



## Safety Data Sheet

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|                                       |                   |                         |            |
|---------------------------------------|-------------------|-------------------------|------------|
| <b>Document group:</b>                | 22-2293-3         | <b>Version number:</b>  | 12.02      |
| <b>Revision date:</b>                 | 04/09/2020        | <b>Supersedes date:</b> | 17/06/2019 |
| <b>Transportation version number:</b> | 1.00 (12/08/2011) |                         |            |

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

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

#### 1.1. Product identifier

3M™ 55045 Superfast Plastic Adhesive

#### Product Identification Numbers

FS-9100-4549-1      UU-0108-5079-8

7000080185      7100222866

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

##### Identified uses

Automotive.

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

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

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

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

22-1822-0, 22-1877-4

### TRANSPORTATION INFORMATION

FS-9100-4549-1,    UU-0108-5079-8

Not hazardous for transportation

## KIT LABEL

### 2.1. Classification of the substance or mixture

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

##### CLASSIFICATION:

Acute Toxicity, Category 4 - Acute Tox. 4; H332

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

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

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

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

Carcinogenicity, Category 2 - Carc. 2; H351

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335

Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

For full text of H phrases, see Section 16.

### 2.2. Label elements

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

##### SIGNAL WORD

DANGER.

##### Symbols:

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

##### Pictograms



Contains:

m-Xylene-.alpha.alpha'.-diamine; Triethoxy(3-isocyanatopropyl)silane; 4,4'-Methylenediphenyl diisocyanate, oligomers

##### HAZARD STATEMENTS:

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

##### PRECAUTIONARY STATEMENTS

##### Prevention:

|       |                         |
|-------|-------------------------|
| P260A | Do not breathe vapours. |
| P280E | Wear protective gloves. |

##### Response:

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

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

**<=125 ml Hazard statements**

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H317 May cause an allergic skin reaction.  
H335 May cause respiratory irritation.  
H351 Suspected of causing cancer.

**<=125 ml 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.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

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

**Revision information:**

Section 1: Product identification numbers information was modified.  
Section 01: SAP Material Numbers information was modified.  
Section 2: <125ml Precautionary - Prevention information was modified.



## Safety Data Sheet

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|                                       |                   |                         |            |
|---------------------------------------|-------------------|-------------------------|------------|
| <b>Document group:</b>                | 22-1877-4         | <b>Version number:</b>  | 14.00      |
| <b>Revision date:</b>                 | 27/05/2019        | <b>Supersedes date:</b> | 12/03/2019 |
| <b>Transportation version number:</b> | 1.00 (12/08/2011) |                         |            |

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

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

#### 1.1. Product identifier

3M™ Superfast Plastic Adhesive PN 55045 Accelerator (Part B)

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

##### Identified uses

Automotive.

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

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

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

### SECTION 2: Hazard identification

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

CLP REGULATION (EC) No 1272/2008

##### CLASSIFICATION:

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Skin Sensitization, Category 1 - Skin Sens. 1; H317

For full text of H phrases, see Section 16.

#### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

##### SIGNAL WORD

WARNING.

**Symbols:**

GHS07 (Exclamation mark) |

**Pictograms**



**Ingredients:**

| Ingredient                  | CAS Nbr   | EC No.    | % by Wt |
|-----------------------------|-----------|-----------|---------|
| m-phenylenebis(methylamine) | 1477-55-0 | 216-032-5 | < 3     |

**HAZARD STATEMENTS:**

|      |                                      |
|------|--------------------------------------|
| H319 | Causes serious eye irritation.       |
| H315 | Causes skin irritation.              |
| H317 | May cause an allergic skin reaction. |

**PRECAUTIONARY STATEMENTS**

**General:**

P102 Keep out of reach of children.

**Prevention:**

P280E Wear protective gloves.

**Response:**

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

**Disposal:**

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

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

**<=125 ml Hazard statements**

H317 May cause an allergic skin reaction.

**<=125 ml Precautionary statements**

**General:**

P102 Keep out of reach of children.

**Prevention:**

P280E Wear protective gloves.

**Response:**

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

**Disposal:**

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

**3M™ Superfast Plastic Adhesive PN 55045 Accelerator (Part B)**

18% of the mixture consists of components of unknown acute inhalation toxicity.

