



## Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

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

#### 1.1. Product identifier

3M™ Screen Printing UV Ink 9827 Red

#### Product Identification Numbers

75-3470-6901-7

7000056108

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

##### Identified uses

Ink

#### 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

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.

#### CLASSIFICATION:

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
 Skin Sensitization, Category 1A - Skin Sens. 1A; H317  
 Reproductive Toxicity, Category 1B - Repr. 1B; H360FD  
 Specific Target Organ Toxicity-Repeated Exposure, Category 1 - STOT RE 1; H372  
 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

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

### SIGNAL WORD

DANGER.

### Symbols

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

### Pictograms



Ingredient	CAS Nbr	EC No.	% by Wt
2-Phenoxyethyl acrylate	48145-04-6	256-360-6	30 - 40
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	404-360-3	< 2.5
3,6-Bis(4-chlorophenyl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione	84632-65-5	401-540-3	10 - 20
1-Vinylhexahydro-2H-azepin-2-one	2235-00-9	218-787-6	10 - 20
Methacrylate polymer	Trade Secret		10 - 20
Aliphatic urethane acrylate	Trade Secret		7 - 13
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	500-114-5	< 0.5
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	4006006	1 - 5
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	230-811-7	1 - 5
ethylbenzene	100-41-4	202-849-4	< 0.5
octamethylcyclotetrasiloxane	556-67-2	209-136-7	< 0.5
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5		1 - 5
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5	500-066-5	< 1

### HAZARD STATEMENTS:

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H360FD	May damage fertility. May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure: respiratory system.
H411	Toxic to aquatic life with long lasting effects.

### PRECAUTIONARY STATEMENTS

#### Prevention:

P201 Obtain special instructions before use.  
P280F Wear respiratory protection.

**Response:**

P308 + P313 IF exposed or concerned: Get medical advice/attention.

**SUPPLEMENTAL INFORMATION:****Supplemental Precautionary Statements:**

Restricted to professional users.

10% of the mixture consists of components of unknown acute oral toxicity.

Contains 10% of components with unknown hazards to the aquatic environment.

**2.3. Other hazards**

Persons previously sensitised to isocyanates may develop a cross-sensitisation reaction to other isocyanates. Contains a substance that meets the criteria for PBT according to Regulation (EC) No 1907/2006, Annex XIII, as amended by UK REACH Regulations SI 2019/758. Contains a substance that meets the criteria for vPvB according to Regulation (EC) No 1907/2006, Annex XIII, as amended by UK REACH Regulations SI 2019/758.

**SECTION 3: Composition/information on ingredients****3.1. Substances**

Not applicable

**3.2. Mixtures**

<b>Ingredient</b>	<b>Identifier(s)</b>	<b>%</b>	<b>Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB</b>
2-Phenoxyethyl acrylate	(CAS-No.) 48145-04-6 (EC-No.) 256-360-6	30 - 40	Skin Sens. 1A, H317 Repr. 2, H361df Aquatic Chronic 2, H411
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	(CAS-No.) 119313-12-1 (EC-No.) 404-360-3	< 2.5	Repr. 1B, H360D Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
Methacrylate polymer	Trade Secret	10 - 20	Substance not classified as hazardous
3,6-Bis(4-chlorophenyl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione	(CAS-No.) 84632-65-5 (EC-No.) ELINCS 401-540-3	10 - 20	Substance not classified as hazardous
1-Vinylhexahydro-2H-azepin-2-one	(CAS-No.) 2235-00-9 (EC-No.) 218-787-6	10 - 20	Acute Tox. 4, H312 Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT RE 1, H372
Aliphatic urethane acrylate	Trade Secret	7 - 13	Substance not classified as hazardous
2-(2-Ethoxyethoxy)ethyl acrylate	(CAS-No.) 7328-17-8 (EC-No.) 230-811-7	1 - 5	Acute Tox. 4, H312 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317

octamethylcyclotetrasiloxane	(CAS-No.) 556-67-2 (EC-No.) 209-136-7	< 0.5	Repr. 2, H361f Aquatic Chronic 1, H410, M=10 Flam. Liq. 3, H226
Synthetic amorphous silica, fumed, crystalline-free	(CAS-No.) 112945-52-5	1 - 5	Substance with a national occupational exposure limit
Glycerol, propoxylated, esters with acrylic acid	(CAS-No.) 52408-84-1 (EC-No.) 500-114-5	< 0.5	Eye Irrit. 2, H319 Skin Sens. 1A, H317 Aquatic Chronic 3, H412
ethylbenzene	(CAS-No.) 100-41-4 (EC-No.) 202-849-4	< 0.5	Flam. Liq. 2, H225 Acute Tox. 4, H332 Asp. Tox. 1, H304 STOT RE 2, H373 Aquatic Chronic 3, H412
2-methyl-1-(4-methylthiophenyl)-2- morpholinopropan-1-one	(CAS-No.) 71868-10-5 (EC-No.) ELINCS 4006006	1 - 5	Acute Tox. 4, H302 Repr. 1B, H360FD Aquatic Chronic 2, H411
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	(CAS-No.) 28961-43-5 (EC-No.) 500-066-5	< 1	Eye Irrit. 2, H319 Skin Sens. 1B, H317

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

### 4.3. Indication of any immediate medical attention and special treatment required

Not applicable.

