



## Safety Data Sheet

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**Transportation version number:**

**Version number:** 4.01  
**Supersedes date:** 14/04/2023

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™ Epoxy Adhesive DP420NS Black

#### Product Identification Numbers

62-3299-1436-0 62-3299-3532-4

7100010680 7100148758

#### 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](http://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:**

17-9844-6, 17-9858-6

### 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 1B - Skin Corr. 1B; H314

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318

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

DANGER.

#### Symbols

GHS05 (Corrosion) | GHS07 (Exclamation mark) | GHS09 (Environment) |

#### Pictograms



Contains:

2,4,6-tris(dimethylaminomethyl)phenol.; bis-[4-(2,3-epoxipropoxy)phenyl]propane; 3,3'-Oxybis(ethyleneoxy)bis(propylamine); reaction product: bisphenol-A-(epichlorhydrin)

#### HAZARD STATEMENTS:

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

##### Prevention:

P260A Do not breathe vapours.

P273 Avoid release to the environment.

P280D Wear protective gloves, protective clothing, and eye/face protection.

##### Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.

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

**<=125 ml Hazard statements**

|      |                                          |
|------|------------------------------------------|
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction.     |

**<=125 ml Precautionary statements**

**Prevention:**

|       |                                                                       |
|-------|-----------------------------------------------------------------------|
| P260A | Do not breathe vapours.                                               |
| P280D | Wear protective gloves, protective clothing, and eye/face protection. |

**Response:**

|                    |                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.                           |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310               | Immediately call a POISON CENTRE or doctor/physician.                                                                            |

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

**Revision information:**

No revision information



## Safety Data Sheet

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|                        |            |                         |            |
|------------------------|------------|-------------------------|------------|
| <b>Document group:</b> | 17-9844-6  | <b>Version number:</b>  | 8.00       |
| <b>Revision date:</b>  | 19/12/2024 | <b>Supersedes date:</b> | 14/04/2023 |

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 DP420NS Black, Part A or Epoxy Adhesive 420NS Black, 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

**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

### 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 1B - Skin Corr. 1B; H314  
Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318  
Skin Sensitization, Category 1 - Skin Sens. 1; H317

For full text of H phrases, see Section 16.

#### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

**SIGNAL WORD**

DANGER.

**Symbols**

GHS05 (Corrosion) | GHS07 (Exclamation mark) |

**Pictograms****Ingredients:**

| Ingredient                               | CAS Nbr   | EC No.    | % by Wt |
|------------------------------------------|-----------|-----------|---------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9 | 224-207-2 | 20 - 40 |
| 2,4,6-tris(dimethylaminomethyl)phenol    | 90-72-2   | 202-013-9 | 1 - 5   |

**HAZARD STATEMENTS:**

|      |                                          |
|------|------------------------------------------|
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction.     |

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

|       |                                                                       |
|-------|-----------------------------------------------------------------------|
| P260A | Do not breathe vapours.                                               |
| P280D | Wear protective gloves, protective clothing, and eye/face protection. |

**Response:**

|                    |                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.                           |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310               | Immediately call a POISON CENTRE or doctor/physician.                                                                            |
| P333 + P313        | If skin irritation or rash occurs: Get medical advice/attention.                                                                 |

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

|      |                                          |
|------|------------------------------------------|
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction.     |

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

|       |                                                                       |
|-------|-----------------------------------------------------------------------|
| P260A | Do not breathe vapours.                                               |
| P280D | Wear protective gloves, protective clothing, and eye/face protection. |

**Response:**

|                    |                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.                           |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

P310 Immediately call a POISON CENTRE or doctor/physician.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Contains 74% 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] |
|---------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|-----------------------------------------------------------------|
| Modified Epoxy Resin                                          | Trade Secret                                                                      | 50 - 80 | Substance not classified as hazardous                           |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | (CAS-No.) 4246-51-9<br>(EC-No.) 224-207-2<br>(REACH-No.) 01-2119963377-26         | 20 - 40 | Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317   |
| Siloxanes and Silicones, di-Me, reaction products with silica | (CAS-No.) 67762-90-7                                                              | 5 - 10  | Substance not classified as hazardous                           |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | (CAS-No.) 90-72-2<br>(EC-No.) 202-013-9<br>(REACH-No.) 01-2119560597-27           | 1 - 5   | Acute Tox. 4, H302<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318   |
| Calcium trifluoromethanesulphonate                            | (CAS-No.) 55120-75-7<br>(EC-No.) ELINCS 415-540-6<br>(REACH-No.) 01-0000016247-70 | < 3     | Eye Dam. 1, H318                                                |

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 flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

#### Eye contact

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

**If swallowed**

Rinse mouth. Do not induce vomiting. Get immediate 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:

Skin burns (localized redness, swelling, itching, intense pain, blistering, and tissue destruction). Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of 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**

Exposure to extreme heat can give rise to thermal decomposition.