**2.3. Other hazards**

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

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

| Ingredient                                      | CAS Nbr    | EC No.    | REACH Registration No. | % by Wt | Classification   |
|---|------------|-----------|------------------------|---------|--|
| Glycerol poly(oxyethylene, oxypropylene) ether  | 9082-00-2  |           |                        | 40 - 70 | Substance not classified as hazardous  |
| Propylidynetrimehtanol, propoxylated            | 25723-16-4 | 500-041-9 |                        | 10 - 30 | Substance not classified as hazardous  |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | 102-60-3   | 203-041-4 | 01-2119552434-41       | 10 - 30 | Eye Irrit. 2, H319   |
| m-phenylenebis(methylamine)                     | 1477-55-0  | 216-032-5 |                        | < 3     | Acute Tox. 4, H332; Acute Tox. 4, H302; Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Chronic 3, H412 |

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

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

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

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

**Skin contact**

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

**Eye contact**

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

**If swallowed**

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

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

See Section 11.1 Information on toxicological effects

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

Not applicable

**SECTION 5: Fire-fighting measures**

## 3M™ Superfast Plastic Adhesive PN 55045 Accelerator (Part B)

### 5.1. Extinguishing media

In case of fire: Use a 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. |
| Oxides of nitrogen. | During combustion. |

### 5.3. Advice for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## SECTION 6: Accidental release measures

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

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment.

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

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

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Keep out of reach of children. Avoid breathing 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.)

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

Store away from acids. Store away from oxidising agents.

### 7.3. Specific end use(s)

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

## SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

### Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

### Biological limit values

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

## 8.2. Exposure controls

### 8.2.1. Engineering controls

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

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

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

Indirect vented goggles.

#### *Applicable Norms/Standards*

Use eye protection conforming to EN 166

#### Skin/hand protection

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

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

| Material        | Thickness (mm) | Breakthrough Time |
|-----------------|----------------|-------------------|
| Butyl rubber.   | 0.5            | > 8 hours         |
| Fluoroelastomer | 0.4            | > 8 hours         |
| Neoprene.       | 0.5            | > 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 (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Butyl rubber  
Neoprene apron.

#### 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>                         | Liquid.   |
| <b>Specific Physical Form:</b>                | Gel   |
| <b>Appearance/Odour</b>                       | Slight ammonia like odour, clear.                           |
| <b>Odour threshold</b>                        | <i>No data available.</i>                                   |
| <b>pH</b>                                     | <i>Not applicable.</i>                                      |
| <b>Boiling point/boiling range</b>            | $\geq 204.4$ °C   |
| <b>Melting point</b>                          | <i>No data available.</i>                                   |
| <b>Flammability (solid, gas)</b>              | Not applicable.   |
| <b>Explosive properties</b>                   | Not classified  |
| <b>Oxidising properties</b>                   | Not classified  |
| <b>Flash point</b>                            | $\geq 143.3$ °C [ <i>Test Method</i> :Tagliabue closed cup] |
| <b>Autoignition temperature</b>               | <i>Not applicable.</i>                                      |
| <b>Flammable Limits(LEL)</b>                  | <i>Not applicable.</i>                                      |
| <b>Flammable Limits(UEL)</b>                  | <i>Not applicable.</i>                                      |
| <b>Vapour pressure</b>                        | <i>Not applicable.</i>                                      |
| <b>Relative density</b>                       | 1.02 [ <i>Ref Std</i> :WATER=1]                             |
| <b>Water solubility</b>                       | Negligible  |
| <b>Solubility- non-water</b>                  | <i>No data available.</i>                                   |
| <b>Partition coefficient: n-octanol/water</b> | <i>No data available.</i>                                   |
| <b>Evaporation rate</b>                       | $\leq 1$ [ <i>Ref Std</i> :WATER=1]                         |
| <b>Vapour density</b>                         | $\geq 1$ [ <i>Ref Std</i> :AIR=1]                           |
| <b>Decomposition temperature</b>              | <i>No data available.</i>                                   |
| <b>Viscosity</b>                              | 1,300 - 2,000 mPa-s   |
| <b>Density</b>                                | 1.02 g/ml   |

### **9.2. Other information**

|                                      |  |
|--------------------------------------|--|
| <b>EU Volatile Organic Compounds</b> | <i>No data available.</i>                          |
| <b>Molecular weight</b>              | <i>No data available.</i>                          |
| <b>Percent volatile</b>              | $\leq 1$ % weight [ <i>Test Method</i> :Estimated] |

## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

### **10.2 Chemical stability**

Stable.

### **10.3 Possibility of hazardous reactions**

Hazardous polymerisation will not occur.

### **10.4 Conditions to avoid**

None known.

### 10.5 Incompatible materials

Strong acids.  
Strong oxidising agents.

### 10.6 Hazardous decomposition products

#### Substance

#### Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

### 11.1 Information on Toxicological effects

#### Signs and Symptoms of Exposure

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

#### **Inhalation**

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

#### **Skin contact**

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

#### **Eye contact**

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

#### **Ingestion**

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

#### **Additional information:**

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

#### **Toxicological Data**

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

#### **Acute Toxicity**

| Name   | Route                      | Species | Value  |
|--|----------------------------|---------|--|
| Overall product                                | Dermal                     |         | No data available; calculated ATE >5,000 mg/kg |
| Overall product                                | Inhalation-Dust/Mist(4 hr) |         | No data available; calculated ATE >12.5 mg/l   |
| Overall product                                | Ingestion                  |         | No data available; calculated ATE >5,000 mg/kg |
| Glycerol poly(oxyethylene, oxypropylene) ether | Dermal                     | Rabbit  | LD50 > 5,000 mg/kg                             |
| Glycerol poly(oxyethylene, oxypropylene) ether | Ingestion                  | Rat     | LD50 > 10,000 mg/kg                            |
| Propylidynetrimethanol, propoxylated           | Dermal                     | Rat     | LD50 > 2,000 mg/kg                             |
| Propylidynetrimethanol, propoxylated           | Ingestion                  | Rat     | LD50 > 2,500 mg/kg                             |

