



## Safety Data Sheet

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|                                       |            |                         |            |
|---------------------------------------|------------|-------------------------|------------|
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| <b>Revision date:</b>                 | 03/02/2023 | <b>Supersedes date:</b> | 27/04/2020 |
| <b>Transportation version number:</b> |            |                         |            |

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

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

#### 1.1. Product identifier

3M Scotch-Weld(TM) Epoxy Adhesive DP125 Grey

#### Product Identification Numbers

62-3293-3530-1      UU-0080-9113-2      UU-0101-3321-1

7100076727      7100114584      7100200488

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

##### Identified uses

Structural adhesive.

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

**Address:** 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.  
**Telephone:** +353 1 280 3555  
**E Mail:** tox.uk@mmm.com

**Website:** www.3M.com

#### 1.4. Emergency telephone number

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

**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:**

05-6813-9, 05-6814-7

### TRANSPORTATION INFORMATION

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

## KIT LABEL

### 2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

#### 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

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336

Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400

Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

For full text of H phrases, see Section 16.

### 2.2. Label elements CLP REGULATION (EC) No 1272/2008

#### SIGNAL WORD

WARNING.

#### Symbols

GHS07 (Exclamation mark) | GHS09 (Environment) |

#### Pictograms



Contains:

Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyl oxy)]dipropylamine; 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane; bis-[4-(2,3-epoxypropoxy)phenyl]propane

#### HAZARD STATEMENTS:

|      |   |
|------|---|
| H315 | Causes skin irritation.                               |
| H319 | Causes serious eye irritation.                        |
| H317 | May cause an allergic skin reaction.                  |
| H336 | May cause drowsiness or dizziness.                    |
| H410 | Very toxic to aquatic life with long lasting effects. |

#### PRECAUTIONARY STATEMENTS

##### Prevention:

|       |                                   |
|-------|-----------------------------------|
| P261A | Avoid breathing vapours.          |
| P273  | Avoid release to the environment. |
| P280E | Wear protective gloves.           |

##### Response:

|                    |  |
|--------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if |
|--------------------|--|

|             |   |
|-------------|---|
| P333 + P313 | present and easy to do. Continue rinsing.   |
| P391        | If skin irritation or rash occurs: Get medical advice/attention.<br>Collect spillage. |

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

**<=125 ml Hazard statements**

|      |                                      |
|------|--------------------------------------|
| H317 | May cause an allergic skin reaction. |
|------|--------------------------------------|

**<=125 ml Precautionary statements**

**Prevention:**

|       |                         |
|-------|-------------------------|
| P280E | Wear protective gloves. |
|-------|-------------------------|

**Response:**

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

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

**Revision information:**

Label: CLP Ingredients - kit components information was modified.

Section 1: Emergency telephone information was modified.

Label: CLP Classification information was modified.

Label: CLP Environmental Hazard Statements information was modified.

Label: CLP Precautionary - Disposal information was deleted.

Label: CLP Precautionary - Prevention information was modified.

Label: CLP Precautionary - Response information was modified.



## Safety Data Sheet

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|                        |            |                         |            |
|------------------------|------------|-------------------------|------------|
| <b>Document group:</b> | 05-6813-9  | <b>Version number:</b>  | 25.00      |
| <b>Revision date:</b>  | 20/11/2024 | <b>Supersedes date:</b> | 13/06/2024 |

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

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

#### 1.1. Product identifier

3M™ Scotch-Weld™ Epoxy Adhesive DP125 Gray, Part B

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

##### Identified uses

Structural adhesive.

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

|                   |   |
|-------------------|---|
| <b>Address:</b>   | 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18. |
| <b>Telephone:</b> | +353 1 280 3555   |
| <b>E Mail:</b>    | tox.uk@mmm.com  |
| <b>Website:</b>   | www.3M.com  |

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazard identification

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

CLP REGULATION (EC) No 1272/2008

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

##### 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 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

#### 2.2. Label elements

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

WARNING.

**Symbols**

GHS07 (Exclamation mark) | GHS09 (Environment) |

**Pictograms****Ingredients:**

| Ingredient   | CAS Nbr    | EC No.    | % by Wt |
|--|------------|-----------|---------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | 1675-54-3  | 216-823-5 | 40 - 70 |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | 30583-72-3 | 500-070-7 | 15 - 40 |

**HAZARD STATEMENTS:**

|      |  |
|------|--|
| H315 | Causes skin irritation.                          |
| H319 | Causes serious eye irritation.                   |
| H317 | May cause an allergic skin reaction.             |
| H411 | Toxic to aquatic life with long lasting effects. |

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

|       |                                   |
|-------|-----------------------------------|
| P273  | Avoid release to the environment. |
| 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.   |
| P391               | Collect spillage.  |

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

|      |                                      |
|------|--------------------------------------|
| H317 | May cause an allergic skin reaction. |
|------|--------------------------------------|

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

|       |                         |
|-------|-------------------------|
| P280E | Wear protective gloves. |
|-------|-------------------------|

**Response:**

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

Contains 2% of components with unknown hazards to the aquatic environment.

## 2.3. Other hazards

None known.

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

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Ingredient   | Identifier(s)   | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP]                            |
|--|---|---------|--|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | (CAS-No.) 1675-54-3<br>(EC-No.) 216-823-5<br>(REACH-No.) 01-2119456619-26 | 40 - 70 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Aquatic Chronic 2, H411 |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | (CAS-No.) 30583-72-3<br>(EC-No.) 500-070-7                                | 15 - 40 | Skin Sens. 1, H317<br>Aquatic Chronic 3, H412  |
| Kaolin   | (CAS-No.) 1332-58-7<br>(EC-No.) 310-194-1                                 | 10 - 30 | Substance with a national occupational exposure limit                                      |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | (CAS-No.) 67762-90-7  | 1 - 5   | Substance not classified as hazardous  |
| Titanium dioxide   | (CAS-No.) 13463-67-7<br>(EC-No.) 236-675-5                                | < 0.5   | Carc. 2, H351 (inhalation)   |

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                               |
|---|---|---|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | (CAS-No.) 1675-54-3<br>(EC-No.) 216-823-5 | (C ≥ 5%) Skin Irrit. 2, H315<br>(C ≥ 5%) Eye Irrit. 2, H319 |

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**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

**If swallowed**

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

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

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

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**

Aldehydes.

Hydrocarbons.

Carbon monoxide

Carbon dioxide.

Hydrogen Chloride

Ketones.

Toxic vapour, gas, particulate.

**Condition**

During combustion.

During combustion.

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. 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**

Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

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

Store away from acids. Store away from oxidising agents.