**Hazardous Decomposition or By-Products**

**Substance**

Amine compounds.  
Carbon monoxide  
Carbon dioxide.  
Hydrogen Chloride  
Hydrogen Fluoride  
Oxides of nitrogen.  
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 inhalation of thermal decomposition products. For industrial/occupational use only. Not for consumer sale or use. 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.)

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

Store away from acids. Store away from oxidising agents.

### 7.3. Specific end use(s)

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

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

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

#### Biological limit values

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

#### Derived no effect level (DNEL)

| Ingredient                                | Degradation Product | Population | Human exposure pattern                                     | DNEL                   |
|-------------------------------------------|---------------------|------------|------------------------------------------------------------|------------------------|
| 2,4,6-tris(dimethylaminomethyl) phenol    |                     | Worker     | Inhalation, Long-term exposure (8 hours), Systemic effects | 0.31 mg/m <sup>3</sup> |
| 3,3'-Oxybis(ethyleneoxy)bis(pr opylamine) |                     | Worker     | Dermal, Long-term exposure (8 hours), Systemic effects     | 8.3 mg/kg bw/d         |
| 3,3'-Oxybis(ethyleneoxy)bis(pr opylamine) |                     | Worker     | Inhalation, Long-term exposure (8 hours), Local effects    | 1 mg/m <sup>3</sup>    |
| 3,3'-Oxybis(ethyleneoxy)bis(pr opylamine) |                     | Worker     | Inhalation, Long-term exposure (8 hours), Systemic effects | 59 mg/m <sup>3</sup>   |
| 3,3'-Oxybis(ethyleneoxy)bis(pr opylamine) |                     | Worker     | Inhalation, Short-term exposure, Local effects             | 13 mg/m <sup>3</sup>   |
| 3,3'-Oxybis(ethyleneoxy)bis(pr opylamine) |                     | Worker     | Inhalation, Short-term exposure, Systemic effects          | 176 mg/m <sup>3</sup>  |

#### Predicted no effect concentrations (PNEC)

| Ingredient | Degradation Product | Compartment | PNEC       |
|------------|---------------------|-------------|------------|
| 2,4,6-     |                     | Freshwater  | 0.084 mg/l |

|                                          |  |                                |                   |
|------------------------------------------|--|--------------------------------|-------------------|
| tris(dimethylaminomethyl) phenol         |  |                                |                   |
| 2,4,6-tris(dimethylaminomethyl) phenol   |  | Intermittent releases to water | 0.84 mg/l         |
| 2,4,6-tris(dimethylaminomethyl) phenol   |  | Marine water                   | 0.0084 mg/l       |
| 2,4,6-tris(dimethylaminomethyl) phenol   |  | Sewage Treatment Plant         | 0.2 mg/l          |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) |  | Freshwater                     | 0.22 mg/l         |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) |  | Freshwater sediments           | 0.809 mg/kg d.w.  |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) |  | Intermittent releases to water | 2.2 mg/l          |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) |  | Marine water                   | 0.022 mg/l        |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) |  | Marine water sediments         | 0.0809 mg/kg d.w. |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) |  | Sewage Treatment Plant         | 125 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

Provide ventilated enclosure for heat curing. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use with appropriate local exhaust ventilation sufficient to maintain levels of thermal decomposition products below their exposure guidelines. 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:

Full face shield.

Indirect vented goggles.

*Applicable Norms/Standards*

Use eye/face protection conforming to EN 166

### Skin/hand protection

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

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

| Material        | Thickness (mm) | Breakthrough Time |
|-----------------|----------------|-------------------|
| Butyl rubber.   | 0.7            | =>8 hours         |
| Nitrile rubber. | 0.4            | =>8 hours         |

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

### Applicable Norms/Standards

Use gloves tested to EN 374

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

### Respiratory protection

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

For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use a positive pressure supplied-air respirator.