**3M™ Superfast Plastic Adhesive PN 55045 Accelerator (Part B)**

|   |                                |        |                    |
|---|--------------------------------|--------|--------------------|
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Dermal                         | Rat    | LD50 > 2,000 mg/kg |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Ingestion                      | Rat    | LD50 2,890 mg/kg   |
| m-phenylenebis(methylamine)                     | Dermal                         | Rabbit | LD50 > 2,000 mg/kg |
| m-phenylenebis(methylamine)                     | Inhalation-Dust/Mist (4 hours) | Rat    | LC50 1.2 mg/l      |
| m-phenylenebis(methylamine)                     | Ingestion                      | Rat    | LD50 980 mg/kg     |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name  | Species | Value                     |
|---|---------|---------------------------|
| Propylidynetrimethanol, propoxylated            | Rabbit  | No significant irritation |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Rabbit  | No significant irritation |
| m-phenylenebis(methylamine)                     | Rat     | Corrosive                 |

**Serious Eye Damage/Irritation**

| Name  | Species | Value           |
|---|---------|-----------------|
| Propylidynetrimethanol, propoxylated            | Rabbit  | Mild irritant   |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Rabbit  | Severe irritant |
| m-phenylenebis(methylamine)                     | Rabbit  | Corrosive       |

**Skin Sensitisation**

| Name  | Species    | Value          |
|---|------------|----------------|
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Guinea pig | Not classified |
| m-phenylenebis(methylamine)                     | Guinea pig | Sensitising    |

**Respiratory Sensitisation**

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

**Germ Cell Mutagenicity**

| Name  | Route    | Value         |
|---|----------|---------------|
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | In Vitro | Not mutagenic |
| m-phenylenebis(methylamine)                     | In Vitro | Not mutagenic |
| m-phenylenebis(methylamine)                     | In vivo  | Not mutagenic |

**Carcinogenicity**

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

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

| Name  | Route     | Value                                  | Species | Test result           | Exposure Duration          |
|---|-----------|--|---------|-----------------------|----------------------------|
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Ingestion | Not classified for female reproduction | Rat     | NOAEL 1,000 mg/kg/day | prematuring into lactation |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 1,000 mg/kg/day | 30 days                    |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Ingestion | Not classified for development         | Rat     | NOAEL 1,000 mg/kg/day | prematuring into lactation |
| m-phenylenebis(methylamine)                     | Ingestion | Not classified for female reproduction | Rat     | NOAEL 450 mg/kg/day   | 1 generation               |
| m-phenylenebis(methylamine)                     | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 450 mg/kg       | 1 generation               |

**3M™ Superfast Plastic Adhesive PN 55045 Accelerator (Part B)**

|                             |           |                                |     |                     |              |
|-----------------------------|-----------|--------------------------------|-----|---------------------|--------------|
| m-phenylenebis(methylamine) | Ingestion | Not classified for development | Rat | NOAEL 450 mg/kg/day | 1 generation |
|-----------------------------|-----------|--------------------------------|-----|---------------------|--------------|

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

| Name   | Route      | Target Organ(s)        | Value  | Species                | Test result         | Exposure Duration |
|--|------------|------------------------|--|------------------------|---------------------|-------------------|
| 1,1',1'',1'''-Ethylenedinitrilotetrapropo n-2-ol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Positive      |                   |
| m-phenylenebis(methylamine)                      | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Not available          | NOAEL Not available |                   |

**Specific Target Organ Toxicity - repeated exposure**

| Name   | Route     | Target Organ(s)   | Value  | Species | Test result           | Exposure Duration |
|--|-----------|---|--|---------|-----------------------|-------------------|
| 1,1',1'',1'''-Ethylenedinitrilotetrapropo n-2-ol | Ingestion | nervous system  | Some positive data exist, but the data are not sufficient for classification | Rat     | NOAEL 300 mg/kg/day   | 30 days           |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropo n-2-ol | Ingestion | heart   skin   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   eyes   kidney and/or bladder   respiratory system   vascular system | Not classified   | Rat     | NOAEL 1,000 mg/kg/day | 30 days           |
| m-phenylenebis(methylamine)                      | Ingestion | endocrine system   blood   bone marrow  | Not classified   | Rat     | NOAEL 600 mg/kg/day   | 28 days           |

**Aspiration Hazard**

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

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

**SECTION 12: Ecological information**

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

**12.1. Toxicity**

No product test data available.