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

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

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

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> |
|-------------------|----------------|---------------|---|----------------------------|
| Kaolin            | 1332-58-7      | Ireland OELs  | TWA(as respirable dust)(8 hours):2 mg/m <sup>3</sup>  |                            |
| Titanium dioxide  | 13463-67-7     | Ireland OELs  | TWA(Total inhalable dust)(8 hours):10 mg/m <sup>3</sup> ;TWA(as respirable dust)(8 hours):4 mg/m <sup>3</sup> |                            |

Ireland OELs : Ireland. OELs

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

**Biological limit values**

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

**Derived no effect level (DNEL)**

| <b>Ingredient</b>                       | <b>Degradation Product</b> | <b>Population</b> | <b>Human exposure pattern</b>                              | <b>DNEL</b>            |
|---|----------------------------|-------------------|--|------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane |                            | Worker            | Dermal, Long-term exposure (8 hours), Systemic effects     | 8.3 mg/kg bw/d         |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane |                            | Worker            | Dermal, Short-term exposure, Systemic effects              | 8.3 mg/kg bw/d         |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane |                            | Worker            | Inhalation, Long-term exposure (8 hours), Systemic effects | 12.3 mg/m <sup>3</sup> |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane |                            | Worker            | Inhalation, Short-term exposure, Systemic effects          | 12.3 mg/m <sup>3</sup> |



**Predicted no effect concentrations (PNEC)**

| Ingredient                              | Degradation Product | Compartment                    | PNEC           |
|---|---------------------|--------------------------------|----------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane |                     | Freshwater                     | 0.003 mg/l     |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane |                     | Freshwater sediments           | 0.5 mg/kg d.w. |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane |                     | Intermittent releases to water | 0.013 mg/l     |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane |                     | Marine water                   | 0.0003 mg/l    |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane |                     | Marine water sediments         | 0.5 mg/kg d.w. |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane |                     | Sewage Treatment Plant         | 10 mg/l        |

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

**8.2. Exposure controls**

In addition, refer to the annex for more information.

**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. 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

Half facepiece or full facepiece supplied-air respirator

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

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

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

Refer to Annex

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

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

|   |  |
|---|--|
| <b>Physical state</b>                         | Liquid.  |
| <b>Colour</b>                                 | Grey   |
| <b>Odor</b>                                   | Slight Epoxy                                       |
| <b>Odour threshold</b>                        | <i>No data available.</i>                          |
| <b>Melting point/freezing point</b>           | <i>Not applicable.</i>                             |
| <b>Boiling point/boiling range</b>            | > 93.3 °C  |
| <b>Flammability</b>                           | Not applicable.                                    |
| <b>Flammable Limits(LEL)</b>                  | <i>No data available.</i>                          |
| <b>Flammable Limits(UEL)</b>                  | <i>No data available.</i>                          |
| <b>Flash point</b>                            | > 93.3 °C [Test Method:Pensky-Martens Closed Cup]  |
| <b>Autoignition temperature</b>               | <i>No data available.</i>                          |
| <b>Decomposition temperature</b>              | <i>No data available.</i>                          |
| <b>pH</b>                                     | <i>substance/mixture is non-soluble (in water)</i> |
| <b>Kinematic Viscosity</b>                    | 60,317 mm²/sec                                     |
| <b>Water solubility</b>                       | Nil  |
| <b>Solubility- non-water</b>                  | <i>No data available.</i>                          |
| <b>Partition coefficient: n-octanol/water</b> | <i>No data available.</i>                          |
| <b>Vapour pressure</b>                        | <i>No data available.</i>                          |
| <b>Density</b>                                | 1.26 g/ml  |
| <b>Relative density</b>                       | approximately 1.26 [Ref Std:WATER=1]               |
| <b>Relative Vapour Density</b>                | <i>No data available.</i>                          |
| <b>Particle Characteristics</b>               | <i>Not applicable.</i>                             |

## 9.2. Other information

### 9.2.2 Other safety characteristics

EU Volatile Organic Compounds

*No data available.*

Evaporation rate

*No data available.*

Molecular weight

*No data available.*

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

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

### 10.2 Chemical stability

Stable.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

### 10.5 Incompatible materials

Strong acids.

Strong oxidising agents.

### 10.6 Hazardous decomposition products

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

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

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

#### Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Skin contact

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

**Eye contact**

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Ingestion**

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

**Toxicological Data**

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

**Acute Toxicity**

| Name   | Route                          | Species | Value  |
|--|--------------------------------|---------|--|
| Overall product  | Ingestion                      |         | No data available; calculated ATE >5,000 mg/kg |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Dermal                         | Rat     | LD50 > 1,600 mg/kg                             |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Ingestion                      | Rat     | LD50 > 1,000 mg/kg                             |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Dermal                         | Rat     | LD50 > 2,000 mg/kg                             |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Ingestion                      | Rat     | LD50 > 2,000 mg/kg                             |
| Kaolin   | Dermal                         |         | LD50 estimated to be > 5,000 mg/kg             |
| Kaolin   | Ingestion                      | Human   | LD50 > 15,000 mg/kg                            |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | Dermal                         | Rabbit  | LD50 > 5,000 mg/kg                             |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | Inhalation-Dust/Mist (4 hours) | Rat     | LC50 > 0.691 mg/l                              |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | Ingestion                      | Rat     | LD50 > 5,110 mg/kg                             |
| Titanium dioxide   | Dermal                         | Rabbit  | LD50 > 10,000 mg/kg                            |
| Titanium dioxide   | Inhalation-Dust/Mist (4 hours) | Rat     | LC50 > 6.82 mg/l                               |
| Titanium dioxide   | Ingestion                      | Rat     | LD50 > 10,000 mg/kg                            |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name   | Species                | Value                     |
|--|------------------------|---------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Rabbit                 | Mild irritant             |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Rabbit                 | Minimal irritation        |
| Kaolin   | Professional judgement | No significant irritation |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | Rabbit                 | No significant irritation |
| Titanium dioxide   | Rabbit                 | No significant irritation |

**Serious Eye Damage/Irritation**

| Name   | Species                | Value                     |
|--|------------------------|---------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Rabbit                 | Moderate irritant         |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Rabbit                 | Mild irritant             |
| Kaolin   | Professional judgement | No significant irritation |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | Rabbit                 | No significant irritation |
| Titanium dioxide   | Rabbit                 | No significant irritation |

**Skin Sensitisation**

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

|  |                  |                |
|--|------------------|----------------|
|  |                  |                |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Human and animal | Sensitising    |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Mouse            | Sensitising    |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | Human and animal | Not classified |
| Titanium dioxide   | Human and animal | Not classified |

### Respiratory Sensitisation

| Name                                    | Species | Value          |
|---|---------|----------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Human   | Not classified |

### Germ Cell Mutagenicity

| Name   | Route    | Value  |
|--|----------|--|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | In vivo  | Not mutagenic  |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | In vivo  | Not mutagenic  |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | In Vitro | Not mutagenic  |
| Titanium dioxide   | In Vitro | Not mutagenic  |
| Titanium dioxide   | In vivo  | Not mutagenic  |

### Carcinogenicity

| Name  | Route          | Species                 | Value  |
|---|----------------|-------------------------|--|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane                       | Dermal         | Mouse                   | Some positive data exist, but the data are not sufficient for classification |
| Kaolin  | Inhalation     | Multiple animal species | Not carcinogenic   |
| Siloxanes and Silicones, di-Me, reaction products with silica | Not specified. | Mouse                   | Some positive data exist, but the data are not sufficient for classification |
| Titanium dioxide  | Ingestion      | Multiple animal species | Not carcinogenic   |
| Titanium dioxide  | Inhalation     | Rat                     | Carcinogenic.  |