## SECTION 5: Fire-fighting measures

### 5.1. 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****Substance**

formaldehyde  
Carbon monoxide  
Carbon dioxide.

**Condition**

During combustion.  
During combustion.  
During combustion.

**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. 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. 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**

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. Keep cool. 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.

<b>Ingredient</b>	<b>CAS Nbr</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional comments</b>
ethylbenzene	100-41-4	UK HSC	TWA:441 mg/m3(100 ppm);STEL:552 mg/m3(125 ppm)	SKIN
Silicon dioxide	112945-52-5	UK HSC	TWA(as respirable dust):2.4 mg/m3;TWA(as inhalable dust):6 mg/m3	
1-Vinylhexahydro-2H-azepin-2-one	2235-00-9	Manufacturer determined	TWA(8 hours):0.1 ppm(0.57 mg/m3)	

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:

Indirect vented goggles.

##### *Applicable Norms/Standards*

Use eye 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:

<b>Material</b>	<b>Thickness (mm)</b>	<b>Breakthrough Time</b>
Polymer laminate	No data available	No 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.
Specific Physical Form:	Liquid.
Colour	Red
Odor	Mild Acrylic, Sweet Acrylic
Odour threshold	<i>No data available.</i>
Melting point/freezing point	<i>Not applicable.</i>
Boiling point/boiling range	> 148.9 °C
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Flash point	> 93.3 °C [ <i>Test Method</i> :Pensky-Martens Closed Cup]
Autoignition temperature	<i>No data available.</i>
Decomposition temperature	<i>No data available.</i>
pH	<i>substance/mixture is non-soluble (in water)</i>
Kinematic Viscosity	<i>No data available.</i>
Water solubility	Negligible
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Vapour pressure	< 160 Pa [ <i>@ 20 °C</i> ]
Density	approximately 1.3 g/ml
Relative density	approximately 1.3 [ <i>Ref Std</i> :WATER=1]
Relative Vapour Density	<i>No data available.</i>

### 9.2. Other information

#### 9.2.2 Other safety characteristics

EU Volatile Organic Compounds	<i>No data available.</i>
Evaporation rate	< 1 [ <i>Ref Std</i> :BUOAC=1]
Percent volatile	1 - 5 % weight

## 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. Upon loss of initiator or with exposure to heat.

#### 10.4 Conditions to avoid

Sparks and/or flames.

Heat.

#### 10.5 Incompatible materials

Strong oxidising agents.

#### 10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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 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 hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

##### Signs and Symptoms of Exposure

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

##### Inhalation

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

##### Skin contact

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

##### Eye contact

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

##### Ingestion

May be harmful if swallowed.

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

##### Additional Health Effects:

##### Prolonged or repeated exposure may cause target organ effects:

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.

##### Reproductive/Developmental Toxicity:

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

#### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

#### Additional information:

Persons previously sensitised to isocyanates may develop a cross-sensitisation reaction to other isocyanates.

#### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
2-Phenoxyethyl acrylate	Dermal	Rat	LD50 > 2,000 mg/kg
2-Phenoxyethyl acrylate	Ingestion	Rat	LD50 > 5,000 mg/kg
Methacrylate polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Methacrylate polymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
1-Vinylhexahydro-2H-azepin-2-one	Dermal	Rabbit	LD50 1,700 mg/kg
1-Vinylhexahydro-2H-azepin-2-one	Ingestion	Rat	LD50 1,049 mg/kg
3,6-Bis(4-chlorophenyl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione	Dermal	Rat	LD50 > 2,000 mg/kg
3,6-Bis(4-chlorophenyl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.25 mg/l
3,6-Bis(4-chlorophenyl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione	Ingestion	Rat	LD50 > 5,000 mg/kg
Synthetic amorphous silica, fumed, crystalline-free	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic amorphous silica, fumed, crystalline-free	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Rat	LD50 > 5,110 mg/kg
2-(2-Ethoxyethoxy)ethyl acrylate	Dermal		LD50 estimated to be 1,000 - 2,000 mg/kg
2-(2-Ethoxyethoxy)ethyl acrylate	Ingestion	Rat	LD50 1,860 mg/kg
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	Dermal	Rat	LD50 > 2,000 mg/kg
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	Ingestion	Rat	LD50 > 5,000 mg/kg
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	Dermal	Rat	LD50 > 2,000 mg/kg
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	Ingestion	Rat	LD50 967 mg/kg
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	Dermal	Rabbit	LD50 > 13,200 mg/kg
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	Ingestion	Rat	LD50 > 2,000 mg/kg
Glycerol, propoxylated, esters with acrylic acid	Dermal	Rabbit	LD50 > 2,000 mg/kg
Glycerol, propoxylated, esters with acrylic acid	Ingestion	Rat	LD50 > 2,000 mg/kg
octamethylcyclotetrasiloxane	Dermal	Rat	LD50 > 2,400 mg/kg
octamethylcyclotetrasiloxane	Inhalation-Dust/Mist (4 hours)	Rat	LC50 36 mg/l
octamethylcyclotetrasiloxane	Ingestion	Rat	LD50 > 5,000 mg/kg
ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
ethylbenzene	Inhalation-Vapour (4 hours)	Rat	LC50 17.4 mg/l
ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
2-Phenoxyethyl acrylate	Rabbit	No significant irritation