| Material   | CAS #     | Organism          | Type      | Exposure | Test endpoint | Test result |
|--|-----------|-------------------|-----------|----------|---------------|-------------|
| Glycerol poly(oxyethylene, oxypropylene) ether   | 9082-00-2 | Inland Silverside | Estimated | 96 hours | LC50          | 650 mg/l    |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropo n-2-ol | 102-60-3  | Green algae       | Estimated | 72 hours | EC50          | >100 mg/l   |

**3M™ Superfast Plastic Adhesive PN 55045 Accelerator (Part B)**

|   |            |                |              |          |                          |             |
|---|------------|----------------|--------------|----------|--------------------------|-------------|
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | 102-60-3   | Water flea     | Estimated    | 48 hours | EC50                     | >500 mg/l   |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | 102-60-3   | Fathead minnow | Experimental | 96 hours | LC50                     | >1,000 mg/l |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | 102-60-3   | Green algae    | Estimated    | 72 hours | Effect Concentration 10% | 16.1 mg/l   |
| Propylidynetrimethanol, propoxylated            | 25723-16-4 | Green algae    | Experimental | 72 hours | EC50                     | >100 mg/l   |
| Propylidynetrimethanol, propoxylated            | 25723-16-4 | Water flea     | Experimental | 48 hours | EC50                     | >100 mg/l   |
| Propylidynetrimethanol, propoxylated            | 25723-16-4 | Zebra Fish     | Experimental | 96 hours | LC50                     | >100 mg/l   |
| Propylidynetrimethanol, propoxylated            | 25723-16-4 | Green algae    | Experimental | 72 hours | NOEC                     | 100 mg/l    |
| Propylidynetrimethanol, propoxylated            | 25723-16-4 | Water flea     | Experimental | 21 days  | NOEC                     | 8.5 mg/l    |
| m-phenylenebis(methylamine)                     | 1477-55-0  | Green Algae    | Experimental | 72 hours | EC50                     | 28 mg/l     |
| m-phenylenebis(methylamine)                     | 1477-55-0  | Ricefish       | Experimental | 96 hours | LC50                     | 87.6 mg/l   |
| m-phenylenebis(methylamine)                     | 1477-55-0  | Water flea     | Experimental | 48 hours | EC50                     | 15.2 mg/l   |
| m-phenylenebis(methylamine)                     | 1477-55-0  | Green Algae    | Experimental | 72 hours | NOEC                     | 9.8 mg/l    |
| m-phenylenebis(methylamine)                     | 1477-55-0  | Water flea     | Experimental | 21 days  | NOEC                     | 4.7 mg/l    |

**12.2. Persistence and degradability**

| Material  | CAS Nbr    | Test type                          | Duration | Study Type    | Test result    | Protocol                          |
|---|------------|------------------------------------|----------|---------------|----------------|-----------------------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether  | 9082-00-2  | Data not available or insufficient |          |               | N/A            |                                   |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | 102-60-3   | Experimental Biodegradation        | 28 days  | BOD           | 1 % weight     | OECD 301C - MITI test (I)         |
| Propylidynetrimethanol, propoxylated            | 25723-16-4 | Experimental Biodegradation        | 28 days  | BOD           | 84 % BOD/ThBOD | Other methods                     |
| m-phenylenebis(methylamine)                     | 1477-55-0  | Experimental Biodegradation        | 28 days  | CO2 evolution | 49 % weight    | OECD 301B - Modified sturm or CO2 |

**12.3 : Bioaccumulative potential**

| Material  | Cas No.    | Test type   | Duration | Study Type             | Test result | Protocol   |
|---|------------|---|----------|------------------------|-------------|--|
| Glycerol poly(oxyethylene, oxypropylene) ether  | 9082-00-2  | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A  |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | 102-60-3   | Experimental Bioconcentration                         |          | Log Kow                | 0.27        | Other methods                                      |
| Propylidynetrimethanol, propoxylated            | 25723-16-4 | Experimental Bioconcentration                         |          | Log Kow                | 1.8         | Other methods                                      |
| m-phenylenebis(methylamine)                     | 1477-55-0  | Experimental BCF-Carp                                 | 42 days  | Bioaccumulation factor | <2.7        | OECD 305E - Bioaccumulation flow-through fish test |

**12.4. Mobility in soil**

Please contact manufacturer for more details

## 12.5. Results of the PBT and vPvB assessment

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

## 12.6. Other adverse effects

No information available.

# SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

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

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

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

### EU waste code (product as sold)

|           |  |
|-----------|--|
| 08 04 09* | Waste adhesives and sealants containing organic solvents or other dangerous substances |
| 20 01 27* | Paint, inks, adhesives and resins containing dangerous substances                      |

# SECTION 14: Transportation information

ADR/IMDG/IATA: Not restricted for transport.