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

| Name   | Route     | Value                                  | Species | Test result         | Exposure Duration    |
|--|-----------|--|---------|---------------------|----------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Ingestion | Not classified for female reproduction | Rat     | NOAEL 750 mg/kg/day | 2 generation         |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 750 mg/kg/day | 2 generation         |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Dermal    | Not classified for development         | Rabbit  | NOAEL 300 mg/kg/day | during organogenesis |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Ingestion | Not classified for development         | Rat     | NOAEL 750 mg/kg/day | 2 generation         |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Ingestion | Not classified for development         | Rat     | NOAEL 300 mg/kg/day | during gestation     |
| Siloxanes and Silicones, di-Me, reaction   | Ingestion | Not classified for female reproduction | Rat     | NOAEL 509           | 1 generation         |

|   |           |                                      |     |                       |                      |
|---|-----------|--------------------------------------|-----|-----------------------|----------------------|
| products with silica  |           |                                      |     | mg/kg/day             |                      |
| Siloxanes and Silicones, di-Me, reaction products with silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day   | 1 generation         |
| Siloxanes and Silicones, di-Me, reaction products with silica | Ingestion | Not classified for development       | Rat | NOAEL 1,350 mg/kg/day | during organogenesis |

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

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

#### Specific Target Organ Toxicity - repeated exposure

| Name   | Route      | Target Organ(s)  | Value  | Species | Test result           | Exposure Duration     |
|--|------------|--|--|---------|-----------------------|-----------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Dermal     | liver  | Not classified   | Rat     | NOAEL 1,000 mg/kg/day | 2 years               |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Dermal     | nervous system   | Not classified   | Rat     | NOAEL 1,000 mg/kg/day | 13 weeks              |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | Ingestion  | auditory system   heart   endocrine system   hematopoietic system   liver   eyes   kidney and/or bladder   | Not classified   | Rat     | NOAEL 1,000 mg/kg/day | 28 days               |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Ingestion  | kidney and/or bladder  | Some positive data exist, but the data are not sufficient for classification | Rat     | NOAEL 100 mg/kg/day   | 90 days               |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Ingestion  | heart   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   nervous system   vascular system   skin   muscles   eyes   respiratory system | Not classified   | Rat     | NOAEL 600 mg/kg/day   | 90 days               |
| Kaolin   | Inhalation | pneumoconiosis   | Causes damage to organs through prolonged or repeated exposure               | Human   | NOAEL NA              | occupational exposure |
| Kaolin   | Inhalation | pulmonary fibrosis   | Not classified   | Rat     | NOAEL Not available   |                       |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | Inhalation | respiratory system   silicosis   | Not classified   | Human   | NOAEL Not available   | occupational exposure |
| Titanium dioxide   | Inhalation | respiratory system   | Some positive data exist, but the data are not sufficient for classification | Rat     | LOAEL 0.01 mg/l       | 2 years               |
| Titanium dioxide   | Inhalation | pulmonary fibrosis   | Not classified   | Human   | NOAEL Not available   | occupational exposure |

### Aspiration Hazard

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

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

### 11.2. Information on other hazards

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

## SECTION 12: Ecological information

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

### 12.1. Toxicity

No product test data available.

| Material   | CAS #      | Organism         | Type  | Exposure | Test endpoint | Test result  |
|--|------------|------------------|---|----------|---------------|--------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | 1675-54-3  | Activated sludge | Analogous Compound                                    | 3 hours  | IC50          | >100 mg/l    |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | 1675-54-3  | Rainbow trout    | Estimated   | 96 hours | LC50          | 2 mg/l       |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | 1675-54-3  | Water flea       | Estimated   | 48 hours | EC50          | 1.8 mg/l     |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | 1675-54-3  | Green algae      | Experimental  | 72 hours | ErC50         | >11 mg/l     |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | 1675-54-3  | Green algae      | Experimental  | 72 hours | NOEC          | 4.2 mg/l     |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | 1675-54-3  | Water flea       | Experimental  | 21 days  | NOEC          | 0.3 mg/l     |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | 30583-72-3 | Activated sludge | Experimental  | 3 hours  | NOEC          | 1,000 mg/l   |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | 30583-72-3 | Green algae      | Experimental  | 72 hours | EC50          | >100 mg/l    |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | 30583-72-3 | Rainbow trout    | Experimental  | 96 hours | LC50          | 11.5 mg/l    |
| Kaolin   | 1332-58-7  | Water flea       | Experimental  | 48 hours | LC50          | >1,100 mg/l  |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | 67762-90-7 | N/A              | Data not available or insufficient for classification | N/A      | N/A           | N/A          |
| Titanium dioxide   | 13463-67-7 | Activated sludge | Experimental  | 3 hours  | NOEC          | >=1,000 mg/l |
| Titanium dioxide   | 13463-67-7 | Diatom           | Experimental  | 72 hours | EC50          | >10,000 mg/l |
| Titanium dioxide   | 13463-67-7 | Fathead minnow   | Experimental  | 96 hours | LC50          | >100 mg/l    |

|                  |            |            |              |          |      |            |
|------------------|------------|------------|--------------|----------|------|------------|
| Titanium dioxide | 13463-67-7 | Water flea | Experimental | 48 hours | EC50 | >100 mg/l  |
| Titanium dioxide | 13463-67-7 | Diatom     | Experimental | 72 hours | NOEC | 5,600 mg/l |

## 12.2. Persistence and degradability

| Material   | CAS Nbr    | Test type                          | Duration | Study Type                  | Test result       | Protocol                            |
|--|------------|------------------------------------|----------|-----------------------------|-------------------|-------------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | 1675-54-3  | Experimental Biodegradation        | 28 days  | BOD                         | 5 %BOD/COD        | OECD 301F - Manometric respirometry |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | 1675-54-3  | Experimental Hydrolysis            |          | Hydrolytic half-life (pH 7) | 117 hours (t 1/2) | OECD 111 Hydrolysis function of pH  |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | 30583-72-3 | Experimental Biodegradation        | 28 days  | BOD                         | 0.1 %BOD/Th OD    | OECD 301D - Closed bottle test      |
| Kaolin   | 1332-58-7  | Data not available or insufficient | N/A      | N/A                         | N/A               | N/A                                 |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | 67762-90-7 | Data not available or insufficient | N/A      | N/A                         | N/A               | N/A                                 |
| Titanium dioxide   | 13463-67-7 | Data not available or insufficient | N/A      | N/A                         | N/A               | N/A                                 |

## 12.3 : Bioaccumulative potential

| Material   | Cas No.    | Test type   | Duration | Study Type             | Test result | Protocol                     |
|--|------------|---|----------|------------------------|-------------|------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane  | 1675-54-3  | Experimental Bioconcentration                         |          | Log Kow                | 3.242       | OECD 117 log Kow HPLC method |
| 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | 30583-72-3 | Experimental Bioconcentration                         |          | Log Kow                | 3.84        |                              |
| Kaolin   | 1332-58-7  | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                          |
| Siloxanes and Silicones, di-Me, reaction products with silica                                  | 67762-90-7 | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                          |
| Titanium dioxide   | 13463-67-7 | Experimental BCF - Fish                               | 42 days  | Bioaccumulation factor | 9.6         |                              |

## 12.4. Mobility in soil

| Material                                | Cas No.   | Test type                | Study Type | Test result | Protocol  |
|---|-----------|--------------------------|------------|-------------|-----------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Modeled Mobility in Soil | Koc        | 450 l/kg    | Episuite™ |

## 12.5. Results of the PBT and vPvB assessment

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

## 12.6. Endocrine disrupting properties

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



## 12.7. Other adverse effects

No information available.

# SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

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

Dispose of 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. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

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

## EU waste code (product as sold)

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

# SECTION 14: Transportation information

|   | Ground Transport<br>(ADR)  | Air Transport (IATA)   | Marine Transport<br>(IMDG)   |
|---|--|--|--|
| <b>14.1 UN number or ID number</b>                                | UN3082   | UN3082   | UN3082   |
| <b>14.2 UN proper shipping name</b>                               | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(EPOXY RESIN)       | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(EPOXY RESIN)       | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(EPOXY RESIN)       |
| <b>14.3 Transport hazard class(es)</b>                            | 9  | 9  | 9  |
| <b>14.4 Packing group</b>   | III  | III  | III  |
| <b>14.5 Environmental hazards</b>                                 | Environmentally Hazardous  | Not applicable   | Marine Pollutant   |
| <b>14.6 Special precautions for user</b>                          | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. |
| <b>14.7 Marine Transport in bulk according to IMO instruments</b> | No data available.   | No data available.   | No data available.   |

|                                |                    |                    |                    |
|--------------------------------|--------------------|--------------------|--------------------|
| <b>Control Temperature</b>     | No data available. | No data available. | No data available. |
| <b>Emergency Temperature</b>   | No data available. | No data available. | No data available. |
| <b>ADR Classification Code</b> | M6                 | Not applicable.    | Not applicable.    |
| <b>IMDG Segregation Code</b>   | Not applicable.    | Not applicable.    | NONE               |

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

## SECTION 15: Regulatory information

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

#### Carcinogenicity

| <u>Ingredient</u>                       | <u>CAS Nbr</u> | <u>Classification</u>         | <u>Regulation</u>                           |
|---|----------------|-------------------------------|---|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3      | Gr. 3: Not classifiable       | International Agency for Research on Cancer |
| Titanium dioxide                        | 13463-67-7     | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |

#### Restrictions on the manufacture, placing on the market and use:

The following substance(s) contained in this product is/are subject through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

| <u>Ingredient</u>                       | <u>CAS Nbr</u> |
|---|----------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3      |

Restriction status: listed in REACH Annex XVII

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

#### Global inventory status

Contact 3M for more information. 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. The components of this product are in compliance with the new substance notification requirements of CEPA. 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.

#### DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

| Hazard Categories                       | Qualifying quantity (tonnes) for the application of |                         |
|---|---|-------------------------|
|   | Lower-tier requirements                             | Upper-tier requirements |
| E2 Hazardous to the Aquatic environment | 200   | 500                     |

Seveso named dangerous substances, Annex 1, Part 2

None

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

No chemicals listed

#### 15.2. Chemical Safety Assessment

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

## SECTION 16: Other information

#### List of relevant H statements

|       |  |
|-------|--|
| H315  | Causes skin irritation.                            |
| H317  | May cause an allergic skin reaction.               |
| H319  | Causes serious eye irritation.                     |
| H351i | Suspected of causing cancer by inhalation.         |
| H411  | Toxic to aquatic life with long lasting effects.   |
| H412  | Harmful to aquatic life with long lasting effects. |

#### Revision information:

CLP: Ingredient table information was modified.

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

Section 8: Personal Protection - Skin/body information information was added.

Section 8: Respiratory protection - recommended respirators information information was modified.

Section 8: Skin protection - protective clothing information information was added.

## Annex

| 1. Title   |   |
|--|---|
| Substance identification                               | bis-[4-(2,3-epoxipropoxy)phenyl]propane;<br>EC No. 216-823-5;<br>CAS Nbr 1675-54-3;   |
| Exposure Scenario Name                                 | Industrial Use of Adhesives   |
| Lifecycle Stage  | Use at industrial sites   |
| Contributing activities                                | PROC 08a -Transfer of substance or mixture (charging and discharging) at non-dedicated facilities<br>PROC 13 -Treatment of articles by dipping and pouring<br>ERC 05 -Use at industrial site leading to inclusion into/onto article |
| Processes, tasks and activities covered                | Application of product with a roller or brush. Application of product with applicator gun. Application with a wipe. Transfers without dedicated controls, including loading, filling, dumping, bagging.                             |
| 2. Operational conditions and risk management measures |   |
| Operating Conditions                                   | Physical state:Liquid.<br>General operating conditions:<br>Duration of use: 8 hours/day;  |

|                                  |  |
|----------------------------------|--|
|                                  | Emission days per year: 220 days/year;<br>Frequency of exposure at workplace [for one worker]: 5 days/week;  |
| <b>Risk management measures</b>  | Under the operational conditions described above the following risk management measures apply:<br><b>General risk management measures:</b><br><b>Human health:</b><br>Protective Gloves - Chemical resistant. Refer to Section 8 of the SDS for specific glove material.;<br><b>Environmental:</b><br>None needed; |
| <b>Waste management measures</b> | Do not apply industrial sludge to natural soils;<br>Prevent discharge of undissolved substance to or recover from wastewater;  |
| <b>3. Prediction of exposure</b> |  |
| <b>Prediction of exposure</b>    | Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.   |

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

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



## Safety Data Sheet

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|                        |            |                         |            |
|------------------------|------------|-------------------------|------------|
| <b>Document group:</b> | 05-6814-7  | <b>Version number:</b>  | 21.01      |
| <b>Revision date:</b>  | 31/05/2023 | <b>Supersedes date:</b> | 02/12/2022 |

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

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

#### 1.1. Product identifier

3M™ Scotch-Weld™ Epoxy Adhesive DP125 Gray, Part A

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

##### Identified uses

Structural adhesive.

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

|                   |   |
|-------------------|---|
| <b>Address:</b>   | 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18. |
| <b>Telephone:</b> | +353 1 280 3555   |
| <b>E Mail:</b>    | tox.uk@mmm.com  |
| <b>Website:</b>   | www.3M.com  |

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazard identification

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

CLP REGULATION (EC) No 1272/2008

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

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

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

##### CLASSIFICATION:

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

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336

Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400

Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

For full text of H phrases, see Section 16.

**2.2. Label elements****CLP REGULATION (EC) No 1272/2008****SIGNAL WORD**

WARNING.

