



## Safety Data Sheet

Copyright,2025, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

**Document group:** 06-2072-4 **Version number:** 17.00  
**Revision date:** 09/09/2025 **Supersedes date:** 21/08/2024

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 Polyurethane General Purpose Seam Sealer, Black 08694,08789 and 08793

#### Product Identification Numbers

FI-3000-0103-4 FI-3000-0117-4 FI-3000-0254-5

7000077236 7000077248 7000077310

#### 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 Ireland Limited, 70 SIR JOHN ROGERSON'S QUAY, D02R296 DUBLIN 2  
**Telephone:** +353 1 280 3555  
**E Mail:** ner-productstewardship@mmm.com  
**Website:** www.3M.com

#### 1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

### 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.

This material has been tested for eye damage/irritation and the test results do not meet the criteria for classification.

##### CLASSIFICATION:

Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334

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

For full text of H phrases, see Section 16.

## 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

### SIGNAL WORD

DANGER.

### Symbols

GHS08 (Health Hazard) |

### Pictograms



### Ingredients:

| Ingredient                                                                                                             | CAS Nbr   | EC No.    | % by Wt |
|------------------------------------------------------------------------------------------------------------------------|-----------|-----------|---------|
| 4,4'-methylenediphenyl diisocyanate                                                                                    | 101-68-8  | 202-966-0 | < 1     |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate |           | 915-687-0 | < 0.2   |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | 5873-54-1 | 227-534-9 | < 0.1   |
| Tosyl chloride                                                                                                         | 98-59-9   | 202-684-8 | < 0.05  |

### HAZARD STATEMENTS:

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H317 May cause an allergic skin reaction.

### PRECAUTIONARY STATEMENTS

#### Prevention:

P261A Avoid breathing vapours.  
P280E Wear protective gloves.

#### Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

### Information required per Regulation (EU) 2020/1149 as regards diisocyanates:

As from 24 August 2023 adequate training is required before industrial or professional use. Further information can be found at [feica.eu/Puinfo](http://feica.eu/Puinfo)

## 2.3. Other hazards

Persons previously sensitised to isocyanates may develop a cross-sensitisation reaction to other isocyanates.  
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]                                                                                                                                   |
|----------------------------------------------------------------------|---------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Polyurethane prepolymer                                              | Trade Secret                                                              | 20 - 40 | Substance not classified as hazardous                                                                                                                                                             |
| Poly(Vinyl Chloride)                                                 | (CAS-No.) 9002-86-2                                                       | 20 - 40 | Substance with a national occupational exposure limit                                                                                                                                             |
| C14-17 alkanes, sec-mono- and disulfonic acids, phenyl esters        | (EC-No.) 701-257-8<br>(REACH-No.) 01-2119485386-26                        | 20 - 40 | Substance not classified as hazardous                                                                                                                                                             |
| Reaction mass of ethylbenzene and xylene                             | (EC-No.) 905-588-0                                                        | 3 - 8   | Acute Tox. 4, H332<br>Acute Tox. 4, H312<br>Aquatic Chronic 3, H412<br>Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335<br>STOT RE 2, H373 |
| Calcium oxide                                                        | (CAS-No.) 1305-78-8<br>(EC-No.) 215-138-9<br>(REACH-No.) 01-2119475325-36 | 1 - 3   | EUH071<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318                                                                                                                                                 |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | (EC-No.) 926-141-6                                                        | < 1.5   | Asp. Tox. 1, H304<br>EUH066                                                                                                                                                                       |
| 4,4'-methylenediphenyl diisocyanate                                  | (CAS-No.) 101-68-8<br>(EC-No.) 202-966-0<br>(REACH-No.) 01-2119457014-47  | < 1     | Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317<br>Carc. 2, H351<br>STOT SE 3, H335<br>STOT RE 2, H373<br>Nota 2,C                   |
| Carbon black                                                         | (CAS-No.) 1333-86-4<br>(EC-No.) 215-609-9<br>(REACH-No.) 01-2119384822-32 | < 0.3   | Substance with a national occupational exposure limit                                                                                                                                             |
| o-(p-isocyanatobenzyl)phenyl isocyanate                              | (CAS-No.) 5873-54-1<br>(EC-No.) 227-534-9                                 | < 0.1   | Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317<br>Carc. 2, H351<br>STOT SE 3, H335<br>STOT RE 2, H373<br>Nota 2,C                   |
| Tosyl chloride                                                       | (CAS-No.) 98-59-9<br>(EC-No.) 202-684-8                                   | < 0.05  | Met. Corr. 1, H290<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317                                                                                                              |

Any entry in the Identifier(s) column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance.  
Please see section 16 for the full text of any H statements referred to in this section

**Specific Concentration Limits**

| <b>Ingredient</b>                       | <b>Identifier(s)</b>                                                      | <b>Specific Concentration Limits</b>                                                                                                                                                               |
|-----------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Calcium oxide                           | (CAS-No.) 1305-78-8<br>(EC-No.) 215-138-9<br>(REACH-No.) 01-2119475325-36 | (C >= 50%) EUH071<br>(C >= 50%) Skin Corr. 1C, H314<br>(10% <= C < 50%) Skin Irrit. 2, H315<br>(C >= 3%) Eye Dam. 1, H318<br>(1% <= C < 3%) Eye Irrit. 2, H319<br>(20% <= C < 50%) STOT SE 3, H335 |
| o-(p-isocyanatobenzyl)phenyl isocyanate | (CAS-No.) 5873-54-1<br>(EC-No.) 227-534-9                                 | (C >= 5%) Skin Irrit. 2, H315<br>(C >= 5%) Eye Irrit. 2, H319<br>(C >= 0.1%) Resp. Sens. 1, H334<br>(C >= 5%) STOT SE 3, H335                                                                      |
| 4,4'-methylenediphenyl diisocyanate     | (CAS-No.) 101-68-8<br>(EC-No.) 202-966-0<br>(REACH-No.) 01-2119457014-47  | (C >= 5%) Skin Irrit. 2, H315<br>(C >= 5%) Eye Irrit. 2, H319<br>(C >= 0.1%) Resp. Sens. 1, H334<br>(C >= 5%) 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. If you feel unwell, get medical attention.

