



## Safety Data Sheet

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|                                       |            |                         |            |
|---------------------------------------|------------|-------------------------|------------|
| <b>Document group:</b>                | 31-3897-1  | <b>Version number:</b>  | 13.00      |
| <b>Revision date:</b>                 | 05/12/2023 | <b>Supersedes date:</b> | 21/02/2022 |
| <b>Transportation version number:</b> |            |                         |            |

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

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

#### 1.1. Product identifier

3M™ Super Fast Repair Adhesive, Black PN 04248, 04748, 34248

#### Product Identification Numbers

60-4550-7067-6      UU-0030-7712-8      UU-0108-4776-0

7000120166      7100064018      7100222843

#### 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](http://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:

30-0076-7, 31-6306-0

### TRANSPORTATION INFORMATION

Refer to section 14 of the kit components for transport information.

## KIT LABEL

### 2.1. Classification of the substance or mixture

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

#### CLASSIFICATION:

Acute Toxicity, Category 4 - Acute Tox. 4; H332  
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
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-Repeated Exposure, Category 2 - STOT RE 2; H373  
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335  
Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

### 2.2. Label elements

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

#### SIGNAL WORD

DANGER.

#### Symbols

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

#### Pictograms



#### Contains:

m-Xylene-.alpha.alpha'.-diamine; 4,4'-Methylenediphenyl diisocyanate, oligomers

#### HAZARD STATEMENTS:

|      |                                                                            |
|------|----------------------------------------------------------------------------|
| H332 | Harmful if inhaled.                                                        |
| H315 | Causes skin irritation.                                                    |
| H319 | Causes serious eye irritation.                                             |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction.                                       |
| H351 | Suspected of causing cancer.                                               |
| H335 | May cause respiratory irritation.                                          |

|      |                                                                                        |
|------|----------------------------------------------------------------------------------------|
| H373 | May cause damage to organs through prolonged or repeated exposure: respiratory system. |
|------|----------------------------------------------------------------------------------------|

|      |                                                    |
|------|----------------------------------------------------|
| H412 | Harmful to aquatic life with long lasting effects. |
|------|----------------------------------------------------|

#### 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.

**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.  
  
H412 Harmful to aquatic life with long lasting effects.

**<=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.

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

**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)**

**Revision information:**

GB Kit Information: CLP Percent Unknown information was added.  
GB Label: CLP Ingredients - kit components information was added.  
Label: CLP Percent Unknown - Kit information was deleted.  
Kit Information: CLP Target Organ Hazard Statement information was deleted.  
Kit: Component document group number(s) information was modified.  
Label: CLP Ingredients - kit components information was deleted.  
Section 2: <125ml Hazard - Environmental information was added.  
Section 2: <125ml Precautionary - Prevention information was modified.  
Section 2: <125ml Precautionary - Response information was modified.  
Label: CLP Classification information was modified.  
Label: CLP Environmental Hazard Statements information was added.  
Label: CLP Precautionary - Prevention information was modified.  
Label: CLP Precautionary - Response information was modified.  
Label: CLP Target Organ Hazard Statement information was added.



## Safety Data Sheet

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**Document group:** 30-0076-7  
**Revision date:** 05/12/2024

**Version number:** 12.00  
**Supersedes date:** 08/06/2022

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

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

#### 1.1. Product identifier

3M Super Fast Repair Adhesive PN 04248, 04748 (Accelerator) 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

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

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

##### CLASSIFICATION:

Acute Toxicity, Category 4 - Acute Tox. 4; H332  
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
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-Repeated Exposure, Category 2 - STOT RE 2; H373

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

For full text of H phrases, see Section 16.

## 2.2. Label elements

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

### SIGNAL WORD

DANGER.

### Symbols

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

### Pictograms



| Ingredient                                     | CAS Nbr | EC No.    | % by Wt |
|------------------------------------------------|---------|-----------|---------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers |         | 500-040-3 | 50 - 90 |

### HAZARD STATEMENTS:

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

### PRECAUTIONARY STATEMENTS

#### Prevention:

|       |                                                    |
|-------|----------------------------------------------------|
| P261A | Avoid breathing vapours.                           |
| P280K | Wear protective gloves and respiratory protection. |

#### Response:

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

**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.                                               |

## &lt;=125 ml Precautionary statements

**Prevention:**

P261A Avoid breathing vapours.  
P280K Wear protective gloves and respiratory protection.

**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.

39% of the mixture consists of components of unknown acute oral toxicity.

3% of the mixture consists of components of unknown acute inhalation toxicity.  
Contains 39% of components with unknown hazards to the aquatic environment.

**Information required per Regulation (EU) 2020/1149, amendment to REACH Regulation (1907/2006) as amended for Great Britain, 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](https://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], as amended for GB                                                                                  |
|-----------------------------------------------------------------|-------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | (EC-No.) 500-040-3                        | 50 - 90 | Carc. 2, H351<br>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>STOT SE 3, H335<br>STOT RE 2, H373 |
| Castor Oil, Polymer With 1,1'-Methylenebis[4-Isocyanatobenzene] | (CAS-No.) 68424-09-9                      | 30 - 60 | Substance with a national occupational exposure limit                                                                                                               |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane                    | (CAS-No.) 2530-83-8<br>(EC-No.) 219-784-2 | 1 - 5   | Eye Dam. 1, H318<br>Aquatic Chronic 3, H412                                                                                                                         |

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

**Specific Concentration Limits**

| Ingredient                                     | Identifier(s)      | Specific Concentration Limits                                                                                                 |
|------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | (EC-No.) 500-040-3 | (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. 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

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

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). Harmful if inhaled. Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision). Target organ effects. See Section 11 for additional details.

