



## Safety Data Sheet

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<b>Revision date:</b>	16/06/2020	<b>Supersedes date:</b>	14/05/2020
<b>Transportation version number:</b>	8.00 (05/06/2017)		

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

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

#### 1.1. Product identifier

3M™ Flexible Foam Adhesive PN 08463

#### Product Identification Numbers

60-9800-3647-3

7100045768

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

##### Identified uses

Automotive.

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

**Address:** 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.  
**Telephone:** +44 (0)1344 858 000  
**E Mail:** tox.uk@mmm.com  
**Website:** www.3M.com/uk

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

**This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet for each of these components is included. Please do not separate the component Safety Data Sheets from this cover page. The document numbers of the MSDSs for components of this product are:**

07-3378-2, 07-5569-4

### TRANSPORTATION INFORMATION

60-9800-3647-3

Not hazardous for transportation

## KIT LABEL

### 2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

#### CLASSIFICATION:

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334  
Skin Sensitization, Category 1 - Skin Sens. 1; H317  
Reproductive Toxicity, Category 1B - Repr. 1B; H360  
Carcinogenicity, Category 2 - Carc. 2; H351  
Germ Cell Mutagenicity, Category 2 - Muta. 2; H341  
Specific Target Organ Toxicity-Single Exposure, Category 2 - STOT SE 2; H371  
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335  
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373  
Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

#### SIGNAL WORD

DANGER.

#### Symbols:

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

#### Pictograms



#### Contains:

4,4'-methylenediphenyl diisocyanate; Formaldehyde, oligomeric reaction products with aniline and phosgene; o-(p-isocyanatobenzyl)phenyl isocyanate; dibutyltin dilaurate; Polymethylene polyphenylene isocyanate

#### HAZARD STATEMENTS:

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H360FD	May damage fertility. May damage the unborn child.
H351	Suspected of causing cancer.
H341	Suspected of causing genetic defects.
H371	May cause damage to organs: immune system
H373	May cause damage to organs through prolonged or repeated exposure: immune system

liver |  
respiratory system |

H412 Harmful to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS**

**Prevention:**

P260A Do not breathe vapours.  
P280E Wear protective gloves.

**Response:**

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

**Disposal:**

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

**SUPPLEMENTAL INFORMATION:**

**Supplemental Precautionary Statements:**

Restricted to professional users.

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

**Revision information:**

Kit Information: CLP Target Organ Hazard Statement information was added.  
Kit Information: CLP Target Organ Hazard Statement information was modified.  
Label: CLP Classification information was modified.



## Safety Data Sheet

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**Document group:** 07-5569-4 **Version number:** 14.00  
**Revision date:** 15/06/2020 **Supersedes date:** 04/07/2019  
**Transportation version number:** 1.00 (04/08/2011)

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

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

#### 1.1. Product identifier

3M Flexible Foam Adhesive PN 08463, Part B

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

##### Identified uses

Automotive.

#### 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  
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**Website:** www.3M.com/uk

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

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 Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Skin Sensitization, Category 1B - Skin Sens. 1B; H317  
Reproductive Toxicity, Category 1B - Repr. 1B; H360  
Germ Cell Mutagenicity, Category 2 - Muta. 2; H341  
Specific Target Organ Toxicity-Single Exposure, Category 2 - STOT SE 2; H371  
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373  
Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

**2.2. Label elements**

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

**SIGNAL WORD**

DANGER.

**Symbols:**

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

**Pictograms**



**Ingredients:**

Ingredient	CAS Nbr	EC No.	% by Wt
dibutyltin dilaurate	77-58-7	201-039-8	< 2

**HAZARD STATEMENTS:**

H319	Causes serious eye irritation.		
H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		
H360FD	May damage fertility. May damage the unborn child.		
H341	Suspected of causing genetic defects.		
H371	May cause damage to organs: immune system		
H373	May cause damage to organs through prolonged or repeated exposure: immune system   liver		
H412	Harmful to aquatic life with long lasting effects.		

**PRECAUTIONARY STATEMENTS**

**Prevention:**

P260A	Do not breathe vapours.
P280E	Wear protective gloves.

**Response:**

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P308 + P313	IF exposed or concerned: Get medical advice/attention.

**Disposal:**

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

**Supplemental Precautionary Statements:**

Restricted to professional users.

51% of the mixture consists of components of unknown acute inhalation toxicity.

Contains 6% of components with unknown hazards to the aquatic environment.

**2.3. Other hazards**

None known.