# SECTION 15: Regulatory information

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

### Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

## 15.2. Chemical Safety Assessment

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

# SECTION 16: Other information

**List of relevant H statements**

|      |  |
|------|--|
| H302 | Harmful if swallowed.                              |
| H314 | Causes severe skin burns and eye damage.           |
| H315 | Causes skin irritation.                            |
| H317 | May cause an allergic skin reaction.               |
| H319 | Causes serious eye irritation.                     |
| H332 | Harmful if inhaled.                                |
| H412 | Harmful to aquatic life with long lasting effects. |

**Revision information:**

Section 6: Accidental release clean-up information information was modified.  
Section 7: Precautions safe handling information information was modified.  
Section 8: Appropriate Engineering controls information information was modified.  
Section 8: glove data value information was added.  
Section 8: glove data value information was modified.  
Section 8: Personal Protection - Respiratory Information information was modified.  
Section 8: Respiratory protection - recommended respirators information information was modified.  
Section 8: Skin protection - protective clothing information information was modified.  
Section 11: Health Effects - Ingestion information information was modified.  
Section 12: Component ecotoxicity information information was modified.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

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



## Safety Data Sheet

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|                                       |                   |                         |            |
|---------------------------------------|-------------------|-------------------------|------------|
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| <b>Transportation version number:</b> | 1.00 (12/08/2011) |                         |            |

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

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

#### 1.1. Product identifier

3M™ 55045 Superfast Plastic Adhesive (Part A)

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

##### Identified uses

Automotive.

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

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

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

### SECTION 2: Hazard identification

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

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

##### CLASSIFICATION:

Acute Toxicity, Category 4 - Acute Tox. 4; H332  
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334  
Skin Sensitization, Category 1 - Skin Sens. 1; H317  
Carcinogenicity, Category 2 - Carc. 2; H351  
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335  
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

For full text of H phrases, see Section 16.

#### 2.2. Label elements



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

**SIGNAL WORD**

DANGER.

**Symbols:**

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

**Pictograms**



**Ingredients:**

| Ingredient                                     | CAS Nbr    | EC No.    | % by Wt |
|--|------------|-----------|---------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers |            | 500-040-3 | 35 - 80 |
| Triethoxy(3-isocyanatopropyl)silane            | 24801-88-5 | 246-467-6 | 0.1 - 1 |

**HAZARD STATEMENTS:**

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

**PRECAUTIONARY STATEMENTS**

**Prevention:**

|       |                         |
|-------|-------------------------|
| P260A | Do not breathe vapours. |
| P280E | Wear protective gloves. |

**Response:**

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

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

**<=125 ml Hazard statements**

|      |  |
|------|--|
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction.                                       |
| H351 | Suspected of causing cancer.   |

**<=125 ml Precautionary statements**

**Prevention:**

## 3M™ 55045 Superfast Plastic Adhesive (Part A)

P261A Avoid breathing vapours.  
P280E Wear protective gloves.

### Response:

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

33% of the mixture consists of components of unknown acute oral toxicity.

2% of the mixture consists of components of unknown acute inhalation toxicity.

Contains 33% of components with unknown hazards to the aquatic environment.

### 2.3. Other hazards

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

## SECTION 3: Composition/information on ingredients

| Ingredient  | CAS Nbr    | EC No.    | REACH Registration No. | % by Wt | Classification  |
|---|------------|-----------|------------------------|---------|---|
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  |            | 500-040-3 |                        | 35 - 80 | Carc. 2, H351<br>Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317; STOT SE 3, H335; STOT RE 2, H373 |
| Castor oil, polymer with 1,1'-methylenebis[4-isocyanatobenzene] | 68424-09-9 |           |                        | 15 - 40 | Substance with a Community level exposure limit in the workplace  |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane                    | 2530-83-8  | 219-784-2 |                        | 1 - 2   | Eye Dam. 1, H318  |
| Triethoxy(3-isocyanatopropyl)silane                             | 24801-88-5 | 246-467-6 |                        | 0.1 - 1 | Acute Tox. 1, H330; Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Corr. 1B, H314; Resp. Sens. 1, H334; Skin Sens. 1, H317                                |

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

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation

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

#### Skin contact

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

**Eye contact**

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

**If swallowed**

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

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

See Section 11.1 Information on toxicological effects

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

Not applicable

**SECTION 5: Fire-fighting measures**

**5.1. Extinguishing media**

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

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

None inherent in this product.

**Hazardous Decomposition or By-Products**

**Substance**

Carbon monoxide.  
Carbon dioxide.  
Hydrogen cyanide.  
Oxides of nitrogen.  
Toxic vapour, gas, particulate.

**Condition**

During combustion.  
During combustion.  
During combustion.  
During combustion.  
During combustion.

**5.3. Advice for fire-fighters**

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

**SECTION 6: Accidental release measures**

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

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

**6.2. Environmental precautions**

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

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

Contain spill. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Dispose of collected material as

## 3M™ 55045 Superfast Plastic Adhesive (Part A)

soon as possible.

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse.