### 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 soon as possible.

**6.4. Reference to other sections**

Refer to Section 8 and Section 13 for more information

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

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

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

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

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



mg/m<sup>3</sup>

UK HSE : 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 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

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

#### *Applicable Norms/Standards*

Use eye protection conforming to EN 166

#### Skin/hand protection

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

| Material         | Thickness (mm)    | Breakthrough Time |
|------------------|-------------------|-------------------|
| Polymer laminate | No data available | No data available |

#### *Applicable Norms/Standards*

Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

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

#### *Applicable Norms/Standards*

Use a respirator conforming to EN 140 or EN 136: filter types A & P

## SECTION 9: Physical and chemical properties

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

|                                        |                                                |
|----------------------------------------|------------------------------------------------|
| Physical state                         | Liquid.                                        |
| Specific Physical Form:                | Viscous.                                       |
| Colour                                 | Colourless                                     |
| Odor                                   | Mild Epoxy, Odourless                          |
| Odour threshold                        | No data available.                             |
| Melting point/freezing point           | No data available.                             |
| Boiling point/boiling range            | >=204.4 °C                                     |
| Flammability                           | Not applicable.                                |
| Flammable Limits(LEL)                  | Not applicable.                                |
| Flammable Limits(UEL)                  | Not applicable.                                |
| Flash point                            | >=143.3 °C [Test Method: Tagliabue closed cup] |
| Autoignition temperature               | Not applicable.                                |
| Decomposition temperature              | No data available.                             |
| pH                                     | substance/mixture is non-soluble (in water)    |
| Kinematic Viscosity                    | 1,364 mm <sup>2</sup> /sec                     |
| Water solubility                       | Negligible                                     |
| Solubility- non-water                  | No data available.                             |
| Partition coefficient: n-octanol/water | No data available.                             |
| Vapour pressure                        | <=0 Pa [@ 20 °C]                               |
| Density                                | 1.1 g/ml                                       |
| Relative density                       | 1.1 [Ref Std: WATER=1]                         |
| Relative Vapour Density                | >=1 [Ref Std: AIR=1]                           |
| Particle Characteristics               | Not applicable.                                |

### 9.2. Other information

#### 9.2.2 Other safety characteristics

EU Volatile Organic Compounds

No data available.

Evaporation rate

<=1 [Details: Gels with exposure to humidity.]

Percent volatile

<=1 % weight [Test Method: 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 material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

#### 11.1. Information on hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

##### Signs and Symptoms of Exposure

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

##### Inhalation

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

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

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

### Serious Eye Damage/Irritation

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

### Skin Sensitisation

| Name                                           | Species    | Value          |
|------------------------------------------------|------------|----------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Mouse      | Sensitising    |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane   | Guinea pig | Not classified |

### Respiratory Sensitisation

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

**3M Super Fast Repair Adhesive PN 04248, 04748 (Accelerator) Part A**

|                                              |        |       |                               |
|----------------------------------------------|--------|-------|-------------------------------|
|                                              |        |       | 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]trimethoxysilane   | Ingestion  | Not classified for male reproduction   | Rat     | NOAEL<br>1,000 mg/kg/day | 1 generation         |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane   | Ingestion  | Not classified for development         | Rat     | NOAEL<br>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<br>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<br>1,000 mg/kg/day | 28 days           |

**Aspiration Hazard**

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

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

**11.2. Information on other hazards**

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

**SECTION 12: Ecological information**

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

## 12.1. Toxicity

No product test data available.

| Material                                                        | CAS #      | Organism         | Type                                                  | Exposure | Test endpoint | Test result |
|-----------------------------------------------------------------|------------|------------------|-------------------------------------------------------|----------|---------------|-------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | 500-040-3  | Water flea       | Analogous Compound                                    | 24 hours | EC50          | >100 mg/l   |
| Castor Oil, Polymer With 1,1'-Methylenebis[4-Isocyanatobenzene] | 68424-09-9 | N/A              | Data not available or insufficient for classification | N/A      | N/A           | NA          |
| [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  | Green algae      | Experimental                                          | 96 hours | ErC50         | 350 mg/l    |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane                    | 2530-83-8  | Invertebrate     | Experimental                                          | 48 hours | LC50          | 324 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    |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane                    | 2530-83-8  | Activated sludge | Experimental                                          | 3 hours  | EC50          | >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  | Analogous Compound Biodegradation | 28 days  | BOD                            | 0 %BOD/ThOD        | OECD 301C - MITI test (I)      |
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | 500-040-3  | Analogous Compound Hydrolysis     |          | Hydrolytic half-life (pH 7)    | <2 hours (t 1/2)   |                                |
| Castor Oil, Polymer With 1,1'-Methylenebis[4-Isocyanatobenzene] | 68424-09-9 | Data not available - insufficient | N/A      | N/A                            | N/A                | N/A                            |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane                    | 2530-83-8  | Experimental Biodegradation       | 28 days  | Dissolv. Organic Carbon Deplet | 37 %removal of DOC | EC C.4.A. DOC Die-Away Test    |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane                    | 2530-83-8  | Experimental Hydrolysis           |          | Hydrolytic half-life (pH 7)    | 6.5 hours (t 1/2)  | OECD 111 Hydrolysis func of pH |

