



## 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™ Piezo Inkjet Ink 8953UV v2 Blue

#### Product Identification Numbers

75-0302-9146-4

7100239008

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

##### Identified uses

Industrial use.

#### 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.

This material has been tested for skin corrosion/irritation and the test results are reflected in the assigned classification.

**CLASSIFICATION:**

Acute Toxicity, Category 4 - Acute Tox. 4; H332  
 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
 Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318  
 Skin Sensitization, Category 1 - Skin Sens. 1; H317  
 Carcinogenicity, Category 1B - Carc. 1B; H350  
 Reproductive Toxicity, Category 1B - Repr. 1B; H360FD  
 Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335  
 Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400  
 Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

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**

GHS05 (Corrosion) |GHS07 (Exclamation mark) |GHS08 (Health Hazard) |GHS09 (Environment) |

**Pictograms**

Ingredient	CAS Nbr	EC No.	% by Wt
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	227-561-6	10 - 30
isoctyl acrylate	29590-42-9	249-707-8	10 - 30
Tetrahydrofurfuryl acrylate	2399-48-6	219-268-7	10 - 30
hexamethylene diacrylate	13048-33-4	235-921-9	5 - 10
2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol	67906-98-3		< 10
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8	3 - 7
Benzophenone	119-61-9	204-337-6	3 - 7

**HAZARD STATEMENTS:**

H332	Harmful if inhaled.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H350	May cause cancer.
H360FD	May damage fertility. May damage the unborn child.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS****Prevention:**

P201 Obtain special instructions before use.

P261A Avoid breathing vapours.  
 P273 Avoid release to the environment.  
 P280I Wear protective gloves, eye/face protection, and respiratory protection.

**Response:**

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTRE or doctor/physician.

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

Restricted to professional users.

20% of the mixture consists of components of unknown acute oral toxicity.

97% of the mixture consists of components of unknown acute inhalation toxicity.  
 Contains 20% of components with unknown hazards to the aquatic environment.

**2.3. Other hazards**

None known.

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

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

Not applicable

**3.2. Mixtures**

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
Tetrahydrofurfuryl acrylate	(CAS-No.) 2399-48-6 (EC-No.) 219-268-7	10 - 30	Aquatic Chronic 2, H411 EUH071 Acute Tox. 4, H302 Skin Corr. 1C, H314 Skin Sens. 1B, H317 Repr. 1B, H360Df
isoctyl acrylate	(CAS-No.) 29590-42-9 (EC-No.) 249-707-8	10 - 30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1 Skin Sens. 1B, H317
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	(CAS-No.) 5888-33-5 (EC-No.) 227-561-6	10 - 30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol	(CAS-No.) 67906-98-3	< 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
hexamethylene diacrylate	(CAS-No.) 13048-33-4	5 - 10	Skin Irrit. 2, H315

	(EC-No.) 235-921-9		Eye Irrit. 2, H319 Skin Sens. 1, H317 Nota D Aquatic Acute 1, H400,M=1 Aquatic Chronic 2, H411
2-Propenoic acid, 2-hydroxyethyl ester, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-oxepanone and 2,2'-oxybis[ethanol]	(CAS-No.) 72162-39-1	3 - 7	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Benzophenone	(CAS-No.) 119-61-9 (EC-No.) 204-337-6	3 - 7	Acute Tox. 4, H302 STOT RE 2, H373 Aquatic Chronic 3, H412
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	(CAS-No.) 75980-60-8 (EC-No.) 278-355-8	3 - 7	Skin Sens. 1B, H317 Repr. 1B, H360F Aquatic Chronic 2, H411
Polymer	Trade Secret	1 - 5	Substance not classified as hazardous
Stabiliser	Trade Secret	1 - 5	Substance not classified as hazardous
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	(CAS-No.) 193098-40-7	1 - 5	Acute Tox. 4, H332 Acute Tox. 4, H302 Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	(CAS-No.) 147-14-8 (EC-No.) 205-685-1	1 - 5	Substance not classified as hazardous
CAMPHENENE	(CAS-No.) 79-92-5 (EC-No.) 201-234-8	< 0.2	Flam. Sol. 2, H228 Eye Irrit. 2, H319 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1

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

### Specific Concentration Limits

Ingredient	Identifier(s)	Specific Concentration Limits
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	(CAS-No.) 5888-33-5 (EC-No.) 227-561-6	(C >= 10%) STOT SE 3, H335
isooctyl acrylate	(CAS-No.) 29590-42-9 (EC-No.) 249-707-8	(C >= 10%) STOT SE 3, H335

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 for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

**If swallowed**

Rinse mouth. Do not induce vomiting. Get immediate medical attention.