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

The most important symptoms and effects based on the CLP classification include:  
Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). Allergic skin reaction (redness, swelling, blistering, and itching).

**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 carbon dioxide or dry chemical extinguisher 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>   |
|---------------------|--------------------|
| Carbon monoxide     | During combustion. |
| Carbon dioxide.     | During combustion. |
| Hydrogen Chloride   | 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

Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS. 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.

### 6.2. Environmental precautions

Avoid release to the environment.

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

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. 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 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.) Keep away from reactive metals (eg. Aluminium, zinc etc.) to avoid the formation of hydrogen gas that could create an explosion hazard. Use personal protective equipment (eg. gloves, respirators...) as required.

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

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 acids. Store away from strong bases. Store away from oxidising agents.

Store away from amines.

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

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

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

**8.1 Control parameters**

**Occupational exposure limits**

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

| <b>Ingredient</b>                   | <b>CAS Nbr</b> | <b>Agency</b> | <b>Limit type</b>                                                                                                                                                               | <b>Additional comments</b>            |
|-------------------------------------|----------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 4,4'-methylenediphenyl diisocyanate | 101-68-8       | Ireland OELs  | TWA(as NCO)(8 hours):0.005 ppm;TWA(8 hours):0.005 ppm                                                                                                                           | as NCO, Respiratory/Dermal Sensitizer |
| Calcium oxide                       | 1305-78-8      | Ireland OELs  | TWA(respirable fraction)(8 hours):1 mg/m3;TWA(respirable fraction)(8 hours):1 mg/m3;STEL(respirable fraction)(15 minutes):4 mg/m3;STEL(respirable fraction)(15 minutes):4 mg/m3 |                                       |
| Carbon black                        | 1333-86-4      | Ireland OELs  | TWA(inhalable fraction)(8 hours):3 mg/m3                                                                                                                                        |                                       |
| Poly(Vinyl Chloride)                | 9002-86-2      | Ireland OELs  | TWA(Total inhalable dust)(8 hours):10 mg/m3;TWA(as respirable dust)(8 hours):1 mg/m3                                                                                            |                                       |
| Tosyl chloride                      | 98-59-9        | Ireland OELs  | STEL(15 minutes):5 mg/m3                                                                                                                                                        |                                       |

Ireland OELs : Ireland. OELs  
 TWA: Time-Weighted-Average  
 STEL: Short Term Exposure Limit  
 CEIL: Ceiling

**Biological limit values**

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

**Recommended monitoring procedures:**Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

**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:

Safety glasses with side shields.

*Applicable Norms/Standards*

Use eye protection conforming to EN 166

**Skin/hand protection**

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

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

| <b>Material</b>  | <b>Thickness (mm)</b> | <b>Breakthrough Time</b> |
|------------------|-----------------------|--------------------------|
| Fluoroelastomer  | 0.4                   | =>8 hours                |
| Polymer laminate | >0.30                 | =>8 hours                |

The glove data presented are based on the substance driving dermal toxicity and the conditions present at the time of testing. Breakthrough time may be altered when the glove is subjected to use conditions that place additional stress on the glove.

*Applicable Norms/Standards*

Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

**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**

|                                     |                           |
|-------------------------------------|---------------------------|
| <b>Physical state</b>               | Solid.                    |
| <b>Specific Physical Form:</b>      | Paste                     |
| <b>Colour</b>                       | Black                     |
| <b>Odor</b>                         | Light Polyurethane        |
| <b>Odour threshold</b>              | <i>No data available.</i> |
| <b>Melting point/freezing point</b> | <i>No data available.</i> |
| <b>Boiling point/boiling range</b>  | 137 °C                    |
| <b>Flammability</b>                 | Not applicable.           |
| <b>Flammable Limits(LEL)</b>        | 0.6 % volume              |
| <b>Flammable Limits(UEL)</b>        | 7 % volume                |
| <b>Flash point</b>                  | 75 °C                     |
| <b>Autoignition temperature</b>     | >= 200 °C                 |

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| <b>Decomposition temperature</b>              | <i>No data available.</i>                          |
| <b>pH</b>                                     | <i>substance/mixture is non-soluble (in water)</i> |
| <b>Kinematic Viscosity</b>                    | <i>No data available.</i>                          |
| <b>Water solubility</b>                       | Immiscible                                         |
| <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>                        | <i>No data available.</i>                          |
| <b>Density</b>                                | 1.17 g/ml [ @ 20 °C ]                              |
| <b>Relative density</b>                       | 1.17 [Ref.Std:WATER=1]                             |
| <b>Relative Vapour Density</b>                | 4 [Ref.Std:AIR=1]                                  |
| <b>Particle Characteristics</b>               | <i>Not applicable.</i>                             |

## 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> |
| <b>Percent volatile</b>              | 8.46 %                    |

## 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

Heat.  
Sparks and/or flames.  
High shear and high temperature conditions

### 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.  
Strong acids.  
Strong bases.  
Strong oxidising agents.  
Finely divided active metals  
Combustibles.  
Accelerators

### 10.6 Hazardous decomposition products

| <u>Substance</u> | <u>Condition</u> |
|------------------|------------------|
| Carbon dioxide.  | Moisture.        |

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 internal hazard assessments.