## 12.3 : Bioaccumulative potential

| Material                                                        | Cas No.    | Test type                                             | Duration | Study Type             | Test result | Protocol |
|-----------------------------------------------------------------|------------|-------------------------------------------------------|----------|------------------------|-------------|----------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | 500-040-3  | Analogous Compound BCF - Fish                         | 28 days  | Bioaccumulation factor | 200         |          |
| 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 | Experimental Bioconcentration |  | Log Kow | 0.5 | Episuite™ |
|----------------------------------------------|-----------|-------------------------------|--|---------|-----|-----------|

#### 12.4. Mobility in soil

| Material                                     | Cas No.   | Test type                | Study Type | Test result | Protocol  |
|----------------------------------------------|-----------|--------------------------|------------|-------------|-----------|
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | Modeled Mobility in Soil | Koc        | 10 l/kg     | Episuite™ |

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

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

#### 12.6. Other adverse effects

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

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

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

Dispose of 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

### SECTION 14: Transportation information

Not hazardous for transportation.

|                                        | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|----------------------------------------|------------------------|----------------------|-------------------------|
| <b>14.1 UN 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</b>              | No data available.     | No data available.   | No data available.      |

|                                                                                  |                                                                        |                                                                        |                                                                        |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>hazards</b>                                                                   |                                                                        |                                                                        |                                                                        |
| <b>14.6 Special precautions for user</b>                                         | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. |
| <b>14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code</b> | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>Control Temperature</b>                                                       | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>Emergency Temperature</b>                                                     | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>ADR Classification Code</b>                                                   | 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>                                                                                          |
|------------------------------------------------|----------------|-----------------------|------------------------------------------------------------------------------------------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | 500-040-3      | Carc. 2               | Vendor classified according to the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain |

#### 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 Japan Chemical Substance Control Law. 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.

#### COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1



None

Seveso named dangerous substances, Annex 1, Part 2

None

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

No chemicals listed

**15.2. Chemical Safety Assessment**

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

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

|      |                                                                                        |
|------|----------------------------------------------------------------------------------------|
| 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.                                                           |
| H373 | May cause damage to organs through prolonged or repeated exposure.                     |
| H373 | May cause damage to organs through prolonged or repeated exposure: respiratory system. |
| H412 | Harmful to aquatic life with long lasting effects.                                     |

**Revision information:**

GB Section 02: CLP Ingredient table information was added.

GB Section 02: Other hazards phrase information was added.

GB Section 04: First Aid - Symptoms and Effects (GB CLP) information was added.

GB Section 04: Information on toxicological effects information was added.

GB Section 12: Classification Warning information was added.

GB Section 15: Carcinogenicity information information was added.

GB Section 15: Chemical Safety Assessment information was added.

GBSDS Section 14 Transport in bulk - Main Heading information was added.

GBSDS Section 14 UN Number information was added.

Section 2: <125ml Precautionary - Prevention information was modified.

CLP: Ingredient table information was deleted.

Label: CLP Percent Unknown information was deleted.

Label: CLP Precautionary - Prevention information was modified.

Section 02: Label Elements: GB Percent Unknown information was added.

Section 2: Other hazards phrase information was deleted.

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

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

Section 03: SCL table information was added.

Section 03: SCL table information was deleted.

Section 04: First Aid - Symptoms and Effects (CLP) information was deleted.

Section 04: Information on toxicological effects information was deleted.

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was modified.

Section 9: Flammability (solid, gas) information information was deleted.

Section 09: Flammability information information was added.

Section 09: Odor information was modified.

Section 09: Particle Characteristics N/A information was added.  
Section 9: Vapour density value information was modified.  
Section 11: Classification disclaimer information was deleted.  
Section 11: GB Classification disclaimer information was added.  
Section 11: GB No endocrine disruptor information available warning information was added.  
Section 11: Germ Cell Mutagenicity Table information was modified.  
Section 11: No endocrine disruptor information available warning information was deleted.  
Section 11: Skin Sensitization Table information was modified.  
Section 12: 12.6. Endocrine Disrupting Properties information was deleted.  
Section 12: 12.6. Other adverse effects information was added.  
Section 12: 12.7. Other adverse effects information was deleted.  
Section 12: Classification Warning information was deleted.  
Section 12: Component ecotoxicity information information was modified.  
Section 12: Mobility in soil information information was modified.  
Prints No Data if Adverse effects information is not present information was deleted.  
Section 12: No endocrine disruptor information available warning information was added.  
Section 12: No endocrine disruptor information available warning information was deleted.  
Section 12: Persistence and Degradability information information was modified.  
Section 12: Biocumulative potential information information was modified.  
Section 14 Marine transport in bulk according to IMO instruments – Main Heading information was deleted.  
Section 14 UN Number information was deleted.  
Section 14: Transportation classification information was deleted.  
Section 15: Carcinogenicity information information was deleted.  
Section 15: Chemical Safety Assessment information was deleted.  
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material.  
information was added.  
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material.  
information was deleted.  
Section 16: Web address information was added.  
Section 16: Web address information was deleted.

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 SDSs for Great Britain are available at [www.3M.com/uk](http://www.3M.com/uk)**

For Northern Ireland documents, please contact your 3M representative to obtain a copy.



## Safety Data Sheet

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**Document group:** 31-6306-0  
**Revision date:** 05/12/2024

**Version number:** 7.00  
**Supersedes date:** 27/06/2022

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

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

#### 1.1. Product identifier

3M Black Superfast Adhesive PN 04248, 04748, 34248 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

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

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

##### CLASSIFICATION:

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
Skin Sensitization, Category 1 - Skin Sens. 1; H317  
Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

**2.2. Label elements****The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain****SIGNAL WORD**

WARNING.