1-Vinylhexahydro-2H-azepin-2-one	Rabbit	Minimal irritation
3,6-Bis(4-chlorophenyl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione	Rabbit	No significant irritation
Synthetic amorphous silica, fumed, crystalline-free	Rabbit	No significant irritation
2-(2-Ethoxyethoxy)ethyl acrylate	Rabbit	Irritant
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	Rabbit	No significant irritation
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	Rabbit	No significant irritation
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	Rabbit	Minimal irritation
Glycerol, propoxylated, esters with acrylic acid	Rabbit	Minimal irritation
octamethylcyclotetrasiloxane	Rabbit	Minimal irritation
ethylbenzene	Rabbit	Mild irritant

### Serious Eye Damage/Irritation

Name	Species	Value
2-Phenoxyethyl acrylate	Rabbit	No significant irritation
1-Vinylhexahydro-2H-azepin-2-one	Rabbit	Severe irritant
3,6-Bis(4-chlorophenyl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione	Rabbit	No significant irritation
Synthetic amorphous silica, fumed, crystalline-free	Rabbit	No significant irritation
2-(2-Ethoxyethoxy)ethyl acrylate	Rabbit	Severe irritant
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	Rabbit	No significant irritation
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	Rabbit	No significant irritation
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	Rabbit	Severe irritant
Glycerol, propoxylated, esters with acrylic acid	Rabbit	Severe irritant
octamethylcyclotetrasiloxane	Rabbit	No significant irritation
ethylbenzene	Rabbit	Moderate irritant

### Skin Sensitisation

Name	Species	Value
2-Phenoxyethyl acrylate	Guinea pig	Sensitising
1-Vinylhexahydro-2H-azepin-2-one	Mouse	Sensitising
Synthetic amorphous silica, fumed, crystalline-free	Human and animal	Not classified
2-(2-Ethoxyethoxy)ethyl acrylate	Guinea pig	Sensitising
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	Guinea pig	Not classified
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	Guinea pig	Sensitising
Glycerol, propoxylated, esters with acrylic acid	Mouse	Sensitising
octamethylcyclotetrasiloxane	Human and animal	Not classified
ethylbenzene	Human	Not classified

### 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
1-Vinylhexahydro-2H-azepin-2-one	In Vitro	Not mutagenic
Synthetic amorphous silica, fumed, crystalline-free	In Vitro	Not mutagenic
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	In Vitro	Not mutagenic
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	In vivo	Not mutagenic
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	In vivo	Not mutagenic
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	In Vitro	Some positive data exist, but the data are not sufficient for classification
octamethylcyclotetrasiloxane	In Vitro	Some positive data exist, but the data are not sufficient for classification

ethylbenzene	In vivo	Not mutagenic
ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
Synthetic amorphous silica, fumed, crystalline-free	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
ethylbenzene	Inhalation	Multiple animal species	Carcinogenic.

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
2-Phenoxyethyl acrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 800 mg/kg/day	43 days
2-Phenoxyethyl acrylate	Ingestion	Toxic to female reproduction	Rat	NOAEL 300 mg/kg/day	premating into lactation
2-Phenoxyethyl acrylate	Ingestion	Toxic to development	Rat	NOAEL 300 mg/kg/day	premating into lactation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	Ingestion	Not classified for female reproduction	Rat	NOAEL 300 mg/kg/day	1 generation
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	Ingestion	Not classified for male reproduction	Rat	NOAEL 300 mg/kg/day	1 generation
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	Ingestion	Toxic to development	Rat	NOAEL 30 mg/kg/day	1 generation
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	Ingestion	Toxic to female reproduction	Rat	LOAEL 40 mg/kg/day	1 generation
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	Ingestion	Toxic to development	Rat	LOAEL 40 mg/kg/day	1 generation
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	29 days
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
octamethylcyclotetrasiloxane	Inhalation	Not classified for male reproduction	Rat	NOAEL 8.5 mg/l	2 generation
octamethylcyclotetrasiloxane	Ingestion	Toxic to female reproduction	Rabbit	NOAEL 50 mg/kg/day	during organogenesis
octamethylcyclotetrasiloxane	Inhalation	Toxic to female reproduction	Rat	NOAEL 3.6 mg/l	2 generation
ethylbenzene	Inhalation	Not classified for development	Rat	NOAEL 4.3 mg/l	premating & during gestation