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### 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

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

#### Eye contact

Contact with the eyes during product use is not expected to result in significant irritation.

#### Ingestion

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

#### Additional Health Effects:

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

Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

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

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

#### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

#### Additional information:

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

#### Toxicological Data

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

#### Acute Toxicity

| Name            | Route                   | Species | Value                                          |
|-----------------|-------------------------|---------|------------------------------------------------|
| Overall product | Dermal                  |         | No data available; calculated ATE >5,000 mg/kg |
| Overall product | Inhalation-Vapour(4 hr) |         | No data available; calculated ATE >50 mg/l     |
| Overall product | Ingestion               |         | No data available; calculated ATE >5,000 mg/kg |

**3M Polyurethane General Purpose Seam Sealer, Black 08694,08789 and 08793**

|                                                                                                                        |                                |                        |                                          |
|------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------|------------------------------------------|
| Poly(Vinyl Chloride)                                                                                                   | Dermal                         |                        | LD50 estimated to be > 5,000 mg/kg       |
| Poly(Vinyl Chloride)                                                                                                   | Ingestion                      |                        | LD50 estimated to be > 5,000 mg/kg       |
| C14-17 alkanes, sec-mono- and disulfonic acids, phenyl esters                                                          | Dermal                         | Rat                    | LD50 > 1,000 mg/kg                       |
| C14-17 alkanes, sec-mono- and disulfonic acids, phenyl esters                                                          | Ingestion                      | Rat                    | LD50 > 5,000 mg/kg                       |
| Reaction mass of ethylbenzene and xylene                                                                               | Dermal                         | Rabbit                 | LD50 > 4,200 mg/kg                       |
| Reaction mass of ethylbenzene and xylene                                                                               | Inhalation-Vapour (4 hours)    | Rat                    | LC50 29 mg/l                             |
| Reaction mass of ethylbenzene and xylene                                                                               | Ingestion                      | Rat                    | LD50 3,523 mg/kg                         |
| Calcium oxide                                                                                                          | Ingestion                      | Rat                    | LD50 > 2,500 mg/kg                       |
| Calcium oxide                                                                                                          | Dermal                         | similar compounds      | LD50 > 2,500 mg/kg                       |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | Ingestion                      | Rat                    | LD50 > 15,000 mg/kg                      |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | Dermal                         | similar compounds      | LD50 > 5,000 mg/kg                       |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | Dermal                         | Rabbit                 | LD50 > 5,000 mg/kg                       |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | Inhalation-Dust/Mist (4 hours) | Rat                    | LC50 0.368 mg/l                          |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | Ingestion                      | Rat                    | LD50 31,600 mg/kg                        |
| Carbon black                                                                                                           | Dermal                         | Rabbit                 | LD50 > 3,000 mg/kg                       |
| Carbon black                                                                                                           | Ingestion                      | Rat                    | LD50 > 8,000 mg/kg                       |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Dermal                         | Professional judgement | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion                      | Rat                    | LD50 3,125 mg/kg                         |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | 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                        |
| Tosyl chloride                                                                                                         | Dermal                         | Rabbit                 | LD50 estimated to be > 5,000 mg/kg       |
| Tosyl chloride                                                                                                         | Ingestion                      | Rat                    | LD50 > 5,000 mg/kg                       |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name                                                                                                                   | Species                 | Value                     |
|------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------|
| Poly(Vinyl Chloride)                                                                                                   | Professional judgement  | No significant irritation |
| Reaction mass of ethylbenzene and xylene                                                                               | Rabbit                  | Mild irritant             |
| Calcium oxide                                                                                                          | Human                   | Corrosive                 |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | similar compounds       | Mild irritant             |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | official classification | Irritant                  |
| Carbon black                                                                                                           | Rabbit                  | No significant irritation |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Rabbit                  | Minimal irritation        |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | official classification | Irritant                  |
| Tosyl chloride                                                                                                         | Rabbit                  | Irritant                  |

**Serious Eye Damage/Irritation**

**3M Polyurethane General Purpose Seam Sealer, Black 08694,08789 and 08793**

| Name                                                                                                                   | Species                 | Value                     |
|------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------|
| Overall product                                                                                                        | Rabbit                  | Mild irritant             |
| Reaction mass of ethylbenzene and xylene                                                                               | Rabbit                  | Mild irritant             |
| Calcium oxide                                                                                                          | Rabbit                  | Corrosive                 |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | similar compounds       | No significant irritation |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | official classification | Severe irritant           |
| Carbon black                                                                                                           | Rabbit                  | No significant irritation |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Rabbit                  | Mild irritant             |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | official classification | Severe irritant           |
| Tosyl chloride                                                                                                         | Rabbit                  | Corrosive                 |

**Skin Sensitisation**

| Name                                                                                                                   | Species           | Value          |
|------------------------------------------------------------------------------------------------------------------------|-------------------|----------------|
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | similar compounds | Not classified |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | Mouse             | Sensitising    |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Guinea pig        | Sensitising    |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | Mouse             | Sensitising    |
| Tosyl chloride                                                                                                         | Mouse             | Sensitising    |