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

|                              |                    |
|------------------------------|--------------------|
| Physical state               | Liquid.            |
| Specific Physical Form:      | Paste              |
| Colour                       | Off-White          |
| Odor                         | Slight Amine       |
| Odour threshold              | No data available. |
| Melting point/freezing point | No data available. |
| Boiling point/boiling range  | > 171.1 °C         |
| Flammability                 | 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>                            | $\geq 171.1$ °C [ <i>Test Method: Tagliabue closed cup</i> ] |
| <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-polar/aprotic</i>                |
| <b>Kinematic Viscosity</b>                    | 8,000 mm <sup>2</sup> /sec                                   |
| <b>Water solubility</b>                       | Slight (less than 10%)                                       |
| <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>                        | $\leq 8$ Pa [ <i>@ 25 °C</i> ]                               |
| <b>Density</b>                                | 1.15 g/ml                                                    |
| <b>Relative density</b>                       | 1.15 [ <i>Ref Std: WATER=1</i> ]                             |
| <b>Relative Vapour Density</b>                | 3.72 [ <i>Ref Std: AIR=1</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

*Not applicable.*

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

**Substance**

**Condition**

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

Extreme heat arising from situations such as misuse or equipment failure can generate hydrogen fluoride as a decomposition product.

## 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

Corrosive (skin burns): Signs/symptoms may include localised redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

#### Eye contact

Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

#### Ingestion

Gastrointestinal corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea; blood in the faeces and/or vomitus may also be seen.

#### 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 >5,000 mg/kg |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | Dermal                         | Rabbit                 | LD50 2,525 mg/kg                               |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | Ingestion                      | Rat                    | LD50 2,850 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                             |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | Dermal                         | Rat                    | LD50 1,280 mg/kg                               |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | Ingestion                      | Rat                    | LD50 1,000 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                             |

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

| Name                                                          | Species | Value                     |
|---------------------------------------------------------------|---------|---------------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | Rabbit  | Corrosive                 |
| Siloxanes and Silicones, di-Me, reaction products with silica | Rabbit  | No significant irritation |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | Rabbit  | Corrosive                 |
| Calcium trifluoromethanesulphonate                            | Rabbit  | Minimal irritation        |

### Serious Eye Damage/Irritation

| Name                                                          | Species | Value                     |
|---------------------------------------------------------------|---------|---------------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | Rabbit  | Corrosive                 |
| Siloxanes and Silicones, di-Me, reaction products with silica | Rabbit  | No significant irritation |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | Rabbit  | Corrosive                 |
| Calcium trifluoromethanesulphonate                            | Rabbit  | Corrosive                 |

### Skin Sensitisation

| Name                                                          | Species                | Value          |
|---------------------------------------------------------------|------------------------|----------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | Professional judgement | Sensitising    |
| Siloxanes and Silicones, di-Me, reaction products with silica | Human and animal       | Not classified |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | Guinea pig             | Not classified |
| Calcium trifluoromethanesulphonate                            | 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         |
|---------------------------------------------------------------|----------|---------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | In Vitro | Not mutagenic |
| Siloxanes and Silicones, di-Me, reaction products with silica | In Vitro | Not mutagenic |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | In Vitro | Not mutagenic |
| Calcium trifluoromethanesulphonate                            | In Vitro | 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 |

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

| Name                                                          | Route     | Value                                  | Species | Test result         | Exposure Duration        |
|---------------------------------------------------------------|-----------|----------------------------------------|---------|---------------------|--------------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | Ingestion | Not classified for female reproduction | Rat     | NOAEL 600 mg/kg/day | premating into lactation |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 600 mg/kg/day | 59 days                  |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | Ingestion | Not classified for development         | Rat     | NOAEL 600 mg/kg/day | premating 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                      | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 497           | 1 generation             |

|                                                               |           |                                        |        |                       |                      |
|---------------------------------------------------------------|-----------|----------------------------------------|--------|-----------------------|----------------------|
| products with silica                                          |           |                                        |        | mg/kg/day             |                      |
| Siloxanes and Silicones, di-Me, reaction products with silica | Ingestion | Not classified for development         | Rat    | NOAEL 1,350 mg/kg/day | during organogenesis |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | Ingestion | Not classified for male reproduction   | Rat    | NOAEL 150 mg/kg/day   | 2 generation         |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | Ingestion | Not classified for female reproduction | Rat    | NOAEL 50 mg/kg/day    | 2 generation         |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | Ingestion | Not classified for development         | Rabbit | NOAEL 15 mg/kg/day    | during gestation     |