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
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1-Vinylhexahydro-2H-azepin-2-one	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
ethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
ethylbenzene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
ethylbenzene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	

### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
1-Vinylhexahydro-2H-azepin-2-one	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.001 mg/l	28 days
1-Vinylhexahydro-2H-azepin-2-one	Inhalation	blood   liver   kidney and/or bladder   eyes	Not classified	Rat	NOAEL 0.18 mg/l	90 days
1-Vinylhexahydro-2H-azepin-2-one	Ingestion	liver	Not classified	Rat	NOAEL 260 mg/kg/day	3 months
Synthetic amorphous silica, fumed, crystalline-free	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	Ingestion	endocrine system   hematopoietic system   liver   kidney and/or bladder	Not classified	Rat	NOAEL 500 mg/kg/day	28 days
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	Ingestion	peripheral nervous system   eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 75 mg/kg/day	90 days
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	Ingestion	gastrointestinal tract	Not classified	Rat	NOAEL 100 mg/kg/day	29 days
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	Ingestion	endocrine system   hematopoietic system   liver   immune system   nervous system   kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	29 days
octamethylcyclotetrasiloxane	Dermal	hematopoietic system	Not classified	Rabbit	NOAEL 960 mg/kg/day	3 weeks
octamethylcyclotetrasiloxane	Inhalation	liver	Not classified	Rat	NOAEL 8.5 mg/l	13 weeks
octamethylcyclotetrasiloxane	Inhalation	endocrine system   immune system   kidney and/or bladder	Not classified	Rat	NOAEL 8.5 mg/l	2 generation
octamethylcyclotetrasiloxane	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 8.5 mg/l	13 weeks
octamethylcyclotetrasiloxane	Ingestion	liver	Not classified	Rat	NOAEL 1,600 mg/kg/day	2 weeks
ethylbenzene	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	2 years
ethylbenzene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	103 weeks
ethylbenzene	Inhalation	hematopoietic	Not classified	Rat	NOAEL 3.4	28 days

		system			mg/l	
ethylbenzene	Inhalation	auditory system	Not classified	Rat	NOAEL 2.4 mg/l	5 days
ethylbenzene	Inhalation	endocrine system	Not classified	Mouse	NOAEL 3.3 mg/l	103 weeks
ethylbenzene	Inhalation	gastrointestinal tract	Not classified	Rat	NOAEL 3.3 mg/l	2 years
ethylbenzene	Inhalation	bone, teeth, nails, and/or hair   muscles	Not classified	Multiple animal species	NOAEL 4.2 mg/l	90 days
ethylbenzene	Inhalation	heart   immune system   respiratory system	Not classified	Multiple animal species	NOAEL 3.3 mg/l	2 years
ethylbenzene	Ingestion	liver   kidney and/or bladder	Not classified	Rat	NOAEL 680 mg/kg/day	6 months

**Aspiration Hazard**

Name	Value
ethylbenzene	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.

**11.2. Information on other hazards**

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

**SECTION 12: Ecological information**

The information below may not agree with the 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
2-Phenoxyethyl acrylate	48145-04-6	Activated sludge	Experimental	3 hours	EC50	177 mg/l
2-Phenoxyethyl acrylate	48145-04-6	Golden Orfe	Experimental	96 hours	LC50	10 mg/l
2-Phenoxyethyl acrylate	48145-04-6	Green algae	Experimental	72 hours	EC50	4.4 mg/l
2-Phenoxyethyl acrylate	48145-04-6	Water flea	Experimental	48 hours	EC50	1.21 mg/l
2-Phenoxyethyl acrylate	48145-04-6	Green algae	Experimental	72 hours	EC10	0.71 mg/l
2-benzyl-2-dimethylamino-4'-morpholinobutyrop henone	119313-12-1	Activated sludge	Experimental	30 minutes	IC50	>5.9 mg/l
2-benzyl-2-dimethylamino-4'-morpholinobutyrop henone	119313-12-1	Green algae	Experimental	72 hours	EbC50	>0.5 mg/l
2-benzyl-2-dimethylamino-4'-morpholinobutyrop henone	119313-12-1	Zebra Fish	Experimental	96 hours	LC50	0.46 mg/l
2-benzyl-2-dimethylamino-4'-morpholinobutyrop henone	119313-12-1	Green algae	Experimental	72 hours	NOEC	0.5 mg/l