**Symbols**

GHS07 (Exclamation mark) | GHS09 (Environment) |

**Pictograms****Ingredients:**

| Ingredient  | CAS Nbr | EC No.    | % by Wt  |
|---|---------|-----------|----------|
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropan-1-amine |         | 701-270-9 | 80 - 100 |

**HAZARD STATEMENTS:**

|      |   |
|------|---|
| H317 | May cause an allergic skin reaction.                  |
| H336 | May cause drowsiness or dizziness.                    |
| H410 | Very toxic to aquatic life with long lasting effects. |

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

|       |                                   |
|-------|-----------------------------------|
| P261A | Avoid breathing vapours.          |
| P273  | Avoid release to the environment. |
| P280E | Wear protective gloves.           |

**Response:**

|             |  |
|-------------|--|
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P391        | Collect spillage.  |

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

**<=125 ml Hazard statements**

|      |                                      |
|------|--------------------------------------|
| H317 | May cause an allergic skin reaction. |
|------|--------------------------------------|

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

|       |                          |
|-------|--------------------------|
| P261A | Avoid breathing vapours. |
| P280E | Wear protective gloves.  |

**Response:**

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

Contains 3% 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]   |
|---|---|----------|---|
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyloxy)]dipropylamine | (EC-No.) 701-270-9<br>(REACH-No.) 01-2120865952-42                                | 80 - 100 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1A, H317<br>STOT SE 3, H336<br>Aquatic Acute 1, H400,M=1<br>Aquatic Chronic 1, H410,M=1   |
| Calcium trifluoromethanesulphonate  | (CAS-No.) 55120-75-7<br>(EC-No.) ELINCS 415-540-6<br>(REACH-No.) 01-0000016247-70 | 1 - 10   | Eye Dam. 1, H318  |
| Siloxanes and Silicones, di-Me, reaction products with silica   | (CAS-No.) 67762-90-7  | 1 - 5    | Substance with a national occupational exposure limit   |
| toluene   | (CAS-No.) 108-88-3<br>(EC-No.) 203-625-9<br>(REACH-No.) 01-2119471310-51          | < 1      | Flam. Liq. 2, H225<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>Repr. 2, H361d<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Aquatic Chronic 3, H412 |

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

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

If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If

signs/symptoms develop, get medical attention.

**If swallowed**

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

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

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

Allergic skin reaction (redness, swelling, blistering, and itching). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

**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**

Amine compounds.  
Carbon monoxide  
Carbon dioxide.  
Oxides of nitrogen.  
Oxides of sulphur.

**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. 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. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

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

Store in a well-ventilated place. Keep container tightly closed. Store away from oxidising agents.

### 7.3. Specific end use(s)

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

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

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

| Ingredient      | CAS Nbr    | Agency       | Limit type  | Additional comments |
|-----------------|------------|--------------|---|---------------------|
| toluene         | 108-88-3   | Ireland OELs | TWA(8 hours):192 mg/m3(50 ppm);TWA(8 hours):50 ppm(192 mg/m3);STEL(15 minutes):384 mg/m3(100 ppm);STEL(15 minutes):100 ppm(384 mg/m3) | SKIN                |
| Silicon dioxide | 67762-90-7 | Ireland OELs | TWA(Total inhalable dust)(8 hours):6 mg/m3;TWA(as respirable dust)(8 hours):2.4 mg/m3   |                     |

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

#### Biological limit values

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

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

### 8.2. Exposure controls

In addition, refer to the annex for more information.

#### 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

None required.

#### 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

#### Respiratory protection

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

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

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

#### Applicable Norms/Standards

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

#### 8.2.3. Environmental exposure controls

Refer to Annex

## SECTION 9: Physical and chemical properties

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

|  |   |
|--|---|
| Physical state                         | Liquid.                                     |
| Colour                                 | Light Amber                                 |
| Odor                                   | Slight Amine                                |
| Odour threshold                        | No data available.                          |
| Melting point/freezing point           | Not applicable.                             |
| Boiling point/boiling range            | Not applicable.                             |
| Flammability (solid, gas)              | Not applicable.                             |
| Flammable Limits(LEL)                  | Not applicable.                             |
| Flammable Limits(UEL)                  | Not applicable.                             |
| Flash point                            | >=94 °C [Test Method: Closed Cup]           |
| Autoignition temperature               | Not applicable.                             |
| Decomposition temperature              | No data available.                          |
| pH                                     | substance/mixture is non-soluble (in water) |
| Kinematic Viscosity                    | 52,381 mm <sup>2</sup> /sec                 |
| Water solubility                       | Nil   |
| Solubility- non-water                  | No data available.                          |
| Partition coefficient: n-octanol/water | No data available.                          |
| Vapour pressure                        | <=1.3 Pa [@ 25 °C ]                         |
| Density                                | 1.05 g/ml                                   |
| Relative density                       | 1.05 [Ref Std: WATER=1]                     |
| Relative Vapour Density                | Not applicable.                             |

## 9.2. Other information

### 9.2.2 Other safety characteristics

EU Volatile Organic Compounds

*No data available.*

Evaporation rate

*No data available.*

Molecular weight

*No data available.*

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

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

### 10.2 Chemical stability

Stable.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

### 10.5 Incompatible materials

Strong oxidising agents.

### 10.6 Hazardous decomposition products

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

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

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

#### Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Skin contact

Contact with the skin during product use is not expected to result in significant irritation. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

#### Eye contact

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

### Ingestion

May be harmful if swallowed.

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

### Additional Health Effects:

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

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

### Reproductive/Developmental Toxicity:

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

### 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   | Ingestion                      |                        | No data available; calculated ATE >2,000 - =5,000 mg/kg |
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropyl-amine | Dermal                         | Rat                    | LD50 > 2,000 mg/kg                                      |
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropyl-amine | Ingestion                      | Rat                    | LD50 > 2,000 mg/kg                                      |
| Calcium trifluoromethanesulphonate  | Dermal                         | Professional judgement | LD50 estimated to be 2,000 - 5,000 mg/kg                |
| Calcium trifluoromethanesulphonate  | Ingestion                      | Rat                    | LD50 > 2,000 mg/kg                                      |
| Siloxanes and Silicones, di-Me, reaction products with silica   | Dermal                         | Rabbit                 | LD50 > 5,000 mg/kg                                      |
| Siloxanes and Silicones, di-Me, reaction products with silica   | Inhalation-Dust/Mist (4 hours) | Rat                    | LC50 > 0.691 mg/l                                       |
| Siloxanes and Silicones, di-Me, reaction products with silica   | Ingestion                      | Rat                    | LD50 > 5,110 mg/kg                                      |
| toluene   | Dermal                         | Rat                    | LD50 12,000 mg/kg                                       |
| toluene   | Inhalation-Vapour (4 hours)    | Rat                    | LC50 30 mg/l  |
| toluene   | Ingestion                      | Rat                    | LD50 5,550 mg/kg  |