## Target Organ(s)

### Specific Target Organ Toxicity - single exposure

| Name                                     | Route      | Target Organ(s)        | Value                                                                        | Species                | Test result         | Exposure Duration |
|------------------------------------------|------------|------------------------|------------------------------------------------------------------------------|------------------------|---------------------|-------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available |                   |
| 2,4,6-tris(dimethylaminomethyl)phenol    | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | 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 |                   |

### Specific Target Organ Toxicity - repeated exposure

| Name                                                          | Route      | Target Organ(s)                                                                                                                                                                                                                       | Value          | Species | Test result         | Exposure Duration     |
|---------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------|---------------------|-----------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | Ingestion  | gastrointestinal tract   heart   endocrine system   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 600 mg/kg/day | 59 days               |
| Siloxanes and Silicones, di-Me, reaction products with silica | Inhalation | respiratory system   silicosis                                                                                                                                                                                                        | Not classified | Human   | NOAEL Not available | occupational exposure |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | Dermal     | skin                                                                                                                                                                                                                                  | Not classified | Rat     | NOAEL 25 mg/kg/day  | 4 weeks               |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | Dermal     | liver   nervous system   auditory system   hematopoietic system   eyes                                                                                                                                                                | Not classified | Rat     | NOAEL 125 mg/kg/day | 4 weeks               |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | Ingestion  | heart   endocrine system   hematopoietic system   liver   muscles   nervous system   kidney and/or bladder   respiratory system   vascular system   auditory system   skin   gastrointestinal tract   bone, teeth, nails, and/or hair | Not classified | Rat     | NOAEL 150 mg/kg/day | 90 days               |

|  |  |                      |  |  |  |  |
|--|--|----------------------|--|--|--|--|
|  |  | immune system   eyes |  |  |  |  |
|--|--|----------------------|--|--|--|--|

### 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  |
|---------------------------------------------------------------|--------------|-------------|-------------------------------------------------------|----------|---------------|--------------|
| Modified Epoxy Resin                                          | Trade Secret | N/A         | Data not available or insufficient for classification | N/A      | N/A           | N/A % weight |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | 4246-51-9    | Bacteria    | Experimental                                          | 17 hours | EC50          | 4,000 mg/l   |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | 4246-51-9    | Golden Orfe | Experimental                                          | 96 hours | LC50          | >1,000 mg/l  |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | 4246-51-9    | Green algae | Experimental                                          | 72 hours | EC50          | >500 mg/l    |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | 4246-51-9    | Water flea  | Experimental                                          | 48 hours | EC50          | 218.16 mg/l  |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | 4246-51-9    | Green algae | Experimental                                          | 72 hours | EC10          | 5.4 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          |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | 90-72-2      | N/A         | Experimental                                          | 96 hours | LC50          | 718 mg/l     |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | 90-72-2      | Common Carp | Experimental                                          | 96 hours | LC50          | >100 mg/l    |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | 90-72-2      | Green algae | Experimental                                          | 72 hours | EC50          | 46.7 mg/l    |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | 90-72-2      | Water flea  | Experimental                                          | 48 hours | EC50          | >100 mg/l    |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | 90-72-2      | Green algae | Experimental                                          | 72 hours | NOEC          | 6.44 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  |

## 12.2. Persistence and degradability

| Material                                                      | CAS Nbr    | Test type                         | Duration | Study Type                    | Test result                        | Protocol                          |
|---------------------------------------------------------------|------------|-----------------------------------|----------|-------------------------------|------------------------------------|-----------------------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | 4246-51-9  | Experimental Biodegradation       | 25 days  | CO2 evolution                 | -8 %CO2 evolution/THC O2 evolution | OECD 301B - Modified Sturm or CO2 |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | 4246-51-9  | Estimated Photolysis              |          | Photolytic half-life (in air) | 2.96 hours (t1/2)                  |                                   |
| Siloxanes and Silicones, di-Me, reaction products with silica | 67762-90-7 | Data not available - insufficient | N/A      | N/A                           | N/A                                | N/A                               |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | 90-72-2    | Experimental Biodegradation       | 28 days  | BOD                           | 4 %BOD/ThOD                        | OECD 301D - Closed bottle test    |
| Calcium trifluoromethanesulphonate                            | 55120-75-7 | Estimated Biodegradation          | 28 days  | BOD                           | 0 %BOD/ThOD                        | OECD 301D - Closed bottle test    |