morpholinobutyrop henone						
3,6-Bis(4- chlorophenyl)-2,5- dihydropyrrolo[3,4- c]pyrrole-1,4-dione	84632-65-5	Activated sludge	Experimental	3 hours	EC50	>100 mg/l
3,6-Bis(4- chlorophenyl)-2,5- dihydropyrrolo[3,4- c]pyrrole-1,4-dione	84632-65-5	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
3,6-Bis(4- chlorophenyl)-2,5- dihydropyrrolo[3,4- c]pyrrole-1,4-dione	84632-65-5	Water flea	Experimental	24 hours	No tox obs at lmt of water sol	>100 mg/l
3,6-Bis(4- chlorophenyl)-2,5- dihydropyrrolo[3,4- c]pyrrole-1,4-dione	84632-65-5	Zebra Fish	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
3,6-Bis(4- chlorophenyl)-2,5- dihydropyrrolo[3,4- c]pyrrole-1,4-dione	84632-65-5	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
3,6-Bis(4- chlorophenyl)-2,5- dihydropyrrolo[3,4- c]pyrrole-1,4-dione	84632-65-5	Water flea	Experimental	21 days	No tox obs at lmt of water sol	>100 mg/l
Methacrylate polymer	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
1-Vinylhexahydro- 2H-azepin-2-one	2235-00-9	Bacteria	Experimental	17 hours	EC50	622 mg/l
1-Vinylhexahydro- 2H-azepin-2-one	2235-00-9	Green algae	Experimental	72 hours	ErC50	>100 mg/l
1-Vinylhexahydro- 2H-azepin-2-one	2235-00-9	Water flea	Experimental	48 hours	EC50	>100 mg/l
1-Vinylhexahydro- 2H-azepin-2-one	2235-00-9	Zebra Fish	Experimental	96 hours	LC50	307 mg/l
1-Vinylhexahydro- 2H-azepin-2-one	2235-00-9	Green algae	Experimental	72 hours	NOEC	25 mg/l
Aliphatic urethane acrylate	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	Activated sludge	Experimental	3 hours	EC20	507 mg/l
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	Green algae	Experimental	72 hours	ErC50	12.2 mg/l
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	Water flea	Experimental	48 hours	EC50	91.4 mg/l
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	Zebra Fish	Experimental	96 hours	LC50	5.74 mg/l
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	Green algae	Experimental	72 hours	NOEC	0.921 mg/l
2-methyl-1-(4- methylthiophenyl)- 2- morpholinopropan- 1-one	71868-10-5	Activated sludge	Experimental	3 hours	EC50	>100 mg/l

2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Green algae	Experimental	72 hours	ErC50	1.6 mg/l
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Water flea	Experimental	24 hours	EC50	15.3 mg/l
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Zebra Fish	Experimental	96 hours	LC50	9 mg/l
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Green algae	Experimental	72 hours	ErC10	0.92 mg/l
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Water flea	Experimental	21 days	EC10	1.75 mg/l
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	Activated sludge	Experimental	3 hours	EC50	770 mg/l
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	Golden Orfe	Experimental	96 hours	LC50	10 mg/l
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	Green algae	Experimental	72 hours	EC50	3.2 mg/l
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	Water flea	Experimental	48 hours	EC50	10.56 mg/l
ethylbenzene	100-41-4	Activated sludge	Experimental	49 hours	EC50	130 mg/l
ethylbenzene	100-41-4	Atlantic Silverside	Experimental	96 hours	LC50	5.1 mg/l
ethylbenzene	100-41-4	Green algae	Experimental	96 hours	EC50	3.6 mg/l
ethylbenzene	100-41-4	Mysid Shrimp	Experimental	96 hours	LC50	2.6 mg/l
ethylbenzene	100-41-4	Rainbow trout	Experimental	96 hours	LC50	4.2 mg/l
ethylbenzene	100-41-4	Water flea	Experimental	48 hours	EC50	1.8 mg/l
ethylbenzene	100-41-4	Water flea	Experimental	7 days	NOEC	0.96 mg/l
octamethylcyclotetrasiloxane	556-67-2	Blackworm	Experimental	28 days	NOEC	0.73 mg/kg (Dry Weight)
octamethylcyclotetrasiloxane	556-67-2	Midge	Experimental	14 days	LC50	>170 mg/kg (Dry Weight)
octamethylcyclotetrasiloxane	556-67-2	Mysid Shrimp	Experimental	96 hours	LC50	>0.0091 mg/l
octamethylcyclotetrasiloxane	556-67-2	Rainbow trout	Experimental	96 hours	LC50	>0.022 mg/l
octamethylcyclotetrasiloxane	556-67-2	Water flea	Experimental	48 hours	EC50	>0.015 mg/l
octamethylcyclotetrasiloxane	556-67-2	Rainbow trout	Experimental	93 days	NOEC	0.0044 mg/l
octamethylcyclotetrasiloxane	556-67-2	Water flea	Experimental	21 days	NOEC	0.015 mg/l
octamethylcyclotetrasiloxane	556-67-2	Activated sludge	Experimental	3 hours	EC50	>10,000 mg/l

Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Green algae	Analogous Compound	72 hours	ErC50	>173.1 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Sediment organism	Analogous Compound	96 hours	EC50	8,500 mg/kg (Dry Weight)
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Water flea	Analogous Compound	24 hours	EL50	>10,000 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Zebra Fish	Analogous Compound	96 hours	LL50	>10,000 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Green algae	Analogous Compound	72 hours	NOEC	173.1 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Water flea	Analogous Compound	21 days	NOEC	68 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5	Activated sludge	Experimental	3 hours	EC20	292 mg/l
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

## 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
2-Phenoxyethyl acrylate	48145-04-6	Experimental Biodegradation	28 days	BOD	22.3 %BOD/ThOD	OECD 301D - Closed bottle test
2-Phenoxyethyl acrylate	48145-04-6	Estimated Photolysis		Photolytic half-life (in air)	9.7 hours (t 1/2)	
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	3 %CO2 evolution/THCO2 evolution	similar to OECD 301B
3,6-Bis(4-chlorophenyl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione	84632-65-5	Experimental Biodegradation	28 days	CO2 evolution	10 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
Methacrylate polymer	Trade Secret	Data not availbl-insufficient	N/A	N/A	N/A	N/A
1-Vinylhexahydro-2H-azepin-2-one	2235-00-9	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	30-40 %removal of DOC	OECD 301A - DOC Die Away Test
1-Vinylhexahydro-2H-azepin-2-one	2235-00-9	Experimental Biodegradation		Dissolv. Organic Carbon Deplet	98 %removal of DOC	OECD 302B Zahn-Wellens/EVPA
1-Vinylhexahydro-2H-azepin-2-one	2235-00-9	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	OECD 111 Hydrolysis func of pH
1-Vinylhexahydro-2H-azepin-2-one	2235-00-9	Experimental Hydrolysis		Hydrolytic half-life acidic pH	6.5 hours (t 1/2)	OECD 111 Hydrolysis func of pH
Aliphatic urethane acrylate	Trade Secret	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Glycerol, propoxylated, esters with acrylic	52408-84-1	Experimental Biodegradation	28 days	CO2 evolution	72-85 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2

acid						
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Experimental Biodegradation	28 days	CO2 evolution	≤1 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	Experimental Biodegradation	28 days	CO2 evolution	98 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
ethylbenzene	100-41-4	Experimental Biodegradation	28 days	CO2 evolution	70-80 %CO2 evolution/THCO2 evolution	ISO 14593 Inorg C Headspace
ethylbenzene	100-41-4	Experimental Photolysis		Photolytic half-life (in air)	4.26 days (t 1/2)	
octamethylcyclotetrasiloxane	556-67-2	Experimental Biodegradation	29 days	CO2 evolution	3.7 %CO2 evolution/THCO2 evolution	OECD 310 CO2 Headspace
octamethylcyclotetrasiloxane	556-67-2	Experimental Photolysis		Photolytic half-life (in air)	31 days (t 1/2)	
octamethylcyclotetrasiloxane	556-67-2	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	69.3-144 hours (t 1/2)	OECD 111 Hydrolysis func of pH
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5	Experimental Biodegradation	28 days	CO2 evolution	58-61 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2

### 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
2-Phenoxyethyl acrylate	48145-04-6	Experimental Bioconcentration		Log Kow	2.58	
2-benzyl-2-dimethylamino-4'-morpholinobutyrop henone	119313-12-1	Experimental Bioconcentration		Log Kow	2.91	EC A.8 Partition Coefficient
3,6-Bis(4-chlorophenyl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione	84632-65-5	Experimental Bioconcentration		Log Kow	2.4	
Methacrylate polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1-Vinylhexahydro-2H-azepin-2-one	2235-00-9	Experimental Bioconcentration		Log Kow	1.2	similar to OECD 107
Aliphatic urethane acrylate	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	Experimental Bioconcentration		Log Kow	2.52	OECD 107 log Kow shke flsk mtd
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Experimental BCF - Fish	56 days	Bioaccumulation factor	<10	
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Experimental Bioconcentration		Log Kow	3.09	
2-(2-Ethoxyethoxy)ethyl	7328-17-8	Experimental Bioconcentration		Log Kow	1.105	

acrylate						
ethylbenzene	100-41-4	Experimental BCF - Fish	42 days	Bioaccumulation factor	1	
octamethylcyclotetrasiloxane	556-67-2	Experimental BCF - Fish	28 days	Bioaccumulation factor	12400	40CFR 797.1520-Fish Bioaccumm
octamethylcyclotetrasiloxane	556-67-2	Experimental Bioconcentration		Log Kow	6.49	OECD 123 log Kow slow stir
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5	Experimental Bioconcentration		Log Kow	2.89	OECD 107 log Kow shke flsk mtd