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

The most important symptoms and effects based on the GB CLP classification include:

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Harmful if inhaled. Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision).

**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**

Carbon monoxide  
Carbon dioxide.

**Condition**

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

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

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

Store in a well-ventilated place. Keep container tightly closed. 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
Tetrahydrofurfuryl acrylate	2399-48-6	Manufacturer determined	TWA:0.1 ppm(0.64 mg/m <sup>3</sup> );STEL:0.3 ppm(1.91 mg/m <sup>3</sup> )	Dermal Sensitizer

UK HSC : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

##### Biological limit values

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

#### 8.2. Exposure controls

##### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

##### 8.2.2. Personal protective equipment (PPE)

##### Eye/face protection

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

Full face shield.  
Indirect vented goggles.

*Applicable Norms/Standards*  
Use eye/face protection conforming to EN 166

#### **Skin/hand protection**

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended:

<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 vapors and particulates, including oily mists

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

*Applicable Norms/Standards*  
Use a respirator conforming to EN 140: filter types A & P

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

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

<b>Physical state</b>	Liquid.
<b>Specific Physical Form:</b>	Liquid.
<b>Colour</b>	Blue
<b>Odor</b>	Acrylate
<b>Odour threshold</b>	<i>No data available.</i>
<b>Melting point/freezing point</b>	<i>Not applicable.</i>
<b>Boiling point/boiling range</b>	> 93.3 °C
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Flammable Limits(LEL)</b>	<i>No data available.</i>
<b>Flammable Limits(UEL)</b>	<i>No data available.</i>
<b>Flash point</b>	> 93.3 °C [Test Method:Closed Cup]
<b>Autoignition temperature</b>	<i>No data available.</i>
<b>Decomposition temperature</b>	<i>No data available.</i>
<b>pH</b>	substance/mixture is non-soluble (in water)
<b>Kinematic Viscosity</b>	<i>No data available.</i>
<b>Water solubility</b>	Negligible

<b>Solubility- non-water</b>	<i>No data available.</i>
<b>Partition coefficient: n-octanol/water</b>	<i>No data available.</i>
<b>Vapour pressure</b>	< 1,333.2 Pa [ @ 20 °C ]
<b>Density</b>	1.04 g/ml
<b>Relative density</b>	1.04 [Ref Std:WATER=1]
<b>Relative Vapour Density</b>	> 1 [Ref Std:AIR=1]

## 9.2. Other information

### 9.2.2 Other safety characteristics

<b>EU Volatile Organic Compounds</b>	<i>No data available.</i>
<b>Evaporation rate</b>	<i>No data available.</i>

## 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 depletion of inhibitor or exposure to heat)

### 10.4 Conditions to avoid

Light.

### 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

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

#### Skin contact

**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. May cause additional health effects (see below).

#### **Eye contact**

**Corrosive (eye burns):** Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

#### **Ingestion**

May be harmful if swallowed.

**Gastrointestinal corrosion:** Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea; blood in the faeces and/or vomitus may also be seen. May cause additional health effects (see below).

#### **Additional Health Effects:**

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

**Immunological effects:** Signs/symptoms may include alterations in the number of circulating immune cells, allergic skin and/or respiratory reaction, and changes in immune function. **Gastrointestinal Effects:** Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. **Kidney/Bladder effects:** Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination. **Dermal effects:** Signs/symptoms may include redness, itching, acne, or bumps on the skin.