## 12.3 : Bioaccumulative potential

| Material                                                      | Cas No.    | Test type                                             | Duration | Study Type             | Test result | Protocol                        |
|---------------------------------------------------------------|------------|-------------------------------------------------------|----------|------------------------|-------------|---------------------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)                      | 4246-51-9  | Experimental Bioconcentration                         |          | Log Kow                | -1.25       |                                 |
| 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                             |
| 2,4,6-tris(dimethylaminomethyl)phenol                         | 90-72-2    | Experimental Bioconcentration                         |          | Log Kow                | -0.66       | 830.7550 Part.Coeff Shake Flask |
| Calcium trifluoromethanesulphonate                            | 55120-75-7 | Estimated Bioconcentration                            | 35 days  | Bioaccumulation factor | 0.03        | OECD305-Bioconcentration        |

## 12.4. Mobility in soil

| Material                                 | Cas No.   | Test type                | Study Type | Test result | Protocol             |
|------------------------------------------|-----------|--------------------------|------------|-------------|----------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9 | Modeled Mobility in Soil | Koc        | 1 l/kg      | ACD/Labs ChemSketch™ |

## 12.5. Results of the PBT and vPvB assessment

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

## 12.6. 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>                                | UN2735                                                                 | UN2735                                                                 | UN2735                                                                 |
| <b>14.2 UN proper shipping name</b>                               | AMINES, LIQUID, CORROSIVE, N.O.S.(4,7,10-TRIOXATRIDECANE-1,13-DIAMINE) | AMINES, LIQUID, CORROSIVE, N.O.S.(4,7,10-TRIOXATRIDECANE-1,13-DIAMINE) | AMINES, LIQUID, CORROSIVE, N.O.S.(4,7,10-TRIOXATRIDECANE-1,13-DIAMINE) |
| <b>14.3 Transport hazard class(es)</b>                            | 8                                                                      | 8                                                                      | 8                                                                      |
| <b>14.4 Packing group</b>                                         | II                                                                     | II                                                                     | II                                                                     |
| <b>14.5 Environmental hazards</b>                                 | Not Environmentally Hazardous                                          | Not applicable                                                         | Not a 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> | C7                 | Not applicable.    | Not applicable.    |
| <b>IMDG Segregation Code</b>   | Not applicable.    | Not applicable.    | 18 - ALKALIS       |

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

#### Global inventory status

Contact 3M for more 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 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  
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

|      |                                          |
|------|------------------------------------------|
| H302 | Harmful if swallowed.                    |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction.     |
| H318 | Causes serious eye damage.               |

### Revision information:

Section 3: Composition/ Information of ingredients table information was modified.  
Section 8: glove data value information was modified.  
Section 8: Occupational exposure limit table information was deleted.  
Section 8: Occupational exposure limit table information was modified.  
OEL Reg Agency Desc information was deleted.  
Section 8: Respiratory protection - recommended respirators information information was modified.  
Section 8: Skin protection - protective clothing information information was modified.  
Section 8: STEL key information was deleted.  
Section 8: TWA key information was deleted.  
Section 9: Flammability (solid, gas) information information was deleted.  
Section 09: Flammability information information was added.  
Section 09: Particle Characteristics N/A information was added.  
Section 9: Vapour pressure value information was modified.  
Section 11: Reproductive Toxicity Table information was modified.  
Section 11: Target Organs - Repeated Table information was modified.  
Section 11: Target Organs - Single Table information was modified.  
Section 12: Component ecotoxicity information information was modified.  
Section 12: Persistence and Degradability information information was modified.  
Section 12: Biocumulative potential information information was modified.