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

| Name  | Species       | Value                     |
|---|---------------|---------------------------|
| Overall product   | In vitro data | No significant irritation |
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropyl-amine | Rat           | Irritant                  |
| Calcium trifluoromethanesulphonate  | Rabbit        | Minimal irritation        |
| Siloxanes and Silicones, di-Me, reaction products with silica   | Rabbit        | No significant irritation |
| toluene   | Rabbit        | Irritant                  |

**Serious Eye Damage/Irritation**

| Name   | Species       | Value                     |
|--|---------------|---------------------------|
| Overall product  | In vitro data | No significant irritation |
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropylamine | In vitro data | Severe irritant           |
| Calcium trifluoromethanesulphonate   | Rabbit        | Corrosive                 |
| Siloxanes and Silicones, di-Me, reaction products with silica  | Rabbit        | No significant irritation |
| toluene  | Rabbit        | Moderate irritant         |

**Skin Sensitisation**

| Name   | Species          | Value          |
|--|------------------|----------------|
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropylamine | Guinea pig       | Sensitising    |
| Calcium trifluoromethanesulphonate   | Guinea pig       | Not classified |
| Siloxanes and Silicones, di-Me, reaction products with silica  | Human and animal | Not classified |
| toluene  | Guinea pig       | Not classified |

**Respiratory Sensitisation**

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

**Germ Cell Mutagenicity**

| Name   | Route    | Value         |
|--|----------|---------------|
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropylamine | In Vitro | Not mutagenic |
| Calcium trifluoromethanesulphonate   | In Vitro | Not mutagenic |
| Siloxanes and Silicones, di-Me, reaction products with silica  | In Vitro | Not mutagenic |
| toluene  | In Vitro | Not mutagenic |
| toluene  | In vivo  | Not mutagenic |

**Carcinogenicity**

| Name  | Route          | Species | Value  |
|---|----------------|---------|--|
| Siloxanes and Silicones, di-Me, reaction products with silica | Not specified. | Mouse   | Some positive data exist, but the data are not sufficient for classification |
| toluene   | Dermal         | Mouse   | Some positive data exist, but the data are not sufficient for classification |
| toluene   | Ingestion      | Rat     | Some positive data exist, but the data are not sufficient for classification |
| toluene   | Inhalation     | Mouse   | Some positive data exist, but the data are not sufficient for classification |

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

| Name   | Route     | Value                                  | Species | Test result           | Exposure Duration          |
|--|-----------|--|---------|-----------------------|----------------------------|
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropylamine | Ingestion | Not classified for female reproduction | Rat     | NOAEL 1,000 mg/kg/day | prematuring into lactation |
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropylamine | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 1,000 mg/kg/day | 29 days                    |
| Reaction products of fatty acids, C18-   | Ingestion | Not classified for development         | Rat     | NOAEL                 | prematuring                |

|   |            |  |       |                       |                        |
|---|------------|--|-------|-----------------------|------------------------|
| unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyloxy)]dipropylamine |            |  |       | 1,000 mg/kg/day       | into lactation         |
| Siloxanes and Silicones, di-Me, reaction products with silica                       | Ingestion  | Not classified for female reproduction | Rat   | NOAEL 509 mg/kg/day   | 1 generation           |
| Siloxanes and Silicones, di-Me, reaction products with silica                       | Ingestion  | Not classified for male reproduction   | Rat   | NOAEL 497 mg/kg/day   | 1 generation           |
| Siloxanes and Silicones, di-Me, reaction products with silica                       | Ingestion  | Not classified for development         | Rat   | NOAEL 1,350 mg/kg/day | during organogenesis   |
| toluene   | Inhalation | Not classified for female reproduction | Human | NOAEL Not available   | occupational exposure  |
| toluene   | Inhalation | Not classified for male reproduction   | Rat   | NOAEL 2.3 mg/l        | 1 generation           |
| toluene   | Ingestion  | Toxic to development                   | Rat   | LOAEL 520 mg/kg/day   | during gestation       |
| toluene   | Inhalation | Toxic to development                   | Human | NOAEL Not available   | poisoning and/or abuse |

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

| Name  | Route      | Target Organ(s)                   | Value  | Species                | Test result         | Exposure Duration      |
|---|------------|-----------------------------------|--|------------------------|---------------------|------------------------|
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyloxy)]dipropylamine | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | similar health hazards | Irritation Positive |                        |
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyloxy)]dipropylamine | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Rat                    | NOAEL Not available |                        |
| Calcium trifluoromethanesulphonate  | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL not available |                        |
| toluene   | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human                  | NOAEL Not available |                        |
| toluene   | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Human                  | NOAEL Not available |                        |
| toluene   | Inhalation | immune system                     | Not classified   | Mouse                  | NOAEL 0.004 mg/l    | 3 hours                |
| toluene   | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Human                  | NOAEL Not available | poisoning and/or abuse |

#### Specific Target Organ Toxicity - repeated exposure

| Name  | Route      | Target Organ(s)  | Value          | Species | Test result           | Exposure Duration     |
|---|------------|--|----------------|---------|-----------------------|-----------------------|
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyloxy)]dipropylamine | Ingestion  | heart   skin   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system   vascular system | Not classified | Rat     | NOAEL 1,000 mg/kg/day | 29 days               |
| Siloxanes and Silicones, di-Me, reaction products   | Inhalation | respiratory system   silicosis   | Not classified | Human   | NOAEL Not available   | occupational exposure |

|             |            |   |  |                         |                       |                        |
|-------------|------------|---|--|-------------------------|-----------------------|------------------------|
| with silica |            |   |  |                         |                       |                        |
| toluene     | Inhalation | auditory system   eyes   olfactory system | Causes damage to organs through prolonged or repeated exposure               | Human                   | NOAEL Not available   | poisoning and/or abuse |
| toluene     | Inhalation | nervous system                            | May cause damage to organs though prolonged or repeated exposure             | Human                   | NOAEL Not available   | poisoning and/or abuse |
| toluene     | Inhalation | respiratory system                        | Some positive data exist, but the data are not sufficient for classification | Rat                     | LOAEL 2.3 mg/l        | 15 months              |
| toluene     | Inhalation | heart   liver   kidney and/or bladder     | Not classified   | Rat                     | NOAEL 11.3 mg/l       | 15 weeks               |
| toluene     | Inhalation | endocrine system                          | Not classified   | Rat                     | NOAEL 1.1 mg/l        | 4 weeks                |
| toluene     | Inhalation | immune system                             | Not classified   | Mouse                   | NOAEL Not available   | 20 days                |
| toluene     | Inhalation | bone, teeth, nails, and/or hair           | Not classified   | Mouse                   | NOAEL 1.1 mg/l        | 8 weeks                |
| toluene     | Inhalation | hematopoietic system   vascular system    | Not classified   | Human                   | NOAEL Not available   | occupational exposure  |
| toluene     | Inhalation | gastrointestinal tract                    | Not classified   | Multiple animal species | NOAEL 11.3 mg/l       | 15 weeks               |
| toluene     | Ingestion  | nervous system                            | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 625 mg/kg/day   | 13 weeks               |
| toluene     | Ingestion  | heart                                     | Not classified   | Rat                     | NOAEL 2,500 mg/kg/day | 13 weeks               |
| toluene     | Ingestion  | liver   kidney and/or bladder             | Not classified   | Multiple animal species | NOAEL 2,500 mg/kg/day | 13 weeks               |
| toluene     | Ingestion  | hematopoietic system                      | Not classified   | Mouse                   | NOAEL 600 mg/kg/day   | 14 days                |
| toluene     | Ingestion  | endocrine system                          | Not classified   | Mouse                   | NOAEL 105 mg/kg/day   | 28 days                |
| toluene     | Ingestion  | immune system                             | Not classified   | Mouse                   | NOAEL 105 mg/kg/day   | 4 weeks                |