#### **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.

#### **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-Dust/Mist(4 hr)		No data available; calculated ATE >5 - =12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
Tetrahydrofurfuryl acrylate	Ingestion	Rat	LD50 882 mg/kg
isooctyl acrylate	Dermal	Rabbit	LD50 > 2,000 mg/kg
isooctyl acrylate	Ingestion	Rat	LD50 > 5,000 mg/kg
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Dermal	Rabbit	LD50 > 5,000 mg/kg
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Ingestion	Rat	LD50 4,350 mg/kg
hexamethylene diacrylate	Dermal	Rabbit	LD50 3,636 mg/kg
hexamethylene diacrylate	Ingestion	Rat	LD50 > 5,000 mg/kg
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Benzophenone	Dermal	Rabbit	LD50 3,535 mg/kg
Benzophenone	Ingestion	Rat	LD50 1,900 mg/kg
29H,31H-Phthalocyaninato(2)-N29,N30,N31,N32 copper	Dermal		LD50 estimated to be > 5,000 mg/kg
29H,31H-Phthalocyaninato(2)-N29,N30,N31,N32 copper	Ingestion	Rat	LD50 10,000 mg/kg
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction	Dermal	Rat	LD50 > 2,000 mg/kg

products, methylated			
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	Ingestion	Rat	LD50 >500, <2,000 mg/kg
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	Inhalation-Dust/Mist (4 hours)	similar compounds	LC50 2.8 mg/l
CAMPHENENE	Dermal	Rabbit	LD50 > 2,500 mg/kg
CAMPHENENE	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Overall product	Professional judgement	Irritant
Tetrahydrofurfuryl acrylate	Rabbit	Corrosive
isoctyl acrylate	In vitro data	No significant irritation
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Rabbit	Minimal irritation
2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol	similar compounds	Irritant
hexamethylene diacrylate	Rabbit	Irritant
2-Propenoic acid, 2-hydroxyethyl ester, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-oxepanone and 2,2'-oxybis[ethanol]	similar compounds	Irritant
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Rabbit	No significant irritation
Benzophenone	Rabbit	No significant irritation
29H,31H-Phthalocyaninato(2)-N29,N30,N31,N32 copper	Rabbit	No significant irritation
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	Rabbit	No significant irritation
CAMPHENENE	Rabbit	No significant irritation

### Serious Eye Damage/Irritation

Name	Species	Value
Tetrahydrofurfuryl acrylate	Rabbit	Corrosive
isoctyl acrylate	similar health hazards	Mild irritant
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Rabbit	Mild irritant
2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol	similar compounds	Severe irritant
hexamethylene diacrylate	Rabbit	Moderate irritant
2-Propenoic acid, 2-hydroxyethyl ester, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-oxepanone and 2,2'-oxybis[ethanol]	similar compounds	Severe irritant
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Rabbit	No significant irritation
Benzophenone	Rabbit	Mild irritant
29H,31H-Phthalocyaninato(2)-N29,N30,N31,N32 copper	Rabbit	No significant irritation
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	Rabbit	Severe irritant
CAMPHENENE	Rabbit	Moderate irritant

### Skin Sensitisation

Name	Species	Value
Tetrahydrofurfuryl acrylate	Professional judgement	Sensitising

	t	
isooctyl acrylate	Mouse	Sensitising
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Human and animal	Sensitising
2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol	similar compounds	Sensitising
hexamethylene diacrylate	Guinea pig	Sensitising
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Mouse	Sensitising
Benzophenone	Guinea pig	Not classified
29H,31H-Phthalocyaninato(2)-N29,N30,N31,N32 copper	Human	Not classified
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	Guinea pig	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
Tetrahydrofurfuryl acrylate	In Vitro	Not mutagenic
isooctyl acrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	In Vitro	Not mutagenic
hexamethylene diacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	In Vitro	Not mutagenic
Benzophenone	In Vitro	Not mutagenic
Benzophenone	In vivo	Not mutagenic
29H,31H-Phthalocyaninato(2)-N29,N30,N31,N32 copper	In Vitro	Not mutagenic
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	In Vitro	Not mutagenic
CAMPHENЕ	In Vitro	Not mutagenic
CAMPHENЕ	In vivo	Not mutagenic

### Carcinogenicity

Name	Route	Species	Value
isooctyl acrylate	Dermal	Mouse	Not carcinogenic
hexamethylene diacrylate	Dermal	Mouse	Not carcinogenic
Benzophenone	Dermal	Multiple animal species	Not carcinogenic
Benzophenone	Ingestion	Multiple animal species	Carcinogenic.
29H,31H-Phthalocyaninato(2)-N29,N30,N31,N32 copper	Ingestion	Mouse	Not carcinogenic