**Symbols**

GHS07 (Exclamation mark) |

**Pictograms**

| Ingredient                      | CAS Nbr   | EC No.    | % by Wt |
|---------------------------------|-----------|-----------|---------|
| m-Xylene-.alpha.alpha'.-diamine | 1477-55-0 | 216-032-5 | 1 - 5   |

**HAZARD STATEMENTS:**

|      |                                                    |
|------|----------------------------------------------------|
| H315 | Causes skin irritation.                            |
| H319 | Causes serious eye irritation.                     |
| H317 | May cause an allergic skin reaction.               |
| H412 | Harmful to aquatic life with long lasting effects. |

**PRECAUTIONARY STATEMENTS****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.

**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.               |
| H412 | Harmful to aquatic life with long lasting effects. |

**<=125 ml Precautionary statements****Prevention:**

P280E Wear protective gloves.

**Response:**

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

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

Contains 52% of components with unknown hazards to the aquatic environment.

### 2.3. Other hazards

Persons previously sensitised to amines may develop a cross-sensitisation reaction to certain other amines.  
This material does not contain any substances that are assessed to be a PBT or vPvB

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Ingredient                                      | Identifier(s)                              | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB                               |
|-------------------------------------------------|--------------------------------------------|---------|------------------------------------------------------------------------------------------------------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether  | (CAS-No.) 9082-00-2                        | 30 - 60 | Substance not classified as hazardous                                                                            |
| Glycerol, propoxylated                          | (CAS-No.) 25791-96-2<br>(EC-No.) 500-044-5 | 10 - 30 | Substance not classified as hazardous                                                                            |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | (CAS-No.) 102-60-3<br>(EC-No.) 203-041-4   | 10 - 30 | Eye Irrit. 2, H319                                                                                               |
| m-Xylene-.alpha.alpha'.-diamine                 | (CAS-No.) 1477-55-0<br>(EC-No.) 216-032-5  | 1 - 5   | Acute Tox. 4, H332<br>Acute Tox. 4, H302<br>Skin Corr. 1B, H314<br>Skin Sens. 1, H317<br>Aquatic Chronic 3, H412 |
| Carbon black                                    | (CAS-No.) 1333-86-4<br>(EC-No.) 215-609-9  | < 0.5   | Substance with a national occupational exposure limit                                                            |
| 2,6-Di-tert-butyl-p-cresol                      | (CAS-No.) 128-37-0<br>(EC-No.) 204-881-4   | < 0.5   | Aquatic Chronic 1, H410,M=1<br>Aquatic Acute 1, H400,M=1                                                         |

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**

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

Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision).

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

Not applicable

## SECTION 5: Fire-fighting measures

**5.1. Extinguishing media**

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

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

None inherent in this product.

**Hazardous Decomposition or By-Products**

**Substance**

Carbon monoxide

Carbon dioxide.

Oxides of nitrogen.

**Condition**

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

**6.4. Reference to other sections**

Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

Do not handle until all safety precautions have been read and understood. 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.) Use personal protective equipment (eg. gloves, respirators...) as required.

## **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**

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

| <b>Ingredient</b>          | <b>CAS Nbr</b> | <b>Agency</b> | <b>Limit type</b>                                      | <b>Additional comments</b> |
|----------------------------|----------------|---------------|--------------------------------------------------------|----------------------------|
| 2,6-Di-tert-butyl-p-cresol | 128-37-0       | UK HSE        | TWA:10 mg/m <sup>3</sup>                               |                            |
| Carbon black               | 1333-86-4      | UK HSE        | TWA: 3.5 mg/m <sup>3</sup> ; STEL: 7 mg/m <sup>3</sup> |                            |

UK HSE : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

### **Biological limit values**

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

## **8.2. Exposure controls**

### **8.2.1. Engineering controls**

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

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

#### **Eye/face protection**

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

Safety glasses with side shields.

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> |
|-----------------|-----------------------|--------------------------|
| Natural rubber. | 0.5                   | < 1 hour                 |
| Butyl rubber.   | 0.5                   | =>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.

Apron - polymer laminate

#### **Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

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

#### *Applicable Norms/Standards*

Use a respirator conforming to EN 140 or EN 136: filter types A & P

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

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

|                                               |                                                |
|-----------------------------------------------|------------------------------------------------|
| <b>Physical state</b>                         | Liquid.                                        |
| <b>Specific Physical Form:</b>                | Gel                                            |
| <b>Colour</b>                                 | Black                                          |
| <b>Odor</b>                                   | Slight Ammoniacal                              |
| <b>Odour threshold</b>                        | No data available.                             |
| <b>Melting point/freezing point</b>           | No data available.                             |
| <b>Boiling point/boiling range</b>            | >=204.4 °C                                     |
| <b>Flammability</b>                           | Not applicable.                                |
| <b>Flammable Limits(LEL)</b>                  | Not applicable.                                |
| <b>Flammable Limits(UEL)</b>                  | Not applicable.                                |
| <b>Flash point</b>                            | >=143.3 °C [Test Method: Tagliabue closed cup] |
| <b>Autoignition temperature</b>               | Not applicable.                                |
| <b>Decomposition temperature</b>              | No data available.                             |
| <b>pH</b>                                     | substance/mixture is non-soluble (in water)    |
| <b>Kinematic Viscosity</b>                    | 1,569 mm <sup>2</sup> /sec                     |
| <b>Water solubility</b>                       | Negligible                                     |
| <b>Solubility- non-water</b>                  | No data available.                             |
| <b>Partition coefficient: n-octanol/water</b> | No data available.                             |
| <b>Vapour pressure</b>                        | Not applicable.                                |



|                          |                         |
|--------------------------|-------------------------|
| Density                  | 1 kg/l                  |
| Relative density         | 1.02 [Ref Std: WATER=1] |
| Relative Vapour Density  | >=1 [Ref Std: AIR=1]    |
| Particle Characteristics | Not applicable.         |

## 9.2. Other information

### 9.2.2 Other safety characteristics

EU Volatile Organic Compounds

No data available.