**Respiratory Sensitisation**

| Name                                    | Species | Value       |
|-----------------------------------------|---------|-------------|
| 4,4'-methylenediphenyl diisocyanate     | Human   | Sensitising |
| o-(p-isocyanatobenzyl)phenyl isocyanate | Human   | Sensitising |

**Germ Cell Mutagenicity**

| Name                                                                                                                   | Route    | Value                                                                        |
|------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------|
| Poly(Vinyl Chloride)                                                                                                   | In Vitro | Not mutagenic                                                                |
| Reaction mass of ethylbenzene and xylene                                                                               | In Vitro | Not mutagenic                                                                |
| Reaction mass of ethylbenzene and xylene                                                                               | In vivo  | Not mutagenic                                                                |
| Calcium oxide                                                                                                          | In Vitro | Not mutagenic                                                                |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | In Vitro | Not mutagenic                                                                |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Carbon black                                                                                                           | In Vitro | Not mutagenic                                                                |
| Carbon black                                                                                                           | In vivo  | Some positive data exist, but the data are not sufficient for classification |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | In vivo  | Not mutagenic                                                                |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 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 |
| Tosyl chloride                                                                                                         | In vivo  | Not mutagenic                                                                |
| Tosyl chloride                                                                                                         | In Vitro | Some positive data exist, but the data are not sufficient for classification |

**Carcinogenicity**

| Name | Route | Species | Value |
|------|-------|---------|-------|
|------|-------|---------|-------|

**3M Polyurethane General Purpose Seam Sealer, Black 08694,08789 and 08793**

|                                          |                |                         |                                                                              |
|------------------------------------------|----------------|-------------------------|------------------------------------------------------------------------------|
| Poly(Vinyl Chloride)                     | Not specified. | Rat                     | Some positive data exist, but the data are not sufficient for classification |
| Reaction mass of ethylbenzene and xylene | Dermal         | Rat                     | Not carcinogenic                                                             |
| Reaction mass of ethylbenzene and xylene | Ingestion      | Multiple animal species | Not carcinogenic                                                             |
| Reaction mass of ethylbenzene and xylene | Inhalation     | Human                   | 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 |
| Carbon black                             | Dermal         | Mouse                   | Not carcinogenic                                                             |
| Carbon black                             | Ingestion      | Mouse                   | Not carcinogenic                                                             |
| Carbon black                             | Inhalation     | Rat                     | Carcinogenic.                                                                |
| o-(p-isocyanatobenzyl)phenyl isocyanate  | Inhalation     | Rat                     | 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          |
|------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------|-------------------------|-----------------------|----------------------------|
| Poly(Vinyl Chloride)                                                                                                   | Not specified. | Not classified for development         | Mouse                   | NOAEL Not available   | during gestation           |
| Reaction mass of ethylbenzene and xylene                                                                               | Inhalation     | Not classified for female reproduction | Human                   | NOAEL Not available   | occupational exposure      |
| Reaction mass of ethylbenzene and xylene                                                                               | Ingestion      | Not classified for development         | Mouse                   | NOAEL Not available   | during organogenesis       |
| Reaction mass of ethylbenzene and xylene                                                                               | Inhalation     | Not classified for development         | Multiple animal species | NOAEL Not available   | during gestation           |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | Inhalation     | Not classified for development         | Rat                     | NOAEL 0.004 mg/l      | during organogenesis       |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion      | Not classified for male reproduction   | Rat                     | NOAEL 1,493 mg/kg/day | 29 days                    |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion      | Not classified for development         | Rat                     | NOAEL 209 mg/kg/day   | prematuring into lactation |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion      | Toxic to female reproduction           | Rat                     | NOAEL 804 mg/kg/day   | prematuring into lactation |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | Inhalation     | Not classified for development         | Rat                     | NOAEL 0.004 mg/l      | during organogenesis       |
| Tosyl chloride                                                                                                         | Ingestion      | Not classified for female reproduction | Rat                     | NOAEL 750 mg/kg/day   | prematuring into lactation |
| Tosyl chloride                                                                                                         | Ingestion      | Not classified for male reproduction   | Rat                     | NOAEL 750 mg/kg/day   | 34 days                    |
| Tosyl chloride                                                                                                         | Ingestion      | Not classified for development         | Rat                     | NOAEL 750 mg/kg/day   | prematuring into lactation |

**Lactation**

| Name                                     | Route     | Species | Value                                          |
|------------------------------------------|-----------|---------|------------------------------------------------|
| Reaction mass of ethylbenzene and xylene | Ingestion | Mouse   | Not classified for effects on or via lactation |

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

| Name                                     | Route      | Target Organ(s) | Value                   | Species | Test result    | Exposure Duration |
|------------------------------------------|------------|-----------------|-------------------------|---------|----------------|-------------------|
| Reaction mass of ethylbenzene and xylene | Inhalation | auditory system | Causes damage to organs | Rat     | LOAEL 6.3 mg/l | 8 hours           |