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

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
Glycerol, propoxylated	25791-96-2	500-044-5		30 - 60	Substance not classified as hazardous
Glycerol poly(oxyethylene, oxypropylene) ether	9082-00-2			30 - 60	Substance not classified as hazardous
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7			3 - 7	Substance with an occupational exposure limit
Non-Hazardous Ingredients	Mixture			1 - 5	Substance not classified as hazardous
Oxydipropanol	25265-71-8	246-770-3	01-2119456811-38	1 - 5	Substance not classified as hazardous
dibutyltin dilaurate	77-58-7	201-039-8		< 2	Muta. 2, H341; Repr. 1B, H360FD; STOT RE 1, H372 Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=1 Acute Tox. 4, H302; Skin Corr. 1C, H314; Eye Dam. 1, H318; Skin Sens. 1B, H317; STOT SE 1, H370
2,2' -oxybisethanol	111-46-6	203-872-2	01-2119457857-21	< 1.5	Acute Tox. 4, H302
1,4-diazabicyclooctane	280-57-9	205-999-9		0.5 - 1.5	Acute Tox. 4, H302; Eye Dam. 1, H318
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	221-220-5		< 1	Skin Corr. 1A, H314 Acute Tox. 3, H331; Acute Tox. 3, H311; Acute Tox. 4, H302

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

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

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

#### **Inhalation**

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

#### **Skin contact**

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

#### **Eye contact**

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

#### **If swallowed**

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

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

See Section 11.1 Information on toxicological effects

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

Not applicable

### **SECTION 5: Fire-fighting measures**

#### **5.1. Extinguishing media**

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

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

None inherent in this product.

#### **5.3. Advice for fire-fighters**

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 detergent and water. 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 use in a confined area with minimal air exchange. 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. Use personal protective equipment (eg. gloves, respirators...) as required.

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

Store in a well-ventilated place. Store away from heat. Store away from areas where product may come into contact with food or pharmaceuticals.

**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>
2,2' -oxybisethanol	111-46-6	UK HSC	TWA:101 mg/m <sup>3</sup> (23 ppm)	
Silicon dioxide	67762-90-7	UK HSC	TWA(as respirable dust):2.4 mg/m <sup>3</sup> ;TWA(as inhalable dust):6 mg/m <sup>3</sup>	
Tin, organic compounds, except cyhexatin	77-58-7	UK HSC	TWA(as Sn):0.1 mg/m <sup>3</sup> ;STEL(as Sn):0.2 mg/m <sup>3</sup>	SKIN

UK HSC : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

**Biological limit values**

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

**Derived no effect level (DNEL)**

<b>Ingredient</b>	<b>Degradation Product</b>	<b>Population</b>	<b>Human exposure pattern</b>	<b>DNEL</b>
2,2' -oxybisethanol		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	106 mg/kg bw/d
2,2' -oxybisethanol		Worker	Inhalation, Long-term exposure (8 hours), Local effects	60 mg/m <sup>3</sup>

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

**8.2. Exposure controls**

In addition, refer to the annex for more information.

**8.2.1. Engineering controls**



Provide appropriate local exhaust ventilation on open containers. 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. Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining.

### **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.

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

<b>Material</b>	<b>Thickness (mm)</b>	<b>Breakthrough Time</b>
Neoprene.	No data available	No data available
Nitrile rubber.	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: Neoprene apron.

Apron – Nitrile

#### **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

### **8.2.3. Environmental exposure controls**

Refer to Annex

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

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

#### **Appearance**

<b>Physical state</b>	Liquid.
<b>Colour</b>	Black
<b>Specific Physical Form:</b>	Flexible Foam
<b>Odor</b>	Odourless
<b>Odour threshold</b>	<i>No data available.</i>
<b>pH</b>	<i>Not applicable.</i>
<b>Boiling point/boiling range</b>	<i>Not applicable.</i>
<b>Melting point</b>	<i>Not applicable.</i>
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Explosive properties</b>	Not classified
<b>Oxidising properties</b>	Not classified
<b>Flash point</b>	≥121.1 °C [ <i>Test Method:</i> Tagliabue closed cup]
<b>Autoignition temperature</b>	<i>No data available.</i>
<b>Flammable Limits(LEL)</b>	<i>No data available.</i>
<b>Flammable Limits(UEL)</b>	<i>No data available.</i>
<b>Vapour pressure</b>	≤186,158.4 Pa [ <i>@ 55 °C</i> ] [ <i>Details:</i> MITS data]
<b>Relative density</b>	0.96 - 1.03 [ <i>Ref Std:</i> WATER=1]
<b>Water solubility</b>	Moderate
<b>Solubility- non-water</b>	<i>No data available.</i>
<b>Partition coefficient: n-octanol/water</b>	<i>No data available.</i>
<b>Evaporation rate</b>	<i>Not applicable.</i>
<b>Vapour density</b>	<i>Not applicable.</i>
<b>Decomposition temperature</b>	<i>No data available.</i>
<b>Viscosity</b>	<i>No data available.</i>
<b>Density</b>	0.96 - 1.03 g/ml
<b>9.2. Other information</b>	
<b>EU Volatile Organic Compounds</b>	<i>No data available.</i>
<b>Molecular weight</b>	<i>No data available.</i>
<b>Percent volatile</b>	26.3 % weight

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

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

### 10.2 Chemical stability

Stable.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

None known.

### 10.5 Incompatible materials

None known.

### 10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not specified.
Carbon dioxide.	Not specified.
Toxic vapour, gas, particulate.	Not specified.

## SECTION 11: Toxicological information

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

### 11.1 Information on Toxicological effects

#### Signs and Symptoms of Exposure

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

##### Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

##### Skin contact

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

##### Eye contact

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

##### Ingestion

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

#### Additional Health Effects:

##### Single exposure may cause target organ effects:

Liver effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice. 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. Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate. 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.