### Aspiration Hazard

| Name    | Value             |
|---------|-------------------|
| toluene | Aspiration hazard |

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

### 11.2. Information on other hazards

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

## SECTION 12: Ecological information

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

### 12.1. Toxicity

No product test data available.

| <b>Material</b>   | <b>CAS #</b> | <b>Organism</b>  | <b>Type</b>   | <b>Exposure</b> | <b>Test endpoint</b> | <b>Test result</b> |
|---|--------------|------------------|---|-----------------|----------------------|--------------------|
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropan-1-amine | 701-270-9    | Fathead minnow   | Experimental  | 96 hours        | LL50                 | 2.16 mg/l          |
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropan-1-amine | 701-270-9    | Green algae      | Experimental  | 72 hours        | EL50                 | 0.43 mg/l          |
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropan-1-amine | 701-270-9    | Water flea       | Experimental  | 48 hours        | EL50                 | 0.57 mg/l          |
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropan-1-amine | 701-270-9    | Green algae      | Experimental  | 72 hours        | NOEL                 | 0.28 mg/l          |
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diylloxy)]dipropan-1-amine | 701-270-9    | Activated sludge | Experimental  | 3 hours         | EC50                 | 410.3 mg/l         |
| Calcium trifluoromethanesulphonate  | 55120-75-7   | Green algae      | Estimated   | 72 hours        | EC50                 | 54 mg/l            |
| Calcium trifluoromethanesulphonate  | 55120-75-7   | Rainbow trout    | Estimated   | 96 hours        | LC50                 | >100 mg/l          |
| Calcium trifluoromethanesulphonate  | 55120-75-7   | Water flea       | Estimated   | 48 hours        | EC50                 | >100 mg/l          |
| Calcium trifluoromethanesulphonate  | 55120-75-7   | Green algae      | Estimated   | 72 hours        | NOEC                 | 6.4 mg/l           |
| Siloxanes and Silicones, di-Me, reaction products with silica   | 67762-90-7   | N/A              | Data not available or insufficient for classification | N/A             | N/A                  | N/A                |
| toluene   | 108-88-3     | Coho Salmon      | Experimental  | 96 hours        | LC50                 | 5.5 mg/l           |
| toluene   | 108-88-3     | Grass Shrimp     | Experimental  | 96 hours        | LC50                 | 9.5 mg/l           |
| toluene   | 108-88-3     | Green algae      | Experimental  | 72 hours        | EC50                 | 12.5 mg/l          |
| toluene   | 108-88-3     | Leopard frog     | Experimental  | 9 days          | LC50                 | 0.39 mg/l          |
| toluene   | 108-88-3     | Pink Salmon      | Experimental  | 96 hours        | LC50                 | 6.41 mg/l          |
| toluene   | 108-88-3     | Water flea       | Experimental  | 48 hours        | EC50                 | 3.78 mg/l          |
| toluene   | 108-88-3     | Coho Salmon      | Experimental  | 40 days         | NOEC                 | 1.39 mg/l          |
| toluene   | 108-88-3     | Diatom           | Experimental  | 72 hours        | NOEC                 | 10 mg/l            |



|         |          |                  |              |          |      |                              |
|---------|----------|------------------|--------------|----------|------|------------------------------|
| toluene | 108-88-3 | Water flea       | Experimental | 7 days   | NOEC | 0.74 mg/l                    |
| toluene | 108-88-3 | Activated sludge | Experimental | 12 hours | IC50 | 292 mg/l                     |
| toluene | 108-88-3 | Bacteria         | Experimental | 16 hours | NOEC | 29 mg/l                      |
| toluene | 108-88-3 | Bacteria         | Experimental | 24 hours | EC50 | 84 mg/l                      |
| toluene | 108-88-3 | Redworm          | Experimental | 28 days  | LC50 | >150 mg per kg of bodyweight |
| toluene | 108-88-3 | Soil microbes    | Experimental | 28 days  | NOEC | <26 mg/kg (Dry Weight)       |

## 12.2. Persistence and degradability

| Material  | CAS Nbr    | Test type                         | Duration | Study Type                    | Test result      | Protocol                            |
|---|------------|-----------------------------------|----------|-------------------------------|------------------|-------------------------------------|
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyl-oxy)]dipropyl-amine | 701-270-9  | Experimental Biodegradation       | 28 days  | BOD                           | 0 %BOD/ThO D     | OECD 301F - Manometric respirometry |
| Calcium trifluoromethanesulphonate  | 55120-75-7 | Estimated Biodegradation          | 28 days  | BOD                           | 0 %BOD/ThO D     | OECD 301D - Closed bottle test      |
| Siloxanes and Silicones, di-Me, reaction products with silica   | 67762-90-7 | Data not available - insufficient | N/A      | N/A                           | N/A              | N/A                                 |
| toluene   | 108-88-3   | Experimental Biodegradation       | 20 days  | BOD                           | 80 %BOD/ThO D    | APHA Std Meth Water/Wastewater      |
| toluene   | 108-88-3   | Experimental Photolysis           |          | Photolytic half-life (in air) | 5.2 days (t 1/2) |                                     |

## 12.3 : Bioaccumulative potential

| Material  | Cas No.    | Test type   | Duration | Study Type             | Test result | Protocol                 |
|---|------------|---|----------|------------------------|-------------|--------------------------|
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyl-oxy)]dipropyl-amine | 701-270-9  | Modeled Bioconcentration                              |          | Bioaccumulation factor | 42          | Catalogic™               |
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyl-oxy)]dipropyl-amine | 701-270-9  | Modeled Bioconcentration                              |          | Log Kow                | 11.7        | Episuite™                |
| Calcium trifluoromethanesulphonate  | 55120-75-7 | Estimated Bioconcentration                            | 35 days  | Bioaccumulation factor | 0.03        | OECD305-Bioconcentration |
| Siloxanes and Silicones, di-Me, reaction products with silica   | 67762-90-7 | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                      |
| toluene   | 108-88-3   | Experimental BCF - Other                              | 72 hours | Bioaccumulation factor | 90          |                          |
| toluene   | 108-88-3   | Experimental Bioconcentration                         |          | Log Kow                | 2.73        |                          |

## 12.4. Mobility in soil

| Material  | Cas No.   | Test type                     | Study Type | Test result        | Protocol |
|---|-----------|-------------------------------|------------|--------------------|----------|
| Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyl-oxy)]dipropyl-amine | 701-270-9 | Modeled Mobility in Soil      | Koc        | 3,780,000,000 l/kg |          |
| toluene   | 108-88-3  | Experimental Mobility in Soil | Koc        | 37-160 l/kg        |          |

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

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

**12.6. Endocrine disrupting properties**

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

**12.7. Other adverse effects**

No information available.