#### 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
2-Phenoxyethyl acrylate	48145-04-6	Estimated Mobility in Soil	Koc	220 l/kg	Episuite™
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	Experimental Mobility in Soil	Koc	49,000 l/kg	OECD 121 Estim. of Koc by HPLC
1-Vinylhexahydro-2H-azepin-2-one	2235-00-9	Modeled Mobility in Soil	Koc	47 l/kg	Episuite™
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	Experimental Mobility in Soil	Koc	100 l/kg	OECD 121 Estim. of Koc by HPLC
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Experimental Mobility in Soil	Koc	626 l/kg	OECD 121 Estim. of Koc by HPLC
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	Estimated Mobility in Soil	Koc	10 l/kg	Episuite™
octamethylcyclotetrasiloxane	556-67-2	Experimental Mobility in Soil	Koc	16,600 l/kg	OECD 106 Adsp-Desb Batch Equil

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

Ingredient	CAS Nbr	PBT/vPvB status
octamethylcyclotetrasiloxane	556-67-2	Meets UK REACH PBT criteria
octamethylcyclotetrasiloxane	556-67-2	Meets UK REACH vPvB criteria

#### 12.6. Other adverse effects

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

## 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. 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)

080312\* Waste ink containing dangerous substances  
20 01 27\* Paint, inks, adhesives and resins containing dangerous substances

## SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
<b>14.1 UN number</b>	UN3082	UN3082	UN3082
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(PHENOXY ETHYL ACRYLATE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(PHENOXY ETHYL ACRYLATE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(PHENOXY ETHYL ACRYLATE)
<b>14.3 Transport hazard class(es)</b>	9	9	9
<b>14.4 Packing group</b>	III	III	III
<b>14.5 Environmental hazards</b>	Environmentally Hazardous	Not applicable	Marine Pollutant
<b>14.6 Special precautions for user</b>	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
<b>14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code</b>	No data available.	No data available.	No data available.
<b>Control Temperature</b>	No data available.	No data available.	No data available.
<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
<b>ADR Classification Code</b>	M6	Not applicable.	Not applicable.
<b>IMDG Segregation Code</b>	Not applicable.	Not applicable.	NONE

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

## SECTION 15: Regulatory information

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

**Carcinogenicity**  
**Ingredient****CAS Nbr****Classification****Regulation**

ethylbenzene

100-41-4

Grp. 2B: Possible human  
carc.International Agency  
for Research on Cancer**Restrictions on the manufacture, placing on the market and use:**

The following substance(s) contained in this product is/are subject to Annex XVII of regulation (EC) 1907/2006, as amended for GB, with regard to restrictions on the manufacture, placing on the market and use when present in certain dangerous conditions. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

**Ingredient****CAS Nbr**

octamethylcyclotetrasiloxane

556-67-2

Restriction status: listed in UK REACH Annex XVII

Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 as amended for Great Britain for Conditions of Restriction

**Authorisation status under UK REACH:**

The following substance/s contained in this product might be or is/are subject to authorisation in accordance with UK REACH:

**Ingredient****CAS Nbr**2-benzyl-2-dimethylamino-4'-  
morpholinobutyrophenone

119313-12-1

2-methyl-1-(4-methylthiophenyl)-2-  
morpholinopropan-1-one

71868-10-5

octamethylcyclotetrasiloxane

556-67-2

Authorisation status: listed in the UK REACH Candidate List of Substances of Very High Concern for Authorisation

**Global inventory status**

Contact 3M for more information. The components of this product are in compliance with the chemical notification requirements of TSCA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory.

**COMAH Regulation, SI 2015/483**

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	100	200

2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	200	500
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	200	500
ethylbenzene	100-41-4	10	50
octamethylcyclotetrasiloxane	556-67-2	100	200

**Regulation (EU) No 649/2012, as amended for GB**

No chemicals listed

**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 for GB.

**SECTION 16: Other information****List of relevant H statements**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H360D	May damage the unborn child.
H360FD	May damage fertility. May damage the unborn child.
H361df	Suspected of damaging fertility. Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
H372	Causes damage to organs through prolonged or repeated exposure: respiratory system.
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:**

EU Section 09: pH information information was added.  
 GB Section 02: CLP Ingredient table information was added.  
 GB Section 02: Other hazards phrase information was added.  
 GB Section 04: Information on toxicological effects information was added.  
 GB Section 12: Classification Warning information was added.  
 GB Section 12: PBT/vPvB table row information was added.  
 GB Section 15: Authorisation status under REACH: SVHC Authorisation ingredient information information was added.  
 GB Section 15: Carcinogenicity information information was added.  
 GB Section 15: Chemical Safety Assessment information was added.  
 GBSDS Section 14 Transport in bulk - Main Heading information was added.  
 GBSDS Section 14 UN Number information was added.  
 CLP: Ingredient table information was deleted.  
 Label: CLP Classification information was modified.