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

Liver effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice. 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.

##### Reproductive/Developmental Toxicity:

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

##### Genotoxicity:

Genotoxicity and Mutagenicity: May interact with genetic material and possibly alter gene expression.

##### 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.

**3M Flexible Foam Adhesive PN 08463, Part B****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 >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Glycerol poly(oxyethylene, oxypropylene) ether	Dermal	Rabbit	LD50 > 5,000 mg/kg
Glycerol poly(oxyethylene, oxypropylene) ether	Ingestion	Rat	LD50 > 10,000 mg/kg
Glycerol, propoxylated	Dermal	Rat	LD50 > 2,000 mg/kg
Glycerol, propoxylated	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 50 mg/l
Glycerol, propoxylated	Ingestion	Rat	LD50 4,600 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Oxydipropanol	Dermal	Rabbit	LD50 > 5,010 mg/kg
Oxydipropanol	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.34 mg/l
Oxydipropanol	Ingestion	Rat	LD50 > 5,010 mg/kg
dibutyltin dilaurate	Dermal	Rat	LD50 > 2,000 mg/kg
dibutyltin dilaurate	Ingestion	Rat	LD50 1,290 mg/kg
2,2' -oxybisethanol	Ingestion	Human	LD50 estimated to be 300 - 2,000 mg/kg
2,2' -oxybisethanol	Dermal	Rabbit	LD50 13,300 mg/kg
2,2' -oxybisethanol	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.6 mg/l
1,4-diazabicyclooctane	Dermal	Rabbit	LD50 > 3,200 mg/kg
1,4-diazabicyclooctane	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.05 mg/l
1,4-diazabicyclooctane	Ingestion	Rat	LD50 1,870 mg/kg
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	Dermal	Rabbit	LD50 238 mg/kg
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	Inhalation-Vapour (4 hours)	Rat	LC50 2.2 mg/l
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	Ingestion	Rat	LD50 570 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Glycerol, propoxylated	Rabbit	No significant irritation
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation
Oxydipropanol	Rabbit	No significant irritation
dibutyltin dilaurate	Rabbit	Corrosive
2,2' -oxybisethanol	Rabbit	No significant irritation
1,4-diazabicyclooctane	Rabbit	Mild irritant

**Serious Eye Damage/Irritation**

Name	Species	Value
Glycerol, propoxylated	Rabbit	Mild irritant
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation
Oxydipropanol	Rabbit	No significant irritation
dibutyltin dilaurate	Rabbit	Corrosive
2,2' -oxybisethanol	Rabbit	Mild irritant
1,4-diazabicyclooctane	Rabbit	Corrosive

**3M Flexible Foam Adhesive PN 08463, Part B**

**Skin Sensitisation**

Name	Species	Value
Siloxanes and Silicones, di-Me, reaction products with silica	Human and animal	Not classified
Oxydipropanol	Guinea pig	Not classified
dibutyltin dilaurate	Guinea pig	Sensitising

**Respiratory Sensitisation**

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

**Germ Cell Mutagenicity**

Name	Route	Value
Siloxanes and Silicones, di-Me, reaction products with silica	In Vitro	Not mutagenic
Oxydipropanol	In Vitro	Not mutagenic
Oxydipropanol	In vivo	Not mutagenic
dibutyltin dilaurate	In Vitro	Some positive data exist, but the data are not sufficient for classification
dibutyltin dilaurate	In vivo	Mutagenic

**Carcinogenicity**

Name	Route	Species	Value
Siloxanes and Silicones, di-Me, reaction products with silica	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
Oxydipropanol	Ingestion	Multiple animal species	Not carcinogenic

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Oxydipropanol	Ingestion	Not classified for development	Rat	NOAEL 5,000 mg/kg/day	during organogenesis
dibutyltin dilaurate	Ingestion	Toxic to female reproduction	Rat	NOAEL 2 mg/kg/day	pre mating into lactation
dibutyltin dilaurate	Ingestion	Toxic to development	Rat	NOAEL 2.5 mg/kg/day	during gestation

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
dibutyltin dilaurate	Ingestion	immune system	Causes damage to organs	Rat	LOAEL 5 mg/kg	
2,2' -oxybisethanol	Ingestion	liver   nervous system   kidney and/or bladder	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
2,2' -oxybisethanol	Ingestion	central nervous	May cause drowsiness or	Human	NOAEL Not	poisoning

**3M Flexible Foam Adhesive PN 08463, Part B**

		system depression	dizziness		available	and/or abuse
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**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Oxydipropanol	Ingestion	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 470 mg/kg/day	105 weeks
Oxydipropanol	Ingestion	heart	Not classified	Rat	NOAEL 470 mg/kg/day	105 weeks
Oxydipropanol	Ingestion	endocrine system   liver	Not classified	Rat	NOAEL 3,040 mg/kg/day	105 weeks
Oxydipropanol	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 115 mg/kg/day	105 weeks
Oxydipropanol	Ingestion	skin   bone, teeth, nails, and/or hair   hematopoietic system   immune system   nervous system   vascular system	Not classified	Rat	NOAEL 3,040 mg/kg/day	105 weeks
dibutyltin dilaurate	Ingestion	liver	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 2 mg/kg/day	2 weeks
dibutyltin dilaurate	Ingestion	immune system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.3 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.