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Tetrahydrofurfuryl acrylate	Ingestion	Toxic to female reproduction	Rat	NOAEL 50 mg/kg/day	pre mating into lactation
Tetrahydrofurfuryl acrylate	Dermal	Toxic to male reproduction	Rat	NOAEL 100 mg/kg/day	90 days
Tetrahydrofurfuryl acrylate	Ingestion	Toxic to male reproduction	Rat	NOAEL 35 mg/kg/day	90 days
Tetrahydrofurfuryl acrylate	Inhalation	Toxic to male reproduction	Rat	NOAEL 0.6 mg/l	90 days

Tetrahydrofurfuryl acrylate	Ingestion	Toxic to development	Rat	NOAEL 50 mg/kg/day	pre mating into lactation
isoctyl acrylate	Dermal	Not classified for female reproduction	Rat	NOAEL 57 mg/kg/day	pre mating & during gestation
isoctyl acrylate	Dermal	Not classified for male reproduction	Rat	NOAEL 57 mg/kg/day	pre mating & during gestation
isoctyl acrylate	Dermal	Not classified for development	Rat	NOAEL 57 mg/kg/day	pre mating & during gestation
isoctyl acrylate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	31 days
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL 100 mg/kg/day	pre mating into lactation
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Ingestion	Not classified for development	Rat	NOAEL 100 mg/kg/day	pre mating into lactation
hexamethylene diacrylate	Not specified.	Not classified for development	Rat	NOAEL 750 mg/kg/day	during organogenesis
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Ingestion	Not classified for development	Rat	NOAEL 150 mg/kg/day	during gestation
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Ingestion	Toxic to female reproduction	Rat	NOAEL 200 mg/kg/day	pre mating into lactation
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Ingestion	Toxic to male reproduction	Rat	NOAEL 60 mg/kg/day	85 days
Benzophenone	Ingestion	Not classified for female reproduction	Rat	NOAEL 100 mg/kg/day	2 generation
Benzophenone	Ingestion	Not classified for male reproduction	Rat	NOAEL 80 mg/kg/day	2 generation
Benzophenone	Ingestion	Not classified for development	Rabbit	NOAEL 25 mg/kg/day	during gestation
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	pre mating into lactation
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	42 days
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	pre mating into lactation
CAMPHENENE	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis

## Target Organ(s)

### Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Tetrahydrofurfuryl acrylate	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	
isoctyl acrylate	Inhalation	respiratory irritation	Not classified	Human	NOAEL Not available	occupational exposure
isoctyl acrylate	Ingestion	central nervous system depression	Not classified	Rat	NOAEL 5,000 mg/kg	
2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
hexamethylene diacrylate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
2-Propenoic acid, 2-hydroxyethyl ester,	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health	NOAEL Not available	

polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-oxepanone and 2,2'-oxybis[ethanol]			classification	hazards		
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
CAMPHENENE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
isoctyl acrylate	Dermal	heart   endocrine system   hematopoietic system   liver   immune system   nervous system   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 57 mg/kg/day	premating & during gestation
isoctyl acrylate	Ingestion	endocrine system   liver   kidney and/or bladder   heart   bone, teeth, nails, and/or hair   hematopoietic system   immune system   muscles   nervous system   eyes   respiratory system   vascular system	Not classified	Rat	NOAEL 600 mg/kg/day	90 days
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Ingestion	gastrointestinal tract   immune system   kidney and/or bladder   heart   endocrine system   hematopoietic system   liver   nervous system   respiratory system	Not classified	Rat	NOAEL 500 mg/kg/day	31 days
hexamethylene diacrylate	Dermal	skin	May cause damage to organs though prolonged or repeated exposure	Mouse	LOAEL 70 mg/kg/day	80 weeks
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Ingestion	skin   blood   liver   kidney and/or bladder   nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days
Benzophenone	Ingestion	kidney and/or bladder	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 75 mg/kg/day	14 weeks
Benzophenone	Ingestion	heart   hematopoietic system   liver   immune system   endocrine system   bone, teeth, nails, and/or hair   nervous system   eyes	Not classified	Rat	NOAEL 850 mg/kg/day	14 weeks