**3M Polyurethane General Purpose Seam Sealer, Black 08694,08789 and 08793**

|                                                                      |            |                                   |                                                                              |                         |                     |                       |
|----------------------------------------------------------------------|------------|-----------------------------------|------------------------------------------------------------------------------|-------------------------|---------------------|-----------------------|
| Reaction mass of ethylbenzene and xylene                             | Inhalation | central nervous system depression | May cause drowsiness or dizziness                                            | Human                   | NOAEL Not available |                       |
| Reaction mass of ethylbenzene and xylene                             | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Human                   | NOAEL Not available |                       |
| Reaction mass of ethylbenzene and xylene                             | Inhalation | eyes                              | Not classified                                                               | Rat                     | NOAEL 3.5 mg/l      | not available         |
| Reaction mass of ethylbenzene and xylene                             | Inhalation | liver                             | Not classified                                                               | Multiple animal species | NOAEL Not available |                       |
| Reaction mass of ethylbenzene and xylene                             | Ingestion  | central nervous system depression | May cause drowsiness or dizziness                                            | Multiple animal species | NOAEL Not available |                       |
| Reaction mass of ethylbenzene and xylene                             | Ingestion  | eyes                              | Not classified                                                               | Rat                     | NOAEL 250 mg/kg     | not applicable        |
| Calcium oxide                                                        | Inhalation | respiratory irritation            | May cause respiratory irritation                                             | Not available           | NOAEL Not available | occupational exposure |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | similar health hazards  | NOAEL Not available |                       |
| 4,4'-methylenediphenyl diisocyanate                                  | Inhalation | respiratory irritation            | May cause respiratory irritation                                             | official classification | NOAEL Not available |                       |
| o-(p-isocyanatobenzyl)phenyl isocyanate                              | Inhalation | respiratory irritation            | May cause respiratory irritation                                             | official classification | NOAEL Not available |                       |
| Tosyl chloride                                                       | 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 |
|------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------|-----------------------|-------------------|
| Poly(Vinyl Chloride)                     | Inhalation | respiratory system                                                                                                              | Not classified                                                    | Multiple animal species | NOAEL 0.013 mg/l      | 22 months         |
| Reaction mass of ethylbenzene and xylene | Inhalation | nervous system                                                                                                                  | Causes damage to organs through prolonged or repeated exposure    | Rat                     | LOAEL 0.4 mg/l        | 4 weeks           |
| Reaction mass of ethylbenzene and xylene | Inhalation | auditory system                                                                                                                 | May cause damage to organs through prolonged or repeated exposure | Rat                     | LOAEL 7.8 mg/l        | 5 days            |
| Reaction mass of ethylbenzene and xylene | Inhalation | liver                                                                                                                           | Not classified                                                    | Multiple animal species | NOAEL Not available   |                   |
| Reaction mass of ethylbenzene and xylene | Inhalation | heart   endocrine system   gastrointestinal tract   hematopoietic system   muscles   kidney and/or bladder   respiratory system | Not classified                                                    | Multiple animal species | NOAEL 3.5 mg/l        | 13 weeks          |
| Reaction mass of ethylbenzene and xylene | Ingestion  | auditory system                                                                                                                 | Not classified                                                    | Rat                     | NOAEL 900 mg/kg/day   | 2 weeks           |
| Reaction mass of ethylbenzene and xylene | Ingestion  | kidney and/or bladder                                                                                                           | Not classified                                                    | Rat                     | NOAEL 1,500 mg/kg/day | 90 days           |
| Reaction mass of ethylbenzene and xylene | Ingestion  | liver                                                                                                                           | Not classified                                                    | Multiple animal species | NOAEL Not available   |                   |
| Reaction mass of ethylbenzene and xylene | Ingestion  | heart   skin   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   immune system   nervous              | Not classified                                                    | Mouse                   | NOAEL 1,000 mg/kg/day | 103 weeks         |

|                                                                                                                        |            |                                                                                                                                           |                                                                              |       |                       |                       |
|------------------------------------------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------|-----------------------|-----------------------|
|                                                                                                                        |            | system   respiratory system                                                                                                               |                                                                              |       |                       |                       |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | Inhalation | liver                                                                                                                                     | Not classified                                                               | Rat   | NOAEL 6 mg/l          | 13 weeks              |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | Inhalation | kidney and/or bladder                                                                                                                     | Not classified                                                               | Rat   | LOAEL 1.5 mg/l        | 13 weeks              |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | Inhalation | hematopoietic system                                                                                                                      | Not classified                                                               | Rat   | NOAEL 6 mg/l          | 13 weeks              |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | Ingestion  | liver                                                                                                                                     | Not classified                                                               | Rat   | NOAEL 1,000 mg/kg/day | 13 weeks              |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | Ingestion  | kidney and/or bladder                                                                                                                     | Not classified                                                               | Rat   | LOAEL 100 mg/kg/day   | 13 weeks              |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | Ingestion  | hematopoietic system   eyes                                                                                                               | Not classified                                                               | Rat   | NOAEL 1,000 mg/kg/day | 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              |
| Carbon black                                                                                                           | Inhalation | pneumoconiosis                                                                                                                            | Not classified                                                               | Human | NOAEL Not available   | occupational exposure |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion  | eyes                                                                                                                                      | Some positive data exist, but the data are not sufficient for classification | Rat   | NOAEL 300 mg/kg/day   | 28 days               |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion  | gastrointestinal tract   liver   immune system   heart   endocrine system   hematopoietic system   nervous system   kidney and/or bladder | Not classified                                                               | Rat   | NOAEL 1,493 mg/kg/day | 29 days               |
| 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              |
| Tosyl chloride                                                                                                         | Ingestion  | gastrointestinal tract                                                                                                                    | Some positive data exist, but the data are not sufficient for classification | Rat   | NOAEL 750 mg/kg/day   | 34 days               |
| Tosyl chloride                                                                                                         | Ingestion  | heart   endocrine system   hematopoietic system   nervous system   kidney and/or bladder   liver   immune system   respiratory system     | Not classified                                                               | Rat   | NOAEL 750 mg/kg/day   | 34 days               |