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

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

### 7.3. Specific end use(s)

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

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

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

| Ingredient       | CAS Nbr    | Agency | Limit type  | Additional comments    |
|------------------|------------|--------|---|------------------------|
| Free isocyanates | 68424-09-9 | UK HSC | TWA(as NCO):0.02<br>mg/m <sup>3</sup> ;STEL(as NCO):0.07<br>mg/m <sup>3</sup> | Respiratory Sensitizer |

UK HSC : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

#### Biological limit values

| Ingredient       | CAS Nbr    | Agency           | Determinant                | Biological Specimen | Sampling Time | Value      | Additional comments |
|------------------|------------|------------------|----------------------------|---------------------|---------------|------------|---------------------|
| Free isocyanates | 68424-09-9 | UK EH40<br>BMGVs | Isocyanate-derived diamine | Creatinine in urine | EPE           | 1 umol/mol |                     |

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

EPE: At the end of the period of exposure.

### 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

## 3M™ 55045 Superfast Plastic Adhesive (Part A)

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

Indirect vented goggles.

### *Applicable Norms/Standards*

Use eye protection conforming to EN 166

### **Skin/hand protection**

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

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

| <b>Material</b> | <b>Thickness (mm)</b> | <b>Breakthrough Time</b> |
|-----------------|-----------------------|--------------------------|
| Butyl rubber.   | 0.5                   | > 8 hours                |
| Fluoroelastomer | 0.4                   | > 8 hours                |
| Nitrile rubber. | 0.35                  | > 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 (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Nitrile

### **Respiratory protection**

In case of inadequate ventilation wear 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>              | Liquid.                            |
| <b>Specific Physical Form:</b>     | Viscous.                           |
| <b>Appearance/Odour</b>            | Low or no detectable odour, clear. |
| <b>Odour threshold</b>             | <i>No data available.</i>          |
| <b>pH</b>                          | <i>Not applicable.</i>             |
| <b>Boiling point/boiling range</b> | $\geq 204.4$ °C                    |
| <b>Melting point</b>               | <i>No data available.</i>          |
| <b>Flammability (solid, gas)</b>   | Not applicable.                    |
| <b>Explosive properties</b>        | Not classified                     |
| <b>Oxidising properties</b>        | Not classified                     |

## 3M™ 55045 Superfast Plastic Adhesive (Part A)

|   |  |
|---|--|
| <b>Flash point</b>                            | $\geq 143.3$ °C [ <i>Test Method</i> : Tagliabue closed cup] |
| <b>Autoignition temperature</b>               | <i>Not applicable.</i>                                       |
| <b>Flammable Limits(LEL)</b>                  | <i>Not applicable.</i>                                       |
| <b>Flammable Limits(UEL)</b>                  | <i>Not applicable.</i>                                       |
| <b>Vapour pressure</b>                        | $\leq 0$ Pa [ <i>@ 20 °C</i> ]                               |
| <b>Relative density</b>                       | 1.1 [ <i>Ref Std</i> : WATER=1]                              |
| <b>Water solubility</b>                       | Negligible   |
| <b>Solubility- non-water</b>                  | <i>No data available.</i>                                    |
| <b>Partition coefficient: n-octanol/water</b> | <i>No data available.</i>                                    |
| <b>Evaporation rate</b>                       | $\leq 1$ [ <i>Details</i> : Gels with exposure to humidity.] |
| <b>Vapour density</b>                         | $\geq 1$ [ <i>Ref Std</i> : AIR=1]                           |
| <b>Decomposition temperature</b>              | <i>No data available.</i>                                    |
| <b>Viscosity</b>                              | 1,000 - 2,000 mPa-s  |
| <b>Density</b>                                | 1.1 g/ml   |

### 9.2. Other information

|                                      |  |
|--------------------------------------|--|
| <b>EU Volatile Organic Compounds</b> | <i>No data available.</i>                    |
| <b>Molecular weight</b>              | <i>No data available.</i>                    |
| <b>Percent volatile</b>              | 2 % weight [ <i>Test Method</i> : Estimated] |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

### 10.2 Chemical stability

Stable.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

None known.

### 10.5 Incompatible materials

Water  
Strong acids.  
Strong bases.

### 10.6 Hazardous decomposition products

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

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

### 11.1 Information on Toxicological effects

## Signs and Symptoms of Exposure

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

### Inhalation

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

### Skin contact

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

### Eye contact

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

### Ingestion

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

### Additional Health Effects:

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

Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure.