Evaporation rate

<=1 [Ref Std: WATER=1]

Percent volatile

<=1 % weight [Test Method: 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 material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

### 11.1. Information on hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

#### Signs and Symptoms of Exposure

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

#### Inhalation

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

**Skin contact**

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:**
**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

**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                         | similar compounds | LD50 > 2,000 mg/kg                             |
| Glycerol poly(oxyethylene, oxypropylene) ether  | Inhalation-Dust/Mist (4 hours) | similar compounds | LC50 > 3.2 mg/l                                |
| Glycerol poly(oxyethylene, oxypropylene) ether  | Ingestion                      | similar compounds | LD50 > 5,000 mg/kg                             |
| Glycerol, propoxylated                          | Dermal                         | Rat               | LD50 > 2,000 mg/kg                             |
| Glycerol, propoxylated                          | Inhalation-Dust/Mist (4 hours) | Rat               | LC50 > 50 mg/l                                 |
| Glycerol, propoxylated                          | Ingestion                      | Rat               | LD50 4,600 mg/kg                               |
| 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-Xylene-.alpha.alpha'.-diamine                 | Dermal                         | Rabbit            | LD50 > 2,000 mg/kg                             |
| m-Xylene-.alpha.alpha'.-diamine                 | Inhalation-Dust/Mist (4 hours) | Rat               | LC50 1.2 mg/l                                  |
| m-Xylene-.alpha.alpha'.-diamine                 | Ingestion                      | Rat               | LD50 980 mg/kg                                 |
| Carbon black                                    | Dermal                         | Rabbit            | LD50 > 3,000 mg/kg                             |
| Carbon black                                    | Ingestion                      | Rat               | LD50 > 8,000 mg/kg                             |
| 2,6-Di-tert-butyl-p-cresol                      | Dermal                         | Rat               | LD50 > 2,000 mg/kg                             |
| 2,6-Di-tert-butyl-p-cresol                      | Ingestion                      | Rat               | LD50 > 2,930 mg/kg                             |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

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

|                                                 |                   |                           |
|-------------------------------------------------|-------------------|---------------------------|
|                                                 |                   |                           |
| Glycerol poly(oxyethylene, oxypropylene) ether  | similar compounds | Minimal irritation        |
| Glycerol, propoxylated                          | Rabbit            | No significant irritation |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Rabbit            | No significant irritation |
| m-Xylene-.alpha.alpha'-.diamine                 | Rat               | Corrosive                 |
| Carbon black                                    | Rabbit            | No significant irritation |
| 2,6-Di-tert-butyl-p-cresol                      | Human and animal  | Minimal irritation        |

### Serious Eye Damage/Irritation

| Name                                            | Species           | Value                     |
|-------------------------------------------------|-------------------|---------------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether  | similar compounds | Mild irritant             |
| Glycerol, propoxylated                          | Rabbit            | Mild irritant             |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Rabbit            | Severe irritant           |
| m-Xylene-.alpha.alpha'-.diamine                 | Rabbit            | Corrosive                 |
| Carbon black                                    | Rabbit            | No significant irritation |
| 2,6-Di-tert-butyl-p-cresol                      | Rabbit            | Mild irritant             |

### Skin Sensitisation

| Name                                            | Species           | Value          |
|-------------------------------------------------|-------------------|----------------|
| Glycerol poly(oxyethylene, oxypropylene) ether  | similar compounds | Not classified |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Guinea pig        | Not classified |
| m-Xylene-.alpha.alpha'-.diamine                 | Guinea pig        | Sensitising    |
| 2,6-Di-tert-butyl-p-cresol                      | Human             | Not classified |

### Respiratory Sensitisation

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

### Germ Cell Mutagenicity

| Name                                            | Route    | Value                                                                        |
|-------------------------------------------------|----------|------------------------------------------------------------------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether  | In Vitro | Not mutagenic                                                                |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | In Vitro | Not mutagenic                                                                |
| m-Xylene-.alpha.alpha'-.diamine                 | In Vitro | Not mutagenic                                                                |
| m-Xylene-.alpha.alpha'-.diamine                 | In vivo  | Not mutagenic                                                                |
| Carbon black                                    | In Vitro | Not mutagenic                                                                |
| Carbon black                                    | In vivo  | Some positive data exist, but the data are not sufficient for classification |
| 2,6-Di-tert-butyl-p-cresol                      | In Vitro | Not mutagenic                                                                |
| 2,6-Di-tert-butyl-p-cresol                      | In vivo  | Not mutagenic                                                                |