**Aspiration Hazard**

| Name                                                                 | Value             |
|----------------------------------------------------------------------|-------------------|
| Reaction mass of ethylbenzene and xylene                             | Aspiration hazard |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | Aspiration hazard |

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

**11.2. Information on other hazards**

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

**SECTION 12: Ecological information**

The information below may not agree with the 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               |
|----------------------------------------------------------------------|--------------|------------------|-------------------------------------------------------|------------|---------------|---------------------------|
| C14-17 alkanes, sec-mono- and disulfonic acids, phenyl esters        | 701-257-8    | N/A              | Data not available or insufficient for classification | N/A        | N/A           | N/A                       |
| Poly(Vinyl Chloride)                                                 | 9002-86-2    | N/A              | Data not available or insufficient for classification | N/A        | N/A           | N/A                       |
| Polyurethane prepolymer                                              | Trade Secret | N/A              | Data not available or insufficient for classification | N/A        | N/A           | NA                        |
| Reaction mass of ethylbenzene and xylene                             | 905-588-0    | Green algae      | Analogous Compound                                    | 73 hours   | ErC50         | 4.36 mg/l                 |
| Reaction mass of ethylbenzene and xylene                             | 905-588-0    | Rainbow trout    | Analogous Compound                                    | 96 hours   | LC50          | 2.6 mg/l                  |
| Reaction mass of ethylbenzene and xylene                             | 905-588-0    | Water flea       | Analogous Compound                                    | 48 hours   | EC50          | 3.82 mg/l                 |
| Reaction mass of ethylbenzene and xylene                             | 905-588-0    | Green algae      | Analogous Compound                                    | 73 hours   | NOEC          | 0.44 mg/l                 |
| Reaction mass of ethylbenzene and xylene                             | 905-588-0    | Rainbow trout    | Analogous Compound                                    | 56 days    | NOEC          | 1.3 mg/l                  |
| Reaction mass of ethylbenzene and xylene                             | 905-588-0    | Water flea       | Analogous Compound                                    | 7 days     | NOEC          | 0.96 mg/l                 |
| Reaction mass of ethylbenzene and xylene                             | 905-588-0    | Activated sludge | Analogous Compound                                    | 30 minutes | EC50          | >198 mg/l                 |
| Reaction mass of ethylbenzene and xylene                             | 905-588-0    | Redworm          | Analogous Compound                                    | 56 days    | NOEC          | 42.6 mg/kg (Dry Weight)   |
| Reaction mass of ethylbenzene and xylene                             | 905-588-0    | Soil microbes    | Analogous Compound                                    | 28 days    | EC50          | >1,000 mg/kg (Dry Weight) |
| Calcium oxide                                                        | 1305-78-8    | Common Carp      | Experimental                                          | 96 hours   | LC50          | 1,070 mg/l                |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | 926-141-6    | Green algae      | Experimental                                          | 72 hours   | EL50          | >1,000 mg/l               |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | 926-141-6    | Rainbow trout    | Experimental                                          | 96 hours   | LL50          | >1,000 mg/l               |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | 926-141-6    | Water flea       | Experimental                                          | 48 hours   | EL50          | >1,000 mg/l               |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics,               | 926-141-6    | Green algae      | Experimental                                          | 72 hours   | NOEL          | 1,000 mg/l                |

**3M Polyurethane General Purpose Seam Sealer, Black 08694,08789 and 08793**

|                                                                                                                        |           |                  |                    |          |                                |             |
|------------------------------------------------------------------------------------------------------------------------|-----------|------------------|--------------------|----------|--------------------------------|-------------|
| <2% aromatics                                                                                                          |           |                  |                    |          |                                |             |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | 101-68-8  | Activated sludge | Estimated          | 3 hours  | EC50                           | >100 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  | Water flea       | Estimated          | 24 hours | EC50                           | >1,000 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  | Green algae      | Estimated          | 72 hours | NOEC                           | 1,640 mg/l  |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | 101-68-8  | Water flea       | Estimated          | 21 days  | NOEC                           | 10 mg/l     |
| Carbon black                                                                                                           | 1333-86-4 | Green algae      | Experimental       | 72 hours | No tox obs at lmt of water sol | >100 mg/l   |
| Carbon black                                                                                                           | 1333-86-4 | Zebra Fish       | Experimental       | 96 hours | No tox obs at lmt of water sol | >100 mg/l   |
| Carbon black                                                                                                           | 1333-86-4 | Green algae      | Experimental       | 72 hours | No tox obs at lmt of water sol | 100 mg/l    |
| Carbon black                                                                                                           | 1333-86-4 | Activated sludge | Experimental       | 3 hours  | NOEC                           | >800 mg/l   |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 915-687-0 | Green algae      | Experimental       | 72 hours | ErC50                          | 1.68 mg/l   |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 915-687-0 | Zebra Fish       | Experimental       | 96 hours | LC50                           | 0.9 mg/l    |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 915-687-0 | Green algae      | Experimental       | 72 hours | ErC10                          | 0.34 mg/l   |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 915-687-0 | Water flea       | Experimental       | 21 days  | NOEC                           | 1 mg/l      |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 915-687-0 | Activated sludge | Experimental       | 3 hours  | IC50                           | >=100 mg/l  |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | 5873-54-1 | Activated sludge | Analogous Compound | 3 hours  | EC50                           | >100 mg/l   |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | 5873-54-1 | Green algae      | Analogous Compound | 72 hours | No tox obs at lmt of water sol | >100 mg/l   |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | 5873-54-1 | Water flea       | Analogous Compound | 24 hours | No tox obs at lmt of water sol | >100 mg/l   |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | 5873-54-1 | Zebra Fish       | Analogous Compound | 96 hours | No tox obs at lmt of water sol | >100 mg/l   |