#### Additional information:

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

### Toxicological Data

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

#### Acute Toxicity

| Name   | Route                          | Species | Value  |
|--|--------------------------------|---------|--|
| Overall product                                | Dermal                         |         | No data available; calculated ATE >5,000 mg/kg |
| Overall product                                | Inhalation-Vapour(4 hr)        |         | No data available; calculated ATE20 - 50 mg/l  |
| Overall product                                | Ingestion                      |         | No data available; calculated ATE >5,000 mg/kg |
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Dermal                         | Rabbit  | LD50 > 5,000 mg/kg                             |
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Inhalation-Dust/Mist (4 hours) | Rat     | LC50 0.368 mg/l                                |
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Ingestion                      | Rat     | LD50 31,600 mg/kg                              |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane  | Dermal                         | Rabbit  | LD50 4,000 mg/kg                               |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane  | Inhalation-Dust/Mist (4 hours) | Rat     | LC50 > 5.3 mg/l                                |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane  | Ingestion                      | Rat     | LD50 7,010 mg/kg                               |
| Triethoxy(3-isocyanatopropyl)silane            | Dermal                         | Rabbit  | LD50 1,259 mg/kg                               |
| Triethoxy(3-isocyanatopropyl)silane            | Inhalation-Vapour (4 hours)    | Rat     | LC50 0.36 mg/l                                 |
| Triethoxy(3-isocyanatopropyl)silane            | Ingestion                      | Rat     | LD50 706 mg/kg                                 |

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

**3M™ 55045 Superfast Plastic Adhesive (Part A)**

| Name   | Species                 | Value         |
|--|-------------------------|---------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | official classification | Irritant      |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane  | Rabbit                  | Mild irritant |
| Triethoxy(3-isocyanatopropyl)silane            | Rabbit                  | Corrosive     |

**Serious Eye Damage/Irritation**

| Name   | Species                 | Value           |
|--|-------------------------|-----------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | official classification | Severe irritant |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane  | Rabbit                  | Corrosive       |
| Triethoxy(3-isocyanatopropyl)silane            | Rabbit                  | Corrosive       |

**Skin Sensitisation**

| Name   | Species                 | Value          |
|--|-------------------------|----------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | official classification | Sensitising    |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane  | Guinea pig              | Not classified |
| Triethoxy(3-isocyanatopropyl)silane            | similar compounds       | Sensitising    |

**Respiratory Sensitisation**

| Name   | Species           | Value       |
|--|-------------------|-------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Human             | Sensitising |
| Triethoxy(3-isocyanatopropyl)silane            | similar compounds | Sensitising |

**Germ Cell Mutagenicity**

| Name   | Route    | Value  |
|--|----------|--|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane  | In vivo  | Not mutagenic  |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane  | In Vitro | Some positive data exist, but the data are not sufficient for classification |

**Carcinogenicity**

| Name   | Route      | Species | Value  |
|--|------------|---------|--|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Inhalation | Rat     | Some positive data exist, but the data are not sufficient for classification |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane  | Dermal     | Mouse   | Not carcinogenic   |

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

| Name   | Route      | Value                                  | Species | Test result              | Exposure Duration    |
|--|------------|--|---------|--------------------------|----------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Inhalation | Not classified for development         | Rat     | NOAEL<br>0.004 mg/l      | during organogenesis |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane  | Ingestion  | Not classified for female reproduction | Rat     | NOAEL<br>1,000 mg/kg/day | 1 generation         |
| [3-(2,3-Epoxypropoxy)propyl]                   | Ingestion  | Not classified for male reproduction   | Rat     | NOAEL                    | 1 generation         |



**3M™ 55045 Superfast Plastic Adhesive (Part A)**

|   |           |                                |     |                       |                      |
|---|-----------|--------------------------------|-----|-----------------------|----------------------|
| trimethoxysilane                              |           |                                |     | 1,000 mg/kg/day       |                      |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane | Ingestion | Not classified for development | Rat | NOAEL 3,000 mg/kg/day | during organogenesis |

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

| Name   | Route      | Target Organ(s)        | Value                            | Species                 | Test result         | Exposure Duration |
|--|------------|------------------------|----------------------------------|-------------------------|---------------------|-------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Inhalation | respiratory irritation | May cause respiratory irritation | official classification | NOAEL Not available |                   |

**Specific Target Organ Toxicity - repeated exposure**

| Name   | Route      | Target Organ(s)   | Value  | Species | Test result           | Exposure Duration |
|--|------------|---|--|---------|-----------------------|-------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Inhalation | respiratory system  | Causes damage to organs through prolonged or repeated exposure | Rat     | LOAEL 0.004 mg/l      | 13 weeks          |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane  | Ingestion  | heart   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   nervous system   kidney and/or bladder   respiratory system | Not classified   | Rat     | NOAEL 1,000 mg/kg/day | 28 days           |

**Aspiration Hazard**

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

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

**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 |
|---|------------|-----------------|---|----------|---------------|-------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | 500-040-3  | Water flea      | Estimated   | 24 hours | EC50          | >100 mg/l   |
| Castor oil, polymer with 1,1'-methylenebis[4-isocyanatobenzene] | 68424-09-9 |                 | Data not available or insufficient for classification |          |               |             |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane                   | 2530-83-8  | Common Carp     | Experimental  | 96 hours | LC50          | 55 mg/l     |
| [3-(2,3-Epoxypropoxy)propyl] trimethoxysilane                   | 2530-83-8  | Crustacea other | Experimental  | 48 hours | LC50          | 324 mg/l    |