### Carcinogenicity

| Name                       | Route      | Species                 | Value                                                                        |
|----------------------------|------------|-------------------------|------------------------------------------------------------------------------|
| Carbon black               | Dermal     | Mouse                   | Not carcinogenic                                                             |
| Carbon black               | Ingestion  | Mouse                   | Not carcinogenic                                                             |
| Carbon black               | Inhalation | Rat                     | Carcinogenic.                                                                |
| 2,6-Di-tert-butyl-p-cresol | Ingestion  | Multiple animal species | 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        |
|-------------------------------------------------|-----------|----------------------------------------|---------|-----------------------|--------------------------|
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | Ingestion | Not classified for female reproduction | Rat     | NOAEL 1,000 mg/kg/day | premating 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 | premating into lactation |
| m-Xylene-.alpha.alpha'-.diamine                 | Ingestion | Not classified for female reproduction | Rat     | NOAEL 450 mg/kg/day   | 1 generation             |
| m-Xylene-.alpha.alpha'-.diamine                 | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 450 mg/kg       | 1 generation             |
| m-Xylene-.alpha.alpha'-.diamine                 | Ingestion | Not classified for development         | Rat     | NOAEL 450 mg/kg/day   | 1 generation             |
| 2,6-Di-tert-butyl-p-cresol                      | Ingestion | Not classified for female reproduction | Rat     | NOAEL 500 mg/kg/day   | 2 generation             |
| 2,6-Di-tert-butyl-p-cresol                      | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 500 mg/kg/day   | 2 generation             |
| 2,6-Di-tert-butyl-p-cresol                      | Ingestion | Not classified for development         | Rat     | NOAEL 100 mg/kg/day   | 2 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'''-Ethylenedinitrilotetrapropan-2-ol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Positive      |                   |
| m-Xylene-.alpha.alpha'-.diamine                 | 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'''-Ethylenedinitrilotetrapropan-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'''-Ethylenedinitrilotetrapropan-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-Xylene-.alpha.alpha'-.diamine                 | Ingestion  | endocrine system   blood   bone marrow                                                                                                                                                                                    | Not classified                                                               | Rat     | NOAEL 600 mg/kg/day   | 28 days               |
| Carbon black                                    | Inhalation | pneumoconiosis                                                                                                                                                                                                            | Not classified                                                               | Human   | NOAEL Not available   | occupational exposure |
| 2,6-Di-tert-butyl-p-cresol                      | Ingestion  | liver                                                                                                                                                                                                                     | Some positive data exist, but the data are not sufficient for classification | Rat     | NOAEL 250 mg/kg/day   | 28 days               |

|                            |           |                       |                |       |                       |              |
|----------------------------|-----------|-----------------------|----------------|-------|-----------------------|--------------|
| 2,6-Di-tert-butyl-p-cresol | Ingestion | kidney and/or bladder | Not classified | Rat   | NOAEL 500 mg/kg/day   | 2 generation |
| 2,6-Di-tert-butyl-p-cresol | Ingestion | blood                 | Not classified | Rat   | LOAEL 420 mg/kg/day   | 40 days      |
| 2,6-Di-tert-butyl-p-cresol | Ingestion | endocrine system      | Not classified | Rat   | NOAEL 25 mg/kg/day    | 2 generation |
| 2,6-Di-tert-butyl-p-cresol | Ingestion | heart                 | Not classified | Mouse | NOAEL 3,480 mg/kg/day | 10 weeks     |

### Aspiration Hazard

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

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

### 11.2. Information on other hazards

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

## SECTION 12: Ecological information

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

### 12.1. Toxicity

No product test data available.

| Material                                         | CAS #      | Organism         | Type                                                  | Exposure   | Test endpoint | Test result |
|--------------------------------------------------|------------|------------------|-------------------------------------------------------|------------|---------------|-------------|
| Glycerol poly(oxyethylene, oxypropylene) ether   | 9082-00-2  | N/A              | Data not available or insufficient for classification | N/A        | N/A           | N/A         |
| 1,1',1'',1'''-Ethylenedinitrilotet rapropan-2-ol | 102-60-3   | Green algae      | Analogous Compound                                    | 72 hours   | ErC50         | >100 mg/l   |
| 1,1',1'',1'''-Ethylenedinitrilotet rapropan-2-ol | 102-60-3   | Water flea       | Analogous Compound                                    | 48 hours   | EC50          | >500 mg/l   |
| 1,1',1'',1'''-Ethylenedinitrilotet rapropan-2-ol | 102-60-3   | Activated sludge | Experimental                                          | 30 minutes | EC50          | >1,000 mg/l |
| 1,1',1'',1'''-Ethylenedinitrilotet rapropan-2-ol | 102-60-3   | Fathead minnow   | Experimental                                          | 96 hours   | LC50          | >1,000 mg/l |
| 1,1',1'',1'''-Ethylenedinitrilotet rapropan-2-ol | 102-60-3   | Green algae      | Analogous Compound                                    | 72 hours   | ErC10         | 16.1 mg/l   |
| Glycerol, propoxylated                           | 25791-96-2 | Golden Orfe      | Experimental                                          | 96 hours   | LC50          | >1,000 mg/l |
| Glycerol, propoxylated                           | 25791-96-2 | Green algae      | Experimental                                          | 72 hours   | ErC50         | >100 mg/l   |
| Glycerol, propoxylated                           | 25791-96-2 | Water flea       | Experimental                                          | 48 hours   | EC50          | >100 mg/l   |
| Glycerol, propoxylated                           | 25791-96-2 | Green algae      | Experimental                                          | 72 hours   | NOEC          | >100 mg/l   |
| m-Xylene-.alpha.alpha.a',-diamine                | 1477-55-0  | Activated sludge | Experimental                                          | 30 minutes | EC50          | >1,000 mg/l |