**SECTION 12: Ecological information**

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

**12.1. Toxicity**

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
Glycerol poly(oxyethylene, oxypropylene) ether	9082-00-2	Inland Silverside	Estimated	96 hours	LC50	650 mg/l
Glycerol, propoxylated	25791-96-2	Golden Orfe	Experimental	96 hours	LC50	>1,000 mg/l
Glycerol, propoxylated	25791-96-2	Green Algae	Experimental	72 hours	EC50	>100 mg/l
Glycerol, propoxylated	25791-96-2	Water flea	Experimental	48 hours	EC50	>100 mg/l
Glycerol, propoxylated	25791-96-2	Green Algae	Experimental	72 hours	NOEC	>=100 mg/l
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7		Data not available or insufficient for classification			

**3M Flexible Foam Adhesive PN 08463, Part B**

Oxydipropanol	25265-71-8	Goldfish	Experimental	96 hours	LC50	>5,000 mg/l
Oxydipropanol	25265-71-8	Green algae	Experimental	72 hours	EC50	>100 mg/l
Oxydipropanol	25265-71-8	Water flea	Experimental	48 hours	EC50	>100 mg/l
Oxydipropanol	25265-71-8	Green algae	Experimental	72 hours	NOEC	100 mg/l
dibutyltin dilaurate	77-58-7	Water flea	Experimental	48 hours	IC50	0.17 mg/l
2,2'-oxybisethanol	111-46-6	Fathead minnow	Experimental	96 hours	LC50	75,200 mg/l
2,2'-oxybisethanol	111-46-6	Water flea	Experimental	48 hours	LC50	48,900 mg/l
2,2'-oxybisethanol	111-46-6	Green Algae	Estimated	72 hours	NOEC	>100 mg/l
2,2'-oxybisethanol	111-46-6	Water flea	Experimental	7 days	NOEC	8,590 mg/l
1,4-diazabicyclooctane	280-57-9	Common Carp	Experimental	96 hours	LC50	>100 mg/l
1,4-diazabicyclooctane	280-57-9	Green Algae	Experimental	72 hours	EC50	180 mg/l
1,4-diazabicyclooctane	280-57-9	Water flea	Experimental	48 hours	EC50	>100 mg/l
1,4-diazabicyclooctane	280-57-9	Green Algae	Experimental	72 hours	Effect Concentration 10%	79 mg/l
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Green algae	Experimental	72 hours	EC50	24 mg/l
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Water flea	Experimental	48 hours	EC50	102 mg/l
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Zebra Fish	Experimental	96 hours	LC50	131.2 mg/l
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Green algae	Experimental	72 hours	Effect Concentration 10%	5 mg/l

**12.2. Persistence and degradability**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Glycerol poly(oxyethylene, oxypropylene) ether	9082-00-2	Data not availbl-insufficient			N/A	
Glycerol, propoxylated	25791-96-2	Experimental Biodegradation	28 days	CO2 evolution	38 % weight	OECD 301B - Modified sturm or CO2
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	Data not availbl-insufficient			N/A	
Oxydipropanol	25265-71-8	Experimental Biodegradation	28 days	BOD	84.4 % BOD/ThBOD	OECD 301F - Manometric respirometry
dibutyltin dilaurate	77-58-7	Experimental Biodegradation	39 days	BOD	23 % weight	OECD 301F - Manometric respirometry
2,2'-oxybisethanol	111-46-6	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	91.8 % weight	OECD 301A - DOC Die Away Test
1,4-diazabicyclooctane	280-57-9	Experimental Biodegradation	28 days	CO2 evolution	7 % weight	OECD 301B - Modified sturm or CO2
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Experimental Biodegradation	28 days	BOD	0 % BOD/ThBOD	OECD 301C - MITI test (I)

**12.3 : Bioaccumulative potential**

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Glycerol poly(oxyethylene, oxypropylene) ether	9082-00-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glycerol, propoxylated	25791-96-2	Experimental BCF-Carp	42 days	Bioaccumulation factor	≤7	Other methods
Siloxanes and Silicones, di-	67762-90-7	Data not available	N/A	N/A	N/A	N/A

**3M Flexible Foam Adhesive PN 08463, Part B**

Me, reaction products with silica		or insufficient for classification				
Oxydipropanol	25265-71-8	Experimental BCF-Carp	42 days	Bioaccumulation factor	4.6	OECD 305E - Bioaccumulation flow-through fish test
dibutyltin dilaurate	77-58-7	Experimental BCF-Carp	56 days	Bioaccumulation factor	110	Other methods
2,2'-oxybisethanol	111-46-6	Experimental Bioconcentration		Log Kow	-1.98	Other methods
1,4-diazabicyclooctane	280-57-9	Experimental BCF-Carp	42 days	Bioaccumulation factor	<13	OECD 305E - Bioaccumulation flow-through fish test
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Experimental Bioconcentration		Log Kow	-0.339	Other methods

**12.4. Mobility in soil**

Please contact manufacturer for more details

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

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

**12.6. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

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

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)**

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

**SECTION 14: Transportation information**

ADR/IMDG/IATA: Not restricted for transport.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.2. Chemical Safety Assessment**



A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

## **SECTION 16: Other information**

### **List of relevant H statements**

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H360FD	May damage fertility. May damage the unborn child.
H370	Causes damage to organs.
H371	May cause damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### **Revision information:**

Professional Use of Adhesives and Sealants: Section 16: Annex information was modified.