**3M™ 55045 Superfast Plastic Adhesive (Part A)**

|  |            |             |              |          |      |             |
|--|------------|-------------|--------------|----------|------|-------------|
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane | 2530-83-8  | Green algae | Experimental | 96 hours | EC50 | 350 mg/l    |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane | 2530-83-8  | Green Algae | Experimental | 96 hours | NOEC | 130 mg/l    |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane | 2530-83-8  | Water flea  | Experimental | 21 days  | NOEC | >=100 mg/l  |
| Triethoxy(3-isocyanatopropyl)silane          | 24801-88-5 | Green algae | Estimated    | 72 hours | EC50 | >1,000 mg/l |
| Triethoxy(3-isocyanatopropyl)silane          | 24801-88-5 | Water flea  | Estimated    | 48 hours | EC50 | 331 mg/l    |
| Triethoxy(3-isocyanatopropyl)silane          | 24801-88-5 | Zebra Fish  | Estimated    | 96 hours | LC50 | >934 mg/l   |
| Triethoxy(3-isocyanatopropyl)silane          | 24801-88-5 | Green algae | Estimated    | 72 hours | NOEC | 1.3 mg/l    |
| Triethoxy(3-isocyanatopropyl)silane          | 24801-88-5 | Water flea  | Estimated    | 21 days  | NOEC | >=100 mg/l  |

**12.2. Persistence and degradability**

| Material  | CAS Nbr    | Test type                         | Duration | Study Type                     | Test result       | Protocol                  |
|---|------------|-----------------------------------|----------|--------------------------------|-------------------|---------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | 500-040-3  | Estimated Hydrolysis              |          | Hydrolytic half-life           | <2 hours (t 1/2)  | Other methods             |
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | 500-040-3  | Estimated Biodegradation          | 28 days  | BOD                            | 0 % weight        | OECD 301C - MITI test (I) |
| Castor oil, polymer with 1,1'-methylenebis[4-isocyanatobenzene] | 68424-09-9 | Data not available - insufficient |          |                                | NA                |                           |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane                    | 2530-83-8  | Experimental Hydrolysis           |          | Hydrolytic half-life           | 6.5 hours (t 1/2) | Other methods             |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane                    | 2530-83-8  | Experimental Biodegradation       | 28 days  | Dissolv. Organic Carbon Deplet | 37 % weight       | Other methods             |
| Triethoxy(3-isocyanatopropyl)silane                             | 24801-88-5 | Estimated Hydrolysis              |          | Hydrolytic half-life           | 8.5 hours (t 1/2) | Other methods             |

**12.3 : Bioaccumulative potential**

| Material  | Cas No.    | Test type   | Duration | Study Type             | Test result | Protocol   |
|---|------------|---|----------|------------------------|-------------|--|
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | 500-040-3  | Estimated BCF-Carp                                    | 28 days  | Bioaccumulation factor | 200         | Other methods                                      |
| Castor oil, polymer with 1,1'-methylenebis[4-isocyanatobenzene] | 68424-09-9 | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A  |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane                    | 2530-83-8  | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A  |
| Triethoxy(3-isocyanatopropyl)silane                             | 24801-88-5 | Estimated BCF-Carp                                    | 56 days  | Bioaccumulation factor | <3.4        | OECD 305E - Bioaccumulation flow-through fish test |

**12.4. Mobility in soil**

Please contact manufacturer for more details

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

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

**12.6. Other adverse effects**

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

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

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

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

### EU waste code (product as sold)

08 04 09\* Waste adhesives and sealants containing organic solvents or other dangerous substances  
20 01 27\* Paint, inks, adhesives and resins containing dangerous substances

## SECTION 14: Transportation information

ADR/IMDG/IATA: Not restricted for transport.

## SECTION 15: Regulatory information

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

#### Carcinogenicity

| <u>Ingredient</u>                              | <u>CAS Nbr</u> | <u>Classification</u> | <u>Regulation</u>   |
|--|----------------|-----------------------|---|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | 500-040-3      | Carc. 2               | Vendor classified according to Regulation (EC) No 1272/2008 |

#### Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

### 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**

|      |  |
|------|--|
| H302 | Harmful if swallowed.  |
| 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.   |
| H330 | Fatal if inhaled.  |
| H332 | Harmful if inhaled.  |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation.  |
| H351 | Suspected of causing cancer.   |
| H373 | May cause damage to organs through prolonged or repeated exposure.         |

**Revision information:**

CLP: Ingredient table information was modified.

Label: CLP Percent Unknown information was deleted.

Label: CLP Percent Unknown information was modified.

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

Section 8: Appropriate Engineering controls information information was modified.

Section 8: glove data value information was added.

Section 8: glove data value information was modified.

Section 12: Component ecotoxicity information information was modified.

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

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

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