**3M Polyurethane General Purpose Seam Sealer, Black 08694,08789 and 08793**

|                                         |           |                  |                    |          |      |           |
|-----------------------------------------|-----------|------------------|--------------------|----------|------|-----------|
| yl isocyanate                           |           |                  |                    |          |      |           |
| o-(p-isocyanatobenzyl)phenyl isocyanate | 5873-54-1 | Green algae      | Analogous Compound | 72 hours | NOEL | 100 mg/l  |
| o-(p-isocyanatobenzyl)phenyl isocyanate | 5873-54-1 | Water flea       | Experimental       | 21 days  | NOEC | 100 mg/l  |
| Tosyl chloride                          | 98-59-9   | Activated sludge | Estimated          | 3 hours  | EC10 | 240 mg/l  |
| Tosyl chloride                          | 98-59-9   | Green algae      | Experimental       | 72 hours | EC50 | >100 mg/l |
| Tosyl chloride                          | 98-59-9   | Medaka           | Experimental       | 96 hours | LC50 | >100 mg/l |
| Tosyl chloride                          | 98-59-9   | Water flea       | Experimental       | 48 hours | EC50 | >334 mg/l |
| Tosyl chloride                          | 98-59-9   | Green algae      | Experimental       | 72 hours | NOEC | 2.6 mg/l  |

**12.2. Persistence and degradability**

| Material                                                                                                               | CAS Nbr      | Test type                         | Duration | Study Type                     | Test result         | Protocol                            |
|------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------|----------|--------------------------------|---------------------|-------------------------------------|
| C14-17 alkanes, sec-mono- and disulfonic acids, phenyl esters                                                          | 701-257-8    | Data not available/insufficient   | N/A      | N/A                            | N/A                 | N/A                                 |
| Poly(Vinyl Chloride)                                                                                                   | 9002-86-2    | Data not available/insufficient   | N/A      | N/A                            | N/A                 | N/A                                 |
| Polyurethane prepolymer                                                                                                | Trade Secret | Data not available/insufficient   | N/A      | N/A                            | N/A                 | N/A                                 |
| Reaction mass of ethylbenzene and xylene                                                                               | 905-588-0    | Analogous Compound Biodegradation | 28 days  | BOD                            | 94 %BOD/ThOD        | OECD 301F - Manometric respirometry |
| Calcium oxide                                                                                                          | 1305-78-8    | Data not available/insufficient   | N/A      | N/A                            | N/A                 | N/A                                 |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | 926-141-6    | Experimental Biodegradation       | 28 days  | BOD                            | 69 %BOD/ThOD        | OECD 301F - Manometric respirometry |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | 101-68-8     | Estimated Hydrolysis              |          | Hydrolytic half-life           | 20 hours (t 1/2)    |                                     |
| Carbon black                                                                                                           | 1333-86-4    | Data not available/insufficient   | N/A      | N/A                            | N/A                 | N/A                                 |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 915-687-0    | Experimental Biodegradation       | 28 days  | Dissolv. Organic Carbon Deplet | 38 %removal of DOC  | OECD 301E - Modif. OECD Screen      |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 915-687-0    | Experimental Hydrolysis           |          | Hydrolytic half-life (pH 7)    | 68 days (t 1/2)     | OECD 111 Hydrolysis func of pH      |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | 5873-54-1    | Data not available/insufficient   | N/A      | N/A                            | N/A                 | N/A                                 |
| Tosyl chloride                                                                                                         | 98-59-9      | Experimental Biodegradation       | 28 days  | BOD                            | 60 %BOD/ThOD        | OECD 301D - Closed bottle test      |
| Tosyl chloride                                                                                                         | 98-59-9      | Experimental Hydrolysis           |          | Hydrolytic half-life           | 2.2 minutes (t 1/2) |                                     |

**12.3 : Bioaccumulative potential**

| Material                                        | Cas No.   | Test type                              | Duration | Study Type | Test result | Protocol |
|-------------------------------------------------|-----------|----------------------------------------|----------|------------|-------------|----------|
| C14-17 alkanes, sec-mono- and disulfonic acids, | 701-257-8 | Data not available or insufficient for | N/A      | N/A        | N/A         | N/A      |