## Annex

|                                                               |                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Title</b>                                               |                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Substance identification</b>                               | 3,3'-Oxybis(ethyleneoxy)bis(propylamine);<br>EC No. 224-207-2;<br>CAS Nbr 4246-51-9;                                                                                                                                                                                                                                                                                                         |
| <b>Exposure Scenario Name</b>                                 | Industrial Transfer                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Lifecycle Stage</b>                                        | Use at industrial sites                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Contributing activities</b>                                | 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:                                                                                                                                                                                                                                                          |

| 3. Prediction of exposure |                                                                                                                                            |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Prediction of exposure    | Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted. |

| 1. Title                                |                                                                                                                                                                                                                                     |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Substance identification                |                                                                                                                                                                                                                                     |
| 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                                   | <b>Physical state:</b> Liquid.<br><b>General operating conditions:</b><br>Duration of use: 8 hours/day;<br>Emission days per year: 220 days/year;<br>Frequency of exposure at workplace [for one worker]: 5 days/week;                                                                                             |
| Risk management measures                               | 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; |
| Waste management measures                              | Do not apply industrial sludge to natural soils;<br>Prevent discharge of undissolved substance to or recover from wastewater;                                                                                                                                                                                      |

| 3. Prediction of exposure |                                                                                                                                            |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Prediction of exposure    | Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted. |

| 1. Title                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Substance identification | 2,4,6-tris(dimethylaminomethyl)phenol;<br>EC No. 202-013-9;<br>CAS Nbr 90-72-2;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Exposure Scenario Name   | Industrial Use of panel bonding Adhesives                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Lifecycle Stage          | Use at industrial sites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Contributing activities  | PROC 05 -Mixing or blending in batch processes<br>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>PROC 10 -Roller application or brushing<br>PROC 13 -Treatment of articles by dipping and pouring<br>PROC 15 -Use a laboratory reagent<br>ERC 05 -Use at industrial site leading to inclusion into/onto article<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>                | Application of product with a roller or brush. Application of product with applicator gun. Mixing or blending of solid or liquid materials. Transfer of substances/mixtures into small containers e.g. tubes, bottles or small reservoirs. Transfers with dedicated controls, including loading, filling, dumping, bagging. Transfers without dedicated controls, including loading, filling, dumping, bagging. Use as a laboratory reagent.                                                                                                                                               |
| <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>Emission days per year: 220 days/year;<br>Indoors with good general ventilation;<br>Processing Temperature:: <= 40 degree Celsius;<br><br><b>Task: Transferring Material;</b><br>Duration of use: 4 hours/day;<br><br><b>Task: Mixing;</b><br>Duration of use: 8 hours/day;<br><br><b>Task: Laboratory use;</b><br>Duration of use: <= 1 hour(s);                                                                                                                                                                |
| <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>Local exhaust ventilation;<br>Protective clothing / Wear suitable protective clothing;<br><b>Environmental:</b><br>None needed;<br>;<br>The following task-specific risk management measures apply in addition to those listed above:<br><b>Task: Laboratory use;</b><br><b>Human Health;</b><br>Protective Gloves - Chemical resistant. Refer to Section 8 of the SDS for specific glove material.; |
| <b>Waste management measures</b>                              | Send to a municipal sewage treatment plant;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <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>                               | 3,3'-Oxybis(ethyleneoxy)bis(propylamine);<br>EC No. 224-207-2;<br>CAS Nbr 4246-51-9;                                                                                                                                                                                                                             |
| <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.                                                                                                                                                                                                                                                                                   |

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  | <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.                                                                                                                                                                                                                                                                    |

|                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Title</b>                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Substance identification</b>                               | 2,4,6-tris(dimethylaminomethyl)phenol;<br>EC No. 202-013-9;<br>CAS Nbr 90-72-2;                                                                                                                                                                                                                                                                                                                                                     |
| <b>Exposure Scenario Name</b>                                 | Professional Use of panel bonding Adhesives                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Lifecycle Stage</b>                                        | Use at industrial sites                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Contributing activities</b>                                | PROC 05 -Mixing or blending in batch processes<br>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 10 -Roller application or brushing<br>PROC 13 -Treatment of articles by dipping and pouring<br>ERC 08c -Widespread use leading to inclusion into/onto article (indoor) |
| <b>Processes, tasks and activities covered</b>                | Application of product with a roller or brush. Application of product with applicator gun. Mixing or blending of solid or liquid materials. Transfers with dedicated controls, including loading, filling, dumping, bagging. Transfers without 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>Emission days per year: 220 days/year;<br>Indoors with good general ventilation;<br>Processing Temperature:: <= 40 degree Celsius;<br><br><b>Task: Transferring Material;</b><br>Indoors with enhanced general ventilation;<br>Duration of use: 4 hours/day;                                                             |
| <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>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>Municipal Sewage Treatment Plant;<br>;                              |