		respiratory system				
29H,31H- Phthalocyaninato(2-)- N29,N30,N31,N32 copper	Ingestion	endocrine system   hematopoietic system   respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
29H,31H- Phthalocyaninato(2-)- N29,N30,N31,N32 copper	Ingestion	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	not available
N,N'-Bis(2,2,6,6- tetramethyl-4-piperidinyl)- 1,6-hexanediamine, polymers with morpholine- 2,4,6-trichloro-1,3,5- triazine reaction products, methylated	Ingestion	gastrointestinal tract   immune system	May cause damage to organs through prolonged or repeated exposure	Rat	NOAEL 15 mg/kg/day	28 days
CAMPHENENE	Ingestion	liver   kidney and/or bladder   hematopoietic system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days

### Aspiration Hazard

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

**Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.**

### 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
exo-1,7,7- trimethylbicyclo[2. 2.1]hept-2-yl acrylate	5888-33-5	Green algae	Experimental	72 hours	ErC50	1.98 mg/l
exo-1,7,7- trimethylbicyclo[2. 2.1]hept-2-yl acrylate	5888-33-5	Zebra Fish	Experimental	96 hours	LC50	0.704 mg/l
exo-1,7,7- trimethylbicyclo[2. 2.1]hept-2-yl acrylate	5888-33-5	Green algae	Experimental	72 hours	NOEC	0.405 mg/l
exo-1,7,7- trimethylbicyclo[2. 2.1]hept-2-yl acrylate	5888-33-5	Water flea	Experimental	21 days	NOEC	0.092 mg/l
isooctyl acrylate	29590-42-9	Green algae	Estimated	72 hours	EC50	0.535 mg/l
isooctyl acrylate	29590-42-9	Fathead minnow	Experimental	96 hours	LC50	0.67 mg/l
isooctyl acrylate	29590-42-9	Water flea	Experimental	48 hours	EC50	0.4 mg/l

isoctyl acrylate	29590-42-9	Water flea	Experimental	21 days	NOEC	0.065 mg/l
isoctyl acrylate	29590-42-9	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Tetrahydrofurfuryl acrylate	2399-48-6	Activated sludge	Experimental	3 hours	EC50	263.7 mg/l
Tetrahydrofurfuryl acrylate	2399-48-6	Green algae	Experimental	72 hours	EC50	3.92 mg/l
Tetrahydrofurfuryl acrylate	2399-48-6	Water flea	Experimental	48 hours	EC50	37.7 mg/l
Tetrahydrofurfuryl acrylate	2399-48-6	Zebra Fish	Experimental	96 hours	LC50	7.32 mg/l
Tetrahydrofurfuryl acrylate	2399-48-6	Green algae	Experimental	72 hours	EC10	2.48 mg/l
hexamethylene diacrylate	13048-33-4	Green algae	Experimental	72 hours	EC50	2.33 mg/l
hexamethylene diacrylate	13048-33-4	Medaka	Experimental	96 hours	LC50	0.38 mg/l
hexamethylene diacrylate	13048-33-4	Water flea	Experimental	48 hours	EC50	2.7 mg/l
hexamethylene diacrylate	13048-33-4	Green algae	Experimental	72 hours	NOEC	0.9 mg/l
hexamethylene diacrylate	13048-33-4	Medaka	Experimental	39 days	NOEC	0.072 mg/l
hexamethylene diacrylate	13048-33-4	Water flea	Experimental	21 days	NOEC	0.14 mg/l
hexamethylene diacrylate	13048-33-4	Activated sludge	Experimental	30 minutes	EC50	270 mg/l
2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol	67906-98-3	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
diphenyl(2,4,6-trimethylbenzoyl)p phosphine oxide	75980-60-8	Activated sludge	Experimental	3 hours	EC20	>1,000 mg/l
diphenyl(2,4,6-trimethylbenzoyl)p phosphine oxide	75980-60-8	Common Carp	Experimental	96 hours	LC50	1.4 mg/l
diphenyl(2,4,6-trimethylbenzoyl)p phosphine oxide	75980-60-8	Green algae	Experimental	72 hours	EC50	>2.01 mg/l
diphenyl(2,4,6-trimethylbenzoyl)p phosphine oxide	75980-60-8	Water flea	Experimental	48 hours	EC50	3.53 mg/l
diphenyl(2,4,6-trimethylbenzoyl)p phosphine oxide	75980-60-8	Green algae	Experimental	72 hours	EC10	1.56 mg/l
2-Propenoic acid, 2-hydroxyethyl ester, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-oxepanone and 2,2'-oxybis[ethanol]	72162-39-1	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Benzophenone	119-61-9	Fathead minnow	Experimental	96 hours	LC50	10.89 mg/l
Benzophenone	119-61-9	Green algae	Experimental	72 hours	EC50	3.5 mg/l
Benzophenone	119-61-9	Water flea	Experimental	48 hours	EC50	6.8 mg/l
Benzophenone	119-61-9	Fathead minnow	Experimental	7 days	NOEC	2.1 mg/l
Benzophenone	119-61-9	Green algae	Experimental	72 hours	NOEC	1 mg/l