Label: CLP Percent Unknown information was deleted.  
Label: CLP Precautionary - Disposal information was deleted.  
Label: CLP Precautionary - Prevention information was modified.  
Label: CLP Precautionary - Response information was modified.  
Label: CLP Supplemental Precautionary Statements information was deleted.  
Label: CLP Target Organ Hazard Statement information was modified.  
Section 02: Label Elements: GB Percent Unknown information was added.  
Section 2: Other hazards phrase information was deleted.  
Section 02: SDS Elements: CLP Supplemental Precautionary Statements information was added.  
Section 03: Composition table % Column heading information was added.  
Section 3: Composition/ Information of ingredients table information was added.  
Section 3: Composition/ Information of ingredients table information was deleted.  
Section 03: Substance not applicable information was added.  
Section 04: Information on toxicological effects information was deleted.  
Section 5: Hazardous combustion products table information was modified.  
Section 8: Occupational exposure limit table information was modified.  
Section 09: Color information was added.  
Section 9: Evaporation Rate information information was deleted.  
Section 9: Explosive properties information information was deleted.  
Section 09: Kinematic Viscosity information information was added.  
Section 9: Melting point information information was modified.  
Section 09: Odor information was added.  
Sections 3 and 9: Odour, colour, grade information information was deleted.  
Section 9: Oxidising properties information information was deleted.  
Section 9: pH information information was deleted.  
Section 9: Property description for optional properties information was modified.  
Section 9: Vapour density value information was added.  
Section 9: Vapour density value information was deleted.  
Section 9: Viscosity information information was deleted.  
Section 11: Acute Toxicity table information was modified.  
Section 11: Aspiration Hazard Table information was modified.  
Section 11: Carcinogenicity Table information was modified.  
Section 11: Classification disclaimer information was deleted.  
Section 11: GB Classification disclaimer information was added.  
Section 11: GB No endocrine disruptor information available warning information was added.  
Section 11: Germ Cell Mutagenicity Table information was modified.  
Section 11: Reproductive Hazards information information was deleted.  
Section 11: Reproductive Toxicity Table information was modified.  
Section 11: Reproductive/developmental effects information information was added.  
Section 11: Serious Eye Damage/Irritation Table information was modified.  
Section 11: Skin Corrosion/Irritation Table information was modified.  
Section 11: Skin Sensitization Table information was modified.  
Section 11: Target Organs - Repeated Table information was added.  
Section 11: Target Organs - Repeated Table information was deleted.  
Section 11: Target Organs - Single Table information was modified.  
Section 12: 12.6. Other adverse effects information was added.  
Section 12: 12.7. Other adverse effects information was deleted.  
Section 12: Classification Warning information was deleted.  
Section 12: Component ecotoxicity information information was modified.  
Section 12: Contact manufacturer for more detail. information was deleted.  
Section 12: Mobility in soil information information was added.  
Prints No Data if Adverse effects information is not present information was deleted.  
Section 12: No endocrine disruptor information available warning information was added.  
Section 12: No PBT/vPvB information available warning information was deleted.  
Section 12: Persistence and Degradability information information was modified.  
Section 12: Biocumulative potential information information was modified.

Section 14 Classification Code – Main Heading information was added.  
Section 14 Classification Code – Regulation Data information was added.  
Section 14 Control Temperature – Main Heading information was added.  
Section 14 Control Temperature – Regulation Data information was added.  
Section 14 Disclaimer Information information was added.  
Section 14 Emergency Temperature – Main Heading information was added.  
Section 14 Emergency Temperature – Regulation Data information was added.  
Section 14 Hazard Class + Sub Risk – Main Heading information was added.  
Section 14 Hazard Class + Sub Risk – Regulation Data information was added.  
Section 14 Hazardous/Not Hazardous for Transportation information was added.  
Section 14 Other Dangerous Goods – Main Heading information was added.  
Section 14 Other Dangerous Goods – Regulation Data information was added.  
Section 14 Packing Group – Main Heading information was added.  
Section 14 Packing Group – Regulation Data information was added.  
Section 14 Proper Shipping Name information was added.  
Section 14 Regulations – Main Headings information was added.  
Section 14 Segregation – Regulation Data information was added.  
Section 14 Segregation Code – Main Heading information was added.  
Section 14 Special Precautions – Main Heading information was added.  
Section 14 Special Precautions – Regulation Data information was added.  
Section 14 Transport in bulk – Regulation Data information was added.  
Section 14 UN Number Column data information was added.  
Section 15: Carcinogenicity information information was deleted.  
Section 15: Chemical Safety Assessment information was deleted.  
Section 15: Restrictions on manufacture ingredients information information was added.  
Section 15: Seveso Substance Text information was added.  
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material.  
information was added.  
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material.  
information was deleted.  
Section 16: UK disclaimer information was deleted.  
Section 16: Web address information was added.  
Section 16: Web address information was deleted.

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