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

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

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

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

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

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

**SECTION 14: Transportation information**

|  | <b>Ground Transport<br/>(ADR)</b>  | <b>Air Transport (IATA)</b>  | <b>Marine Transport<br/>(IMDG)</b>   |
|--|--|--|--|
| <b>14.1 UN number or ID number</b>     | UN3082   | UN3082   | UN3082   |
| <b>14.2 UN proper shipping name</b>    | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ALIPHATIC POLYMER DIAMINE) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ALIPHATIC POLYMER DIAMINE) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ALIPHATIC POLYMER DIAMINE) |
| <b>14.3 Transport hazard class(es)</b> | 9  | 9  | 9  |
| <b>14.4 Packing group</b>              | III  | III  | III  |

|   |  |  |  |
|---|--|--|--|
| <b>14.5 Environmental hazards</b>                                 | Environmentally Hazardous  | Not applicable   | Marine Pollutant   |
| <b>14.6 Special precautions for user</b>                          | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. |
| <b>14.7 Marine Transport in bulk according to IMO instruments</b> | No data available.   | No data available.   | No data available.   |
| <b>Control Temperature</b>  | No data available.   | No data available.   | No data available.   |
| <b>Emergency Temperature</b>                                      | No data available.   | No data available.   | No data available.   |
| <b>ADR Classification Code</b>                                    | M6   | Not applicable.  | Not applicable.  |
| <b>IMDG Segregation Code</b>                                      | Not applicable.  | Not applicable.  | NONE   |

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

## SECTION 15: Regulatory information

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

#### Carcinogenicity

##### Ingredient

toluene

##### CAS Nbr

108-88-3

##### Classification

Gr. 3: Not classifiable

##### Regulation

International Agency  
for Research on Cancer

#### Restrictions on the manufacture, placing on the market and use:

The following substance(s) contained in this product is/are subject through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

##### Ingredient

toluene

##### CAS Nbr

108-88-3

Restriction status: listed in REACH Annex XVII

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

#### Global inventory status

Contact 3M for more information. 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.

**DIRECTIVE 2012/18/EU**

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

| Dangerous Substances | Identifier(s) | Qualifying quantity (tonnes) for the application of |                         |
|----------------------|---------------|---|-------------------------|
|                      |               | Lower-tier requirements                             | Upper-tier requirements |
| toluene              | 108-88-3      | 10  | 50                      |

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

No chemicals listed

**15.2. Chemical Safety Assessment**

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

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

|       |  |
|-------|--|
| H225  | Highly flammable liquid and vapour.                                |
| H304  | May be fatal if swallowed and enters airways.                      |
| H315  | Causes skin irritation.  |
| H317  | May cause an allergic skin reaction.                               |
| H318  | Causes serious eye damage.   |
| H319  | Causes serious eye irritation.                                     |
| H336  | May cause drowsiness or dizziness.                                 |
| H361d | Suspected of damaging the unborn child.                            |
| H373  | May cause damage to organs through prolonged or repeated exposure. |
| H400  | Very toxic to aquatic life.  |
| H410  | Very toxic to aquatic life with long lasting effects.              |
| H412  | Harmful to aquatic life with long lasting effects.                 |

**Revision information:**

Section 4: First aid for eye contact information information was modified.  
 Section 14 Classification Code – Regulation Data information was modified.  
 Section 14 Hazard Class + Sub Risk – Regulation Data information was modified.  
 Section 14 Hazardous/Not Hazardous for Transportation information was modified.  
 Section 14 Other Dangerous Goods – Regulation Data information was modified.  
 Section 14 Packing Group – Regulation Data information was modified.  
 Section 14 Proper Shipping Name information was modified.  
 Section 14 Segregation – Regulation Data information was modified.  
 Section 14 UN Number Column data information was modified.  
 Section 14: Transportation classification information was deleted.

**Annex**

| 1. Title                 |   |
|--------------------------|---|
| Substance identification |   |
| Exposure Scenario Name   | Industrial Transfer   |
| Lifecycle Stage          | Use at industrial sites   |
| Contributing activities  | PROC 08a -Transfer of substance or mixture (charging and discharging) at non- |

|   |  |
|---|--|
|   | dedicated facilities<br>PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing)<br>ERC 02 -Formulation into mixture  |
| <b>Processes, tasks and activities covered</b>                | Transfers with dedicated controls, including loading, filling, dumping, bagging.   |
| <b>2. Operational conditions and risk management measures</b> |  |
| <b>Operating Conditions</b>                                   | <b>Physical state:</b> Liquid.<br><b>General operating conditions:</b><br>Duration of use: 8 hours/day;<br>Frequency of exposure at workplace [for one worker]: 5 days/week;<br>Indoor use;<br>Outdoor use;  |
| <b>Risk management measures</b>                               | Under the operational conditions described above the following risk management measures apply:<br><b>General risk management measures:</b><br><b>Human health:</b><br>Face shield;<br>Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training. Refer to Section 8 of the SDS for specific glove material.;<br><b>Environmental:</b><br>None needed; |
| <b>Waste management measures</b>                              | No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:  |
| <b>3. Prediction of exposure</b>                              |  |
| <b>Prediction of exposure</b>                                 | Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.   |

|   |   |
|---|---|
| <b>1. Title</b>   |   |
| <b>Substance identification</b>                               |   |
| <b>Exposure Scenario Name</b>                                 | Industrial Use of Structural Adhesives  |
| <b>Lifecycle Stage</b>  | Use at industrial sites   |
| <b>Contributing activities</b>                                | PROC 04 -Chemical production where opportunity for exposure arises<br>PROC 05 -Mixing or blending in batch processes<br>PROC 13 -Treatment of articles by dipping and pouring<br>ERC 06d -Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)  |
| <b>Processes, tasks and activities covered</b>                | Charging material in open systems where significant opportunity for exposure arises e.g. charging from open drum. Mixing or blending of solid or liquid materials.  |
| <b>2. Operational conditions and risk management measures</b> |   |
| <b>Operating Conditions</b>                                   | <b>Physical state:</b> Liquid.<br><b>General operating conditions:</b><br>Duration of use: 8 hours/day;<br>Frequency of exposure at workplace [for one worker]: 5 days/week;<br>Indoor use;   |
| <b>Risk management measures</b>                               | Under the operational conditions described above the following risk management measures apply:<br><b>General risk management measures:</b><br><b>Human health:</b><br>Goggles - Chemical resistant;<br>Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training. Refer to Section 8 of the SDS for specific glove material.;<br><b>Environmental:</b><br>None needed; |

|                                  |  |
|----------------------------------|--|
|                                  |  |
| <b>Waste management measures</b> | No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:        |
| <b>3. Prediction of exposure</b> |  |
| <b>Prediction of exposure</b>    | Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted. |

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

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