Benzophenone	119-61-9	Water flea	Experimental	21 days	NOEC	0.2 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Green algae	Estimated	72 hours	ErC50	>100 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Water flea	Estimated	48 hours	EC50	>500 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Activated sludge	Experimental	30 minutes	EC20	750 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Bacteria	Experimental	30 minutes	EC10	>10,000 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Rainbow trout	Experimental	96 hours	LC50	355.6 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Green algae	Estimated	72 hours	ErC10	100 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Water flea	Estimated	21 days	NOEC	>=1 mg/l
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	193098-40-7	Activated sludge	Experimental	3 hours	EC50	>100 mg/l
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	193098-40-7	Green algae	Experimental	72 hours	EC50	>0.15 mg/l
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	193098-40-7	Rainbow trout	Experimental	96 hours	LC50	>1.5 mg/l
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	193098-40-7	Water flea	Experimental	48 hours	EC50	0.64 mg/l

piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated						
CAMPHENЕ	79-92-5	Activated sludge	Experimental	3 hours	EC10	490.3 mg/l
CAMPHENЕ	79-92-5	Green algae	Experimental	72 hours	EC50	1.75 mg/l
CAMPHENЕ	79-92-5	Sheepshead Minnow	Experimental	96 hours	LC50	1.9 mg/l
CAMPHENЕ	79-92-5	Water flea	Experimental	48 hours	EC50	0.72 mg/l
CAMPHENЕ	79-92-5	Zebra Fish	Experimental	96 hours	LC50	0.72 mg/l
CAMPHENЕ	79-92-5	Green algae	Experimental	72 hours	NOEC	0.07 mg/l

## 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	Experimental Biodegradation	28 days	CO2 evolution	57 %CO2 evolution/THCO2 evolution	OECD 310 CO2 Headspace
isoctyl acrylate	29590-42-9	Experimental Biodegradation	28 days	BOD	93 %BOD/ThOD	OECD 301D - Closed bottle test
Tetrahydrofurfuryl acrylate	2399-48-6	Experimental Biodegradation	28 days	BOD	77.7 %BOD/ThOD	OECD 301F - Manometric respirometry
Tetrahydrofurfuryl acrylate	2399-48-6	Experimental Bioconcentration		Log Kow	0.81	
hexamethylene diacrylate	13048-33-4	Experimental Biodegradation	28 days	CO2 evolution	60-70 %CO2 evolution/THCO2 evolution	ISO 14593 Inorg C Headspace
hexamethylene diacrylate	13048-33-4	Estimated Photolysis		Photolytic half-life (in air)	1 days (t 1/2)	Episuite™
2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol	67906-98-3	Data not availbl-insufficient	N/A	N/A	N/A	N/A
diphenyl(2,4,6-trimethylbenzoyl)p-hosphine oxide	75980-60-8	Experimental Biodegradation	28 days	BOD	≤10 %BOD/ThOD	OECD 301F - Manometric respirometry
2-Propenoic acid, 2-hydroxyethyl ester, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-oxepanone and 2,2'-oxybis[ethanol]	72162-39-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Benzophenone	119-61-9	Experimental Biodegradation	28 days	BOD	66-84 %BOD/ThOD	OECD 301F - Manometric respirometry
29H,31H-Phthalocyaninato(2-)N29,N30,N31,N32 copper	147-14-8	Experimental Biodegradation	28 days	BOD	<1 %BOD/ThOD	OECD 301F - Manometric respirometry
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine,	193098-40-7	Experimental Biodegradation	29 days	CO2 evolution	0 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2

polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated						
CAMPHENЕ	79-92-5	Experimental Biodegradation	28 days	BOD	2 %BOD/ThOD	OECD 301C - MITI test (I)
CAMPHENЕ	79-92-5	Experimental Photolysis		Photolytic half-life (in air)	7.2 hours (t 1/2)	

