
Section 3: Composition/ Information of ingredients table information was modified.  
Section 3: Reference to H statement explanation in Section 016 information was added.  
Section 3: Reference to R and H statement explanation in Section 16 information was deleted.  
Section 3: Reference to section 15 for Nota info information was deleted.  
Section 6: Accidental release personal information information was modified.  
Section 8: Eye/face protection information information was modified.  
Section 8: Occupational exposure limit table information was modified.  
Section 8: Personal Protection - Skin/hand information information was modified.  
Section 9: No Data Available Statement information was added.  
Section 9: Property description for optional properties information was deleted.  
Section 9: Viscosity information information was modified.  
Section 11: Acute Toxicity table information was modified.  
Section 11: Carcinogenicity Table information was modified.  
Section 11: Germ Cell Mutagenicity Table information was modified.  
Section 11: Health Effects - Skin information 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.



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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: Biocumulative potential information information was modified.

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

Section 14: Transportation classification information was added.

Section 15: Carcinogenicity information information was modified.

Section 16: List of relevant R phrase information information was deleted.

Section 16: List of relevant R-phrases 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](http://www.3M.com/uk)**