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  | <p>The following task-specific risk management measures apply in addition to those listed above:</p> <p><b>Task: Transferring Material;</b><br/> <b>Human Health;</b><br/> Protective clothing / Wear suitable protective clothing;<br/> Face shield;</p> <p><b>Task: Mixing;</b><br/> <b>Human Health;</b><br/> Protective clothing / Wear suitable protective clothing;<br/> Face shield;<br/> Local exhaust ventilation;</p> |
| <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)



## Safety Data Sheet

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|                        |            |                         |            |
|------------------------|------------|-------------------------|------------|
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| <b>Revision date:</b>  | 17/09/2025 | <b>Supersedes date:</b> | 19/12/2024 |

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 DP420NS Black, Part B or Epoxy Adhesive 420NS Black, Part B

#### Product Identification Numbers

62-3299-8535-2

7000000853

#### 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, 70 SIR JOHN ROGERSON'S QUAY, D02R296 DUBLIN 2 |
| <b>Telephone:</b> | +353 1 280 3555                                                   |
| <b>E Mail:</b>    | ner-productstewardship@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 | 75 - 98 |

#### 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 | 75 - 98 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Aquatic Chronic 2, H411 |
| Acrylic Polymer                                               | Trade Secret                                                              | 1 - 20  | Substance not classified as hazardous                                                      |
| Siloxanes and Silicones, di-Me, reaction products with silica | (CAS-No.) 67762-90-7                                                      | 1 - 5   | Substance not classified as hazardous                                                      |
| Carbon black                                                  | (CAS-No.) 1333-86-4<br>(EC-No.) 215-609-9                                 | <= 0.15 | Substance with a national occupational exposure limit                                      |

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.  
Carbon monoxide  
Carbon dioxide.  
Hydrogen Chloride  
Irritant vapours or gases.

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

**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

For industrial/occupational use only. Not for consumer sale or use. 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 heat. 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 |
|--------------|-----------|--------------|------------------------------------------------------|---------------------|
| Carbon black | 1333-86-4 | Ireland OELs | TWA(inhalable fraction)(8 hours):3 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)

| Ingredient                              | Degradation Product | Population | Human exposure pattern                                     | DNEL                   |
|-----------------------------------------|---------------------|------------|------------------------------------------------------------|------------------------|
| 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)

| <b>Ingredient</b>                       | <b>Degradation Product</b> | <b>Compartment</b>             | <b>PNEC</b>    |
|-----------------------------------------|----------------------------|--------------------------------|----------------|
| 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:

| <b>Material</b>  | <b>Thickness (mm)</b> | <b>Breakthrough Time</b> |
|------------------|-----------------------|--------------------------|
| 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 (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

#### **Respiratory protection**

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

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

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>Specific Physical Form:</b>                | Paste                                              |
| <b>Colour</b>                                 | Black                                              |
| <b>Odor</b>                                   | Mild 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>            | > 121.1 °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>                            | 121.1 °C                                           |
| <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>                    | 77,295 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>Not applicable.</i>                             |
| <b>Density</b>                                | 1.1 g/ml                                           |
| <b>Relative density</b>                       | 0.97 - 1.1 [Ref Std: WATER=1]                      |
| <b>Relative Vapour Density</b>                | <i>Not applicable.</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

*Not applicable.*

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.

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.

#### 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                             |
| Acrylic Polymer                                               | Dermal                         | Rabbit  | LD50 > 5,000 mg/kg                             |
| Acrylic Polymer                                               | Ingestion                      | Rat     | LD50 > 5,000 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                             |
| Carbon black                                                  | Dermal                         | Rabbit  | LD50 > 3,000 mg/kg                             |
| Carbon black                                                  | Ingestion                      | Rat     | LD50 > 8,000 mg/kg                             |