## 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	Analogous Compound BCF - Fish	56 hours	Bioaccumulation factor	37	OECD305-Bioconcentration
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	Experimental Bioconcentration		Log Kow	4.52	OECD 117 log Kow HPLC method
isooctyl acrylate	29590-42-9	Estimated Bioconcentration		Bioaccumulation factor	120-940	Catalogic™
isooctyl acrylate	29590-42-9	Experimental Bioconcentration		Log Kow	4.6	
hexamethylene diacrylate	13048-33-4	Experimental Bioconcentration		Log Kow	2.81	
2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol	67906-98-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
diphenyl(2,4,6-trimethylbenzoyl)p-hosphine oxide	75980-60-8	Experimental BCF - Fish	56 days	Bioaccumulation factor	≤40	
2-Propenoic acid, 2-hydroxyethyl ester, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-oxepanone and 2,2'-oxybis[ethanol]	72162-39-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Benzophenone	119-61-9	Experimental BCF - Fish	56 days	Bioaccumulation factor	<12	
29H,31H-Phthalocyaninato(2-)N29,N30,N31,N32 copper	147-14-8	Experimental BCF - Fish	42 days	Bioaccumulation factor	<3.6	OECD305-Bioconcentration
N,N'-Bis(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction products, methylated	193098-40-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
CAMPHENЕ	79-92-5	Experimental BCF - Fish	56 days	Bioaccumulation factor	606-1290	OECD305-Bioconcentration

## 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	Analogous Compound Mobility in Soil	Koc	5,100 l/kg	OECD 121 Estim. of Koc by HPLC
isooctyl acrylate	29590-42-9	Experimental Mobility in Soil	Koc	1,500 l/kg	
hexamethylene diacrylate	13048-33-4	Estimated Mobility in Soil	Koc	220 l/kg	Episuite™
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Modeled Mobility in Soil	Koc	10,000,000,000 l/kg	Episuite™

## 12.5. Results of the PBT and vPvB assessment

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

## 12.6. Other adverse effects

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)

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

## SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN3082	UN3082	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ISOBORNYL ACRYLATE; TETRAHYDROFURFURYL ACRYLATE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ISOBORNYL ACRYLATE; TETRAHYDROFURFURYL ACRYLATE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ISOBORNYL ACRYLATE; TETRAHYDROFURFURYL 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

Benzophenone	119-61-9	Carc. 1B	Annex VI-18th ATP according to the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain
Benzophenone	119-61-9	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

#### Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

**COMAH Regulation, SI 2015/483**

Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for the application of	
	Lower-tier requirements	Upper-tier requirements
E1 Hazardous to the Aquatic environment	100	200

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
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	200	500
isoctyl acrylate	29590-42-9	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**

EUH071	Corrosive to the respiratory tract.
H228	Flammable solid.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.
H360Df	May damage the unborn child. Suspected of damaging fertility.
H360F	May damage fertility.
H360FD	May damage fertility. May damage the unborn child.
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:**

GB Section 02: CLP Ingredient table information was modified.

Section 3: Composition/ Information of ingredients table 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: Reproductive Toxicity Table information was modified.  
Section 11: Serious Eye Damage/Irritation Table information was modified.  
Section 11: Skin Corrosion/Irritation Table information was modified.  
Section 11: Skin Sensitization Table information was modified.  
Section 11: Target Organs - Repeated Table information was modified.  
Section 11: Target Organs - Single Table information was modified.  
Section 12: Component ecotoxicity information information was modified.  
Section 12: Mobility in soil information information was modified.  
Section 12: Persistence and Degradability information information was modified.  
Section 12: Biocumulative potential information information was modified.

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