CLP: Ingredient table information was modified.

Label: CLP Classification information was modified.

Label: CLP Target Organ Hazard Statement information was added.

Label: CLP Target Organ Hazard Statement information was modified.

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

Section 8: DNEL table row information was modified.

Section 8: Occupational exposure limit table information was modified.

Section 09: Color information was added.

Section 09: Odor information was added.

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

Section 10: Hazardous decomposition or by-products table information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Mutagenicity information information was added.

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Serious Eye Damage/Irritation Table information was modified.

Section 11: Single exposure may cause standard phrases information was modified.

Section 11: Skin Corrosion/Irritation Table information was modified.

Section 11: Skin Sensitization Table information was modified.

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

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

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12: Biocumulative potential information information was modified.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.

Section 16: UK disclaimer information was deleted.

## Annex

<b>1. Title</b>	
<b>Substance identification</b>	2,2' -oxybisethanol; EC No. 203-872-2; CAS Nbr 111-46-6;
<b>Exposure Scenario Name</b>	Professional Use of Adhesives and Sealants
<b>Lifecycle Stage</b>	Use at industrial sites
<b>Contributing activities</b>	PROC 13 -Treatment of articles by dipping and pouring ERC 08c -Widespread use leading to inclusion into/onto article (indoor)
<b>Processes, tasks and activities covered</b>	Application of product with applicator gun.
<b>2. Operational conditions and risk management measures</b>	
<b>Operating Conditions</b>	<b>Physical state:</b> Liquid. <b>General operating conditions:</b> Duration of use: 8 hours/day; Emission days per year: <= 240 days per year; Indoor use;
<b>Risk management measures</b>	Under the operational conditions described above the following risk management measures apply: <b>General risk management measures:</b> <b>Human health:</b> Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Refer to Section 8 of the SDS for specific glove material.; <b>Environmental:</b> None needed;
<b>Waste management measures</b>	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:
<b>3. Prediction of exposure</b>	
<b>Prediction of exposure</b>	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

3M United Kingdom MSDSs are available at [www.3M.com/uk](http://www.3M.com/uk)



## Safety Data Sheet

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<b>Transportation version number:</b>	1.00 (29/03/2011)		

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

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

#### 1.1. Product identifier

3M Flexible Foam/Part A, 08463

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

##### Identified uses

Automotive.

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

**Address:** 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.  
**Telephone:** +44 (0)1344 858 000  
**E Mail:** tox.uk@mmm.com  
**Website:** www.3M.com/uk

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

##### CLASSIFICATION:

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334  
Skin Sensitization, Category 1 - Skin Sens. 1; H317  
Carcinogenicity, Category 2 - Carc. 2; H351  
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335  
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

For full text of H phrases, see Section 16.

#### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

**SIGNAL WORD**

DANGER.

**Symbols:**

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

**Pictograms****Ingredients:**

Ingredient	CAS Nbr	EC No.	% by Wt
Formaldehyde, oligomeric reaction products with aniline and phosgene	32055-14-4	500-079-6	10 - 30
Polymethylene polyphenylene isocyanate	9016-87-9		10 - 30
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	227-534-9	1 - 10
4,4'-methylenediphenyl diisocyanate	101-68-8	202-966-0	1 - 10

**HAZARD STATEMENTS:**

H319	Causes serious eye irritation.	
H315	Causes skin irritation.	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
H317	May cause an allergic skin reaction.	
H335	May cause respiratory irritation.	
H351	Suspected of causing cancer.	
H373	May cause damage to organs through prolonged or repeated exposure:	respiratory system

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

P260A	Do not breathe vapours.
P280E	Wear protective gloves.

**Response:**

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

38% of the mixture consists of components of unknown acute oral toxicity.

Contains 41% 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.

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

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
Urethane Prepolymer NJTSRN 04499600-6306	Trade Secret			30 - 60	Substance not classified as hazardous
Formaldehyde, oligomeric reaction products with aniline and phosgene	32055-14-4	500-079-6		10 - 30	Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317; Carc. 2, H351; STOT SE 3, H335; STOT RE 2, H373
Polymethylene polyphenylene isocyanate	9016-87-9			10 - 30	Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317; Carc. 2, H351; STOT SE 3, H335; STOT RE 2, H373
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	227-534-9		1 - 10	Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317; Carc. 2, H351; STOT SE 3, H335; STOT RE 2, H373 - Nota 2,C
4,4'-methylenediphenyl diisocyanate	101-68-8	202-966-0		1 - 10	Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317; Carc. 2, H351; STOT SE 3, H335; STOT RE 2, H373 - Nota 2,C
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7			1 - 5	Substance with an occupational exposure limit

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

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation

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

#### Skin contact

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

#### Eye contact

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

#### If swallowed

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

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

See Section 11.1 Information on toxicological effects

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

Not applicable

## SECTION 5: Fire-fighting measures

#### 5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

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

None inherent in this product.

#### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Isocyanates	During combustion.
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Hydrogen cyanide.	During combustion.
Oxides of nitrogen.	During combustion.

#### 5.3. Advice for fire-fighters

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

Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. 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 container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. 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. 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 use in a confined area with minimal air exchange. 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.

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

Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from heat. Store away from amines.

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

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

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Occupational exposure limits**

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Silicon dioxide	67762-90-7	UK HSC	TWA(as respirable dust):2.4 mg/m <sup>3</sup> ;TWA(as inhalable dust):6 mg/m <sup>3</sup>	
Free isocyanates	9016-87-9	UK HSC	TWA(as NCO):0.02 mg/m <sup>3</sup> ;STEL(as NCO):0.07 mg/m <sup>3</sup>	Respiratory Sensitizer

UK HSC : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

**Biological limit values**

Ingredient	CAS Nbr	Agency	Determinant	Biological Specimen	Sampling Time	Value	Additional comments
Free isocyanates	9016-87-9	UK EH40 BMGVs	Isocyanate-derived diamine	Creatinine in urine	EPE	1 umol/mol	

UK EH40 BMGVs : UK. EH40 Biological Monitoring Guidance Values (BMGVs)

EPE: At the end of the period of exposure.

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

**8.2. Exposure controls****8.2.1. Engineering controls**

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

**8.2.2. Personal protective equipment (PPE)****Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face

protection(s) are recommended:  
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.

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

<b>Material</b>	<b>Thickness (mm)</b>	<b>Breakthrough Time</b>
Butyl rubber.	No data available	No data available
Neoprene.	No data available	No data available
Nitrile rubber.	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 – Butyl rubber

Neoprene apron.

Apron – Nitrile

**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**

**Appearance**

**Physical state**

Liquid.

**Colour**

Brown

**Specific Physical Form:**

Paste

**Odor**

Odourless

**Odour threshold**

*No data available.*

**pH**

*Not applicable.*

**Boiling point/boiling range**

$\geq 148.9$  °C

**Melting point**

*Not applicable.*

**Flammability (solid, gas)**

Not applicable.

**Explosive properties**

Not classified



<b>Oxidising properties</b>	Not classified
<b>Flash point</b>	$\geq 148.9$ °C [ <i>Test Method</i> :Closed Cup]
<b>Autoignition temperature</b>	<i>No data available.</i>
<b>Flammable Limits(LEL)</b>	<i>No data available.</i>
<b>Flammable Limits(UEL)</b>	<i>No data available.</i>
<b>Vapour pressure</b>	$\leq 186,158.4$ Pa [ <i>@ 55 °C</i> ] [ <i>Details</i> :MITS data]
<b>Relative density</b>	1.135 - 1.16 [ <i>Ref Std</i> :WATER=1]
<b>Water solubility</b>	<i>Not applicable.</i>
<b>Solubility- non-water</b>	<i>No data available.</i>
<b>Partition coefficient: n-octanol/water</b>	<i>No data available.</i>
<b>Evaporation rate</b>	<i>Not applicable.</i>
<b>Vapour density</b>	8.5 [ <i>Ref Std</i> :AIR=1]
<b>Decomposition temperature</b>	<i>No data available.</i>
<b>Viscosity</b>	<i>No data available.</i>
<b>Density</b>	1.135 - 1.16 g/ml

#### 9.2. Other information

<b>EU Volatile Organic Compounds</b>	<i>No data available.</i>
<b>Molecular weight</b>	<i>No data available.</i>
<b>Percent volatile</b>	0.1 % 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 will not occur.

### 10.4 Conditions to avoid

Heat.

### 10.5 Incompatible materials

Amines.

Alcohols.

Water

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

### 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 EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

## 11.1 Information on Toxicological effects

### Signs and Symptoms of Exposure

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

#### Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest. May cause additional health effects (see below).

#### Skin contact

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

#### Eye contact

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

#### Ingestion

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

#### Additional Health Effects:

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

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.

#### 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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Formaldehyde, oligomeric reaction products with aniline and phosgene	Dermal	Rabbit	LD50 > 5,000 mg/kg
Polymethylene polyphenylene isocyanate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Formaldehyde, oligomeric reaction products with aniline and phosgene	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l
Formaldehyde, oligomeric reaction products with aniline and phosgene	Ingestion	Rat	LD50 31,600 mg/kg
Polymethylene polyphenylene isocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l
Polymethylene polyphenylene isocyanate	Ingestion	Rat	LD50 31,600 mg/kg
o-(p-isocyanatobenzyl)phenyl isocyanate	Dermal	Rabbit	LD50 > 5,000 mg/kg
4,4'-methylenediphenyl diisocyanate	Dermal	Rabbit	LD50 > 5,000 mg/kg
o-(p-isocyanatobenzyl)phenyl isocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l
o-(p-isocyanatobenzyl)phenyl isocyanate	Ingestion	Rat	LD50 31,600 mg/kg
4,4'-methylenediphenyl diisocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l