|                                  |           |                  |              |          |                                |              |
|----------------------------------|-----------|------------------|--------------|----------|--------------------------------|--------------|
| m-Xylene-.alpha.alph a'.-diamine | 1477-55-0 | Bacteria         | Experimental | 16 hours | EC10                           | 24 mg/l      |
| m-Xylene-.alpha.alph a'.-diamine | 1477-55-0 | Green algae      | Experimental | 72 hours | ErC50                          | 28 mg/l      |
| m-Xylene-.alpha.alph a'.-diamine | 1477-55-0 | Medaka           | Experimental | 96 hours | LC50                           | 87.6 mg/l    |
| m-Xylene-.alpha.alph a'.-diamine | 1477-55-0 | Water flea       | Experimental | 48 hours | EC50                           | 15.2 mg/l    |
| m-Xylene-.alpha.alph a'.-diamine | 1477-55-0 | Green algae      | Experimental | 72 hours | NOEC                           | 9.8 mg/l     |
| m-Xylene-.alpha.alph a'.-diamine | 1477-55-0 | Water flea       | Experimental | 21 days  | NOEC                           | 4.7 mg/l     |
| 2,6-Di-tert-butyl-p-cresol       | 128-37-0  | Activated sludge | Experimental | 3 hours  | EC50                           | >10,000 mg/l |
| 2,6-Di-tert-butyl-p-cresol       | 128-37-0  | Green algae      | Experimental | 72 hours | EC50                           | >0.4 mg/l    |
| 2,6-Di-tert-butyl-p-cresol       | 128-37-0  | Water flea       | Experimental | 48 hours | EC50                           | 0.48 mg/l    |
| 2,6-Di-tert-butyl-p-cresol       | 128-37-0  | Zebra Fish       | Experimental | 96 hours | No tox obs at lmt of water sol | >100 mg/l    |
| 2,6-Di-tert-butyl-p-cresol       | 128-37-0  | Green algae      | Experimental | 72 hours | EC10                           | 0.4 mg/l     |
| 2,6-Di-tert-butyl-p-cresol       | 128-37-0  | Medaka           | Experimental | 42 days  | NOEC                           | 0.053 mg/l   |
| 2,6-Di-tert-butyl-p-cresol       | 128-37-0  | Water flea       | Experimental | 21 days  | NOEC                           | 0.023 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    |

## 12.2. Persistence and degradability

| Material                                         | CAS Nbr    | Test type                                | Duration | Study Type    | Test result                       | Protocol                          |
|--------------------------------------------------|------------|------------------------------------------|----------|---------------|-----------------------------------|-----------------------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether   | 9082-00-2  | Modeled Biodegradation                   | 28 days  | BOD           | 20 %BOD/ThOD                      | Catalogic™                        |
| 1,1',1'',1'''-Ethylenedinitrilotet rapropan-2-ol | 102-60-3   | Experimental Biodegradation              | 28 days  | BOD           | 1 %BOD/ThOD                       | OECD 301C - MITI test (I)         |
| Glycerol, propoxylated                           | 25791-96-2 | Experimental Biodegradation              | 28 days  | CO2 evolution | 38 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| m-Xylene-.alpha.alph a'.-diamine                 | 1477-55-0  | Experimental Biodegradation              | 28 days  | CO2 evolution | 49 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| m-Xylene-.alpha.alph a'.-diamine                 | 1477-55-0  | Experimental Aquatic Inherent Biodegrad. | 28 days  | BOD           | 22 %BOD/ThOD                      | OECD 302C - Modified MITI (II)    |
| 2,6-Di-tert-butyl-p-cresol                       | 128-37-0   | Data not availbl-insufficient            | N/A      | N/A           | N/A                               | N/A                               |
| Carbon black                                     | 1333-86-4  | Data not availbl-insufficient            | N/A      | N/A           | N/A                               | N/A                               |

## 12.3 : Bioaccumulative potential

| Material                                        | Cas No.    | Test type                                             | Duration | Study Type             | Test result | Protocol                         |
|-------------------------------------------------|------------|-------------------------------------------------------|----------|------------------------|-------------|----------------------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether  | 9082-00-2  | Modeled Bioconcentration                              |          | Bioaccumulation factor | 2           | Catalogic™                       |
| Glycerol poly(oxyethylene, oxypropylene) ether  | 9082-00-2  | Modeled Bioconcentration                              |          | Log Kow                | -2.6        | Episuite™                        |
| 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol | 102-60-3   | Experimental Bioconcentration                         |          | Log Kow                | 0.27        | OECD 107 log Kow shake flask mtd |
| Glycerol, propoxylated                          | 25791-96-2 | Experimental BCF - Fish                               | 42 days  | Bioaccumulation factor | ≤7          |                                  |
| m-Xylene-.alpha.alpha.alpha'-diamine            | 1477-55-0  | Experimental BCF - Fish                               | 42 days  | Bioaccumulation factor | <2.7        | OECD305-Bioconcentration         |
| m-Xylene-.alpha.alpha.alpha'-diamine            | 1477-55-0  | Extrapolated Bioconcentration                         |          | Log Kow                | 0.18        | OECD 107 log Kow shake flask mtd |
| 2,6-Di-tert-butyl-p-cresol                      | 128-37-0   | Experimental BCF - Fish                               | 56 days  | Bioaccumulation factor | 1277        | OECD305-Bioconcentration         |
| Carbon black                                    | 1333-86-4  | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                              |