**3M Polyurethane General Purpose Seam Sealer, Black 08694,08789 and 08793**

| phenyl esters                                                                                                          |              | classification                                        |         |                        |        |                                 |
|------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------------------------------------|---------|------------------------|--------|---------------------------------|
| Poly(Vinyl Chloride)                                                                                                   | 9002-86-2    | Data not available or insufficient for classification | N/A     | N/A                    | N/A    | N/A                             |
| Polyurethane prepolymer                                                                                                | Trade Secret | Data not available or insufficient for classification | N/A     | N/A                    | N/A    | N/A                             |
| Reaction mass of ethylbenzene and xylene                                                                               | 905-588-0    | Analogous Compound BCF - Fish                         | 56 days | Bioaccumulation factor | <=25.9 |                                 |
| Reaction mass of ethylbenzene and xylene                                                                               | 905-588-0    | Analogous Compound Bioconcentration                   |         | Log Kow                | 3.2    |                                 |
| Calcium oxide                                                                                                          | 1305-78-8    | Data not available or insufficient for classification | N/A     | N/A                    | N/A    | N/A                             |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics                                                   | 926-141-6    | Data not available or insufficient for classification | N/A     | N/A                    | N/A    | N/A                             |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | 101-68-8     | Experimental BCF - Fish                               | 28 days | Bioaccumulation factor | 200    | OECD305-Bioconcentration        |
| Carbon black                                                                                                           | 1333-86-4    | Data not available or insufficient for classification | N/A     | N/A                    | N/A    | N/A                             |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 915-687-0    | Analogous Compound BCF - Fish                         | 56 days | Bioaccumulation factor | <31.4  |                                 |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 915-687-0    | Experimental Bioconcentration                         |         | Log Kow                | 2.77   | OECD 107 log Kow shke flask mtd |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | 5873-54-1    | Analogous Compound BCF - Fish                         | 28 days | Bioaccumulation factor | 200    |                                 |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | 5873-54-1    | Experimental Bioconcentration                         |         | Log Kow                | 4.51   | OECD 117 log Kow HPLC method    |
| Tosyl chloride                                                                                                         | 98-59-9      | Estimated Bioconcentration                            |         | Log Kow                | 0.93   |                                 |

**12.4. Mobility in soil**

| Material                                                                                                               | Cas No.   | Test type                           | Study Type | Test result  | Protocol  |
|------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------|------------|--------------|-----------|
| Reaction mass of ethylbenzene and xylene                                                                               | 905-588-0 | Analogous Compound Mobility in Soil | Koc        | 537 l/kg     |           |
| 4,4'-methylenediphenyl diisocyanate                                                                                    | 101-68-8  | Estimated Mobility in Soil          | Koc        | 34,000 l/kg  | Episuite™ |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 915-687-0 | Modeled Mobility in Soil            | Koc        | 7 l/kg       | Episuite™ |
| o-(p-isocyanatobenzyl)phenyl isocyanate                                                                                | 5873-54-1 | Modeled Mobility in Soil            | Koc        | 300,000 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. Endocrine disrupting properties**

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

**12.7. 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. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. 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**

Not hazardous for transportation.

|                                        | <b>Ground Transport (ADR)</b> | <b>Air Transport (IATA)</b> | <b>Marine Transport (IMDG)</b> |
|----------------------------------------|-------------------------------|-----------------------------|--------------------------------|
| <b>14.1 UN number or ID number</b>     | No data available.            | No data available.          | No data available.             |
| <b>14.2 UN proper shipping name</b>    | No data available.            | No data available.          | No data available.             |
| <b>14.3 Transport hazard class(es)</b> | No data available.            | No data available.          | No data available.             |
| <b>14.4 Packing group</b>              | No data available.            | No data available.          | No data available.             |
| <b>14.5 Environmental hazards</b>      | No data available.            | No data available.          | No data available.             |

|                                                                   |                                                                        |                                                                        |                                                                        |
|-------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|
| <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 Marine Transport in bulk according to IMO instruments</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>                                    | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>IMDG Segregation Code</b>                                      | No data available.                                                     | No data available.                                                     | No data available.                                                     |

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

| <u>Ingredient</u>                       | <u>CAS Nbr</u> | <u>Classification</u>         | <u>Regulation</u>                           |
|-----------------------------------------|----------------|-------------------------------|---------------------------------------------|
| Carbon black                            | 1333-86-4      | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |
| o-(p-isocyanatobenzyl)phenyl isocyanate | 5873-54-1      | Carc. 2                       | Regulation (EC) No. 1272/2008, Table 3.1    |
| 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 |
| Poly(Vinyl Chloride)                    | 9002-86-2      | 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      |
| 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

#### Global inventory status

Contact 3M for more information.

**DIRECTIVE 2012/18/EU**

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

**Regulation (EU) No 649/2012**

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.

**SECTION 16: Other information**

**List of relevant H statements**

|        |                                                                            |
|--------|----------------------------------------------------------------------------|
| EUH066 | Repeated exposure may cause skin dryness or cracking.                      |
| EUH071 | Corrosive to the respiratory tract.                                        |
| H226   | Flammable liquid and vapour.                                               |
| H290   | May be corrosive to metals.                                                |
| H304   | May be fatal if swallowed and enters airways.                              |
| H312   | Harmful in contact with skin.                                              |
| H314   | Causes severe skin burns and eye damage.                                   |
| H315   | Causes skin irritation.                                                    |
| H317   | May cause an allergic skin reaction.                                       |
| H318   | Causes serious eye damage.                                                 |
| 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.                                               |
| H361f  | Suspected of damaging fertility.                                           |
| 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:**

Section 1: Address information was modified.

Section 1: E-mail address information was modified.

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

Section 03: SCL table information was modified.

Section 6: Accidental release personal information information was modified.

Section 7: Conditions safe storage information was modified.

Section 08: Personal Protection - Apron Statement information was added.

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.

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

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our

knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. 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 Ireland MSDSs are available at [www.3M.com](http://www.3M.com)**