**3M Flexible Foam/Part A, 08463**

4,4'-methylenediphenyl diisocyanate	Ingestion	Rat	LD50 31,600 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Formaldehyde, oligomeric reaction products with aniline and phosgene	official classification	Irritant
Polymethylene polyphenylene isocyanate	official classification	Irritant
o-(p-isocyanatobenzyl)phenyl isocyanate	official classification	Irritant
4,4'-methylenediphenyl diisocyanate	official classification	Irritant
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
Formaldehyde, oligomeric reaction products with aniline and phosgene	official classification	Severe irritant
Polymethylene polyphenylene isocyanate	official classification	Severe irritant
o-(p-isocyanatobenzyl)phenyl isocyanate	official classification	Severe irritant
4,4'-methylenediphenyl diisocyanate	official classification	Severe irritant
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation

**Skin Sensitisation**

Name	Species	Value
Formaldehyde, oligomeric reaction products with aniline and phosgene	official classification	Sensitising
Polymethylene polyphenylene isocyanate	official classification	Sensitising
o-(p-isocyanatobenzyl)phenyl isocyanate	official classification	Sensitising
4,4'-methylenediphenyl diisocyanate	official classification	Sensitising
Siloxanes and Silicones, di-Me, reaction products with silica	Human and animal	Not classified

**Respiratory Sensitisation**

Name	Species	Value
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**3M Flexible Foam/Part A, 08463**

Formaldehyde, oligomeric reaction products with aniline and phosgene	Human	Sensitising
Polymethylene polyphenylene isocyanate	Human	Sensitising
o-(p-isocyanatobenzyl)phenyl isocyanate	Human	Sensitising
4,4'-methylenediphenyl diisocyanate	Human	Sensitising

**Germ Cell Mutagenicity**

Name	Route	Value
Formaldehyde, oligomeric reaction products with aniline and phosgene	In Vitro	Some positive data exist, but the data are not sufficient for classification
Polymethylene polyphenylene isocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
o-(p-isocyanatobenzyl)phenyl isocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
4,4'-methylenediphenyl diisocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Siloxanes and Silicones, di-Me, reaction products with silica	In Vitro	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
Formaldehyde, oligomeric reaction products with aniline and phosgene	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Polymethylene polyphenylene isocyanate	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
o-(p-isocyanatobenzyl)phenyl isocyanate	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
4,4'-methylenediphenyl diisocyanate	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Siloxanes and Silicones, di-Me, reaction products with silica	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification

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

Name	Route	Value	Species	Test result	Exposure Duration
Formaldehyde, oligomeric reaction products with aniline and phosgene	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis
Polymethylene polyphenylene isocyanate	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis
o-(p-isocyanatobenzyl)phenyl isocyanate	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis
4,4'-methylenediphenyl diisocyanate	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 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
Formaldehyde, oligomeric reaction products with aniline and phosgene	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
Polymethylene polyphenylene isocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	

**3M Flexible Foam/Part A, 08463**

				tion		
o-(p-isocyanatobenzyl)phenyl isocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
4,4'-methylenediphenyl diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Formaldehyde, oligomeric reaction products with aniline and phosgene	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
Polymethylene polyphenylene isocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
o-(p-isocyanatobenzyl)phenyl isocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
4,4'-methylenediphenyl diisocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

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

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

**SECTION 12: Ecological information**

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

**12.1. Toxicity**

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
Urethane Prepolymer NJTSRN 04499600-6306	Trade Secret		Data not available or insufficient for classification			
Formaldehyde, oligomeric reaction products with aniline and phosgene	32055-14-4	Water flea	Estimated	24 hours	EC50	>100 mg/l
Formaldehyde, oligomeric reaction products with aniline and phosgene	32055-14-4	Green algae	Estimated	72 hours	Effect Level 50%	>100 mg/l
Formaldehyde, oligomeric reaction products with aniline and phosgene	32055-14-4	Green algae	Estimated	72 hours	No obs Effect Level	>100 mg/l
Polymethylene polyphenylene isocyanate	9016-87-9	Water flea	Estimated	24 hours	EC50	>100 mg/l
o-(p-isocyanatobenzyl)phen	5873-54-1	Zebra Fish	Estimated	96 hours	LC50	>1,000 mg/l