#### 12.4. Mobility in soil

| Material                                       | Cas No.   | Test type                | Study Type | Test result | Protocol             |
|------------------------------------------------|-----------|--------------------------|------------|-------------|----------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether | 9082-00-2 | Modeled Mobility in Soil | Koc        | 13 l/kg     | Episuite™            |
| m-Xylene-.alpha.alpha.alpha'-diamine           | 1477-55-0 | Modeled Mobility in Soil | Koc        | <1 l/kg     | ACD/Labs ChemSketch™ |

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

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

#### 12.6. Other adverse effects

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

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

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

Dispose of 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. If no other disposal options are available, waste product that has been completely cured or polymerised may be placed in a landfill properly designed for industrial waste. 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</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 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code</b> | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>Control Temperature</b>                                                       | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>Emergency Temperature</b>                                                     | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>ADR Classification Code</b>                                                   | 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****Ingredient****CAS Nbr****Classification****Regulation**



|                            |           |                                  |                                                |
|----------------------------|-----------|----------------------------------|------------------------------------------------|
| 2,6-Di-tert-butyl-p-cresol | 128-37-0  | Gr. 3: Not classifiable          | International Agency<br>for Research on Cancer |
| Carbon black               | 1333-86-4 | Grp. 2B: Possible human<br>carc. | International Agency<br>for Research on Cancer |

**Global inventory status**

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. 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.

**COMAH Regulation, SI 2015/483**

Seveso hazard categories, Annex 1, Part 1  
None

Seveso named dangerous substances, Annex 1, Part 2  
None

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

No chemicals listed

**15.2. Chemical Safety Assessment**

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

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

|      |                                                       |
|------|-------------------------------------------------------|
| 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.                                   |
| 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:**

GB Section 02: CLP Ingredient table information was added.  
GB Section 02: Other hazards phrase information was added.  
GB Section 04: First Aid - Symptoms and Effects (GB CLP) information was added.  
GB Section 04: Information on toxicological effects information was added.  
GB Section 12: Classification Warning information was added.  
GB Section 15: Carcinogenicity information information was added.  
GB Section 15: Chemical Safety Assessment information was added.  
GBSDS Section 14 Transport in bulk - Main Heading information was added.

GBSDS Section 14 UN Number information was added.  
Section 2: <125ml Hazard - Environmental information was added.  
CLP: Ingredient table information was deleted.  
Label: CLP Classification information was modified.  
Label: CLP Environmental Hazard Statements information was added.  
Label: CLP Percent Unknown information was deleted.  
Section 02: Label Elements: GB Percent Unknown information was added.  
Section 2: Other hazards phrase information was deleted.  
Section 3: Composition/ Information of ingredients table information was added.  
Section 3: Composition/ Information of ingredients table information was deleted.  
Section 04: First Aid - Symptoms and Effects (CLP) information was deleted.  
Section 04: Information on toxicological effects information was deleted.  
Section 8: Eye/face protection information information was modified.  
Section 8: glove data value information was modified.  
Section 8: Occupational exposure limit table information was modified.  
OEL Reg Agency Desc information was modified.  
Section 8: Skin protection - protective clothing information information was modified.  
Section 9: Flammability (solid, gas) information information was deleted.  
Section 09: Flammability information information was added.  
Section 09: Particle Characteristics N/A information was added.  
Section 9: Vapour density value information was modified.  
Section 11: Acute Toxicity table information was modified.  
Section 11: Carcinogenicity Table information was modified.  
Section 11: Classification disclaimer information was deleted.  
Section 11: GB Classification disclaimer information was added.  
Section 11: GB No endocrine disruptor information available warning information was added.  
Section 11: Germ Cell Mutagenicity Table information was modified.  
Section 11: No endocrine disruptor information available warning information was deleted.  
Section 11: Reproductive Toxicity Table information was modified.  
Section 11: Serious Eye Damage/Irritation Table information was modified.  
Section 11: Skin Corrosion/Irritation Table information was modified.  
Section 11: Skin Sensitization Table information was modified.  
Section 11: Target Organs - Repeated Table information was modified.  
Section 11: Target Organs - Single Table information was modified.  
Section 12: 12.6. Endocrine Disrupting Properties information was deleted.  
Section 12: 12.6. Other adverse effects information was added.  
Section 12: 12.7. Other adverse effects information was deleted.  
Section 12: Classification Warning information was deleted.  
Section 12: Component ecotoxicity information information was modified.  
Section 12: Mobility in soil information information was modified.  
Prints No Data if Adverse effects information is not present information was deleted.  
Section 12: No endocrine disruptor information available warning information was added.  
Section 12: No endocrine disruptor information available warning information was deleted.  
Section 12: Persistence and Degradability information information was modified.  
Section 12: Biocumulative potential information information was modified.  
Section 14 Marine transport in bulk according to IMO instruments – Main Heading information was deleted.  
Section 14 UN Number information was deleted.  
Section 14: Transportation classification information was deleted.  
Section 15: Carcinogenicity information information was deleted.  
Section 15: Chemical Safety Assessment information was deleted.  
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material.  
information was added.  
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material.  
information was deleted.  
Section 16: Web address information was added.  
Section 16: Web address information was deleted.

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 SDSs for Great Britain are available at [www.3M.com/uk](http://www.3M.com/uk)**

For Northern Ireland documents, please contact your 3M representative to obtain a copy.