**3M Flexible Foam/Part A, 08463**

yl isocyanate						
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Water flea	Estimated	24 hours	EC50	>100 mg/l
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Green algae	Estimated	72 hours	EC50	>100 mg/l
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Green algae	Estimated	72 hours	EC50	>1,640 mg/l
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Zebra Fish	Estimated	96 hours	LC50	>100 mg/l
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Water flea	Estimated	24 hours	EC50	>1,000 mg/l
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Green algae	Estimated	72 hours	No obs Effect Level	100 mg/l
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Water flea	Estimated	21 days	NOEC	10 mg/l
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Water flea	Estimated	21 days	NOEC	100 mg/l
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Green algae	Estimated	72 hours	NOEC	1,640 mg/l
4,4'-methylenediphenyl diisocyanate	101-68-8	Water flea	Estimated	24 hours	EC50	>100 mg/l
4,4'-methylenediphenyl diisocyanate	101-68-8	Green algae	Estimated	72 hours	EC50	>100 mg/l
4,4'-methylenediphenyl diisocyanate	101-68-8	Water flea	Estimated	24 hours	EC50	>1,000 mg/l
4,4'-methylenediphenyl diisocyanate	101-68-8	Green algae	Estimated	72 hours	EC50	>1,640 mg/l
4,4'-methylenediphenyl diisocyanate	101-68-8	Zebra Fish	Estimated	96 hours	LC50	>100 mg/l
4,4'-methylenediphenyl diisocyanate	101-68-8	Zebra Fish	Estimated	96 hours	LC50	>1,000 mg/l
4,4'-methylenediphenyl diisocyanate	101-68-8	Water flea	Estimated	21 days	NOEC	10 mg/l
4,4'-methylenediphenyl diisocyanate	101-68-8	Green algae	Estimated	72 hours	No obs Effect Level	100 mg/l
4,4'-methylenediphenyl diisocyanate	101-68-8	Green algae	Estimated	72 hours	NOEC	1,640 mg/l
4,4'-methylenediphenyl diisocyanate	101-68-8	Water flea	Estimated	21 days	NOEC	100 mg/l
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7		Data not available or insufficient for classification			

**12.2. Persistence and degradability**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Urethane Prepolymer NJTSRN 04499600-6306	Trade Secret	Data not availbl-insufficient			N/A	
Formaldehyde, oligomeric reaction products with aniline and phosgene	32055-14-4	Data not availbl-insufficient			N/A	
Polymethylene polyphenylene isocyanate	9016-87-9	Experimental Hydrolysis		Hydrolytic half-life	<2 hours (t 1/2)	Other methods
Polymethylene polyphenylene isocyanate	9016-87-9	Estimated Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)

**3M Flexible Foam/Part A, 08463**

o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Estimated Hydrolysis		Hydrolytic half-life	20 hours (t 1/2)	Other methods
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Data not available or insufficient			N/A	
4,4'-methylenediphenyl diisocyanate	101-68-8	Estimated Hydrolysis		Hydrolytic half-life	20 hours (t 1/2)	Other methods
4,4'-methylenediphenyl diisocyanate	101-68-8	Data not available or insufficient			N/A	
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	Data not available or insufficient			N/A	

**12.3 : Bioaccumulative potential**

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Urethane Prepolymer NJTSRN 04499600-6306	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Formaldehyde, oligomeric reaction products with aniline and phosgene	32055-14-4	Estimated Bioconcentration	28 days	Bioaccumulation factor	200	OECD 305E - Bioaccumulation flow-through fish test
Polymethylene polyphenylene isocyanate	9016-87-9	Estimated BCF-Carp	28 days	Bioaccumulation factor	200	Other methods
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Estimated BCF-Carp	28 days	Bioaccumulation factor	200	Other methods
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Experimental BCF-Carp	28 days	Bioaccumulation factor	200	OECD 305E - Bioaccumulation flow-through fish test
4,4'-methylenediphenyl diisocyanate	101-68-8	Estimated BCF-Carp	28 days	Bioaccumulation factor	200	Other methods
4,4'-methylenediphenyl diisocyanate	101-68-8	Experimental BCF-Carp	28 days	Bioaccumulation factor	200	OECD 305E - Bioaccumulation flow-through fish test
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

**12.4. Mobility in soil**

Please contact manufacturer for more details

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

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

**12.6. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

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

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

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

**EU waste code (product as sold)**

08 04 09\* Waste adhesives and sealants containing organic solvents or other dangerous substances  
 080501\* Waste isocyanates

**SECTION 14: Transportation information**

ADR/IATA/IMDG: Not restricted for transport.

**SECTION 15: Regulatory information**

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

**Carcinogenicity**

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Carc. 2	Regulation (EC) No. 1272/2008, Table 3.1
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Gr. 3: Not classifiable	International Agency for Research on Cancer
Formaldehyde, oligomeric reaction products with aniline and phosgene	32055-14-4	Carc. 2	3M classified according to Regulation (EC) No 1272/2008
4,4'-methylenediphenyl diisocyanate	101-68-8	Carc. 2	Regulation (EC) No. 1272/2008, Table 3.1
4,4'-methylenediphenyl diisocyanate	101-68-8	Gr. 3: Not classifiable	International Agency for Research on Cancer
Polymethylene polyphenylene isocyanate	9016-87-9	Carc. 2	3M classified according to Regulation (EC) No 1272/2008
Polymethylene polyphenylene isocyanate	9016-87-9	Gr. 3: Not classifiable	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 through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

<u>Ingredient</u>	<u>CAS Nbr</u>
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1
Formaldehyde, oligomeric reaction products with aniline and phosgene	32055-14-4
4,4'-methylenediphenyl diisocyanate	101-68-8

Restriction status: listed in REACH Annex XVII

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

**15.2. Chemical Safety Assessment**



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

## **SECTION 16: Other information**

### **List of relevant H statements**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

### **Revision information:**

Section 12: Component ecotoxicity information information was modified.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

**3M United Kingdom MSDSs are available at [www.3M.com/uk](http://www.3M.com/uk)**