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

| Name                                                          | Species                | Value                     |
|---------------------------------------------------------------|------------------------|---------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane                       | Rabbit                 | Mild irritant             |
| Acrylic Polymer                                               | Professional judgement | Minimal irritation        |
| Siloxanes and Silicones, di-Me, reaction products with silica | Rabbit                 | No significant irritation |
| Carbon black                                                  | Rabbit                 | No significant irritation |

#### Serious Eye Damage/Irritation

| Name                                                          | Species                | Value                     |
|---------------------------------------------------------------|------------------------|---------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane                       | Rabbit                 | Moderate irritant         |
| Acrylic Polymer                                               | Professional judgement | Mild irritant             |
| Siloxanes and Silicones, di-Me, reaction products with silica | Rabbit                 | No significant irritation |
| Carbon black                                                  | Rabbit                 | No significant irritation |

#### Skin Sensitisation

| Name                                                          | Species          | Value          |
|---------------------------------------------------------------|------------------|----------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane                       | Human and animal | Sensitising    |
| Siloxanes and Silicones, di-Me, reaction products with silica | Human and animal | Not classified |

#### Respiratory Sensitisation

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

**3M™ Scotch-Weld™ Epoxy Adhesive DP420NS Black, Part B or Epoxy Adhesive 420NS Black, Part B**

|                                         |       |                |
|-----------------------------------------|-------|----------------|
| 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 |
| Siloxanes and Silicones, di-Me, reaction products with silica | In Vitro | Not mutagenic                                                                |
| Carbon black                                                  | In Vitro | Not mutagenic                                                                |
| Carbon black                                                  | In vivo  | Some positive data exist, but the data are not sufficient for classification |

**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 |
| Siloxanes and Silicones, di-Me, reaction products with silica | Not specified. | Mouse   | Some positive data exist, but the data are not sufficient for classification |
| Carbon black                                                  | Dermal         | Mouse   | Not carcinogenic                                                             |
| Carbon black                                                  | Ingestion      | Mouse   | Not carcinogenic                                                             |
| Carbon black                                                  | Inhalation     | Rat     | Carcinogenic.                                                                |

**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         |
| Siloxanes and Silicones, di-Me, reaction products with silica | Ingestion | Not classified for female reproduction | Rat     | NOAEL 509 mg/kg/day   | 1 generation         |
| Siloxanes and Silicones, di-Me, reaction products with silica | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 497 mg/kg/day   | 1 generation         |
| Siloxanes and Silicones, di-Me, reaction products with silica | Ingestion | Not classified for development         | Rat     | NOAEL 1,350 mg/kg/day | during organogenesis |

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

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 | Not classified | Rat     | NOAEL 1,000 mg/kg/day | 28 days           |

|                                                               |            |                                |                |       |                     |                       |
|---------------------------------------------------------------|------------|--------------------------------|----------------|-------|---------------------|-----------------------|
|                                                               |            | kidney and/or bladder          |                |       |                     |                       |
| Siloxanes and Silicones, di-Me, reaction products with silica | Inhalation | respiratory system   silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Carbon black                                                  | Inhalation | pneumoconiosis                 | 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    |
| Acrylic Polymer                                               | Trade Secret | N/A              | Data not available or insufficient for classification | N/A      | N/A                            | N/A         |
| 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         |
| Carbon black                                                  | 1333-86-4    | Green algae      | Experimental                                          | 72 hours | No tox obs at lmt of water sol | >100 mg/l   |
| Carbon black                                                  | 1333-86-4    | Zebra Fish       | Experimental                                          | 96 hours | No tox obs at lmt of water sol | >100 mg/l   |
| Carbon black                                                  | 1333-86-4    | Green algae      | Experimental                                          | 72 hours | No tox obs at lmt of water sol | 100 mg/l    |

**3M™ Scotch-Weld™ Epoxy Adhesive DP420NS Black, Part B or Epoxy Adhesive 420NS Black, Part B**

|              |           |                  |              |         |      |           |
|--------------|-----------|------------------|--------------|---------|------|-----------|
| Carbon black | 1333-86-4 | Activated sludge | Experimental | 3 hours | NOEC | >800 mg/l |
|--------------|-----------|------------------|--------------|---------|------|-----------|

**12.2. Persistence and degradability**

| Material                                                          | CAS Nbr      | Test type                         | Duration | Study Type                  | Test result                   | Protocol                            |
|-------------------------------------------------------------------|--------------|-----------------------------------|----------|-----------------------------|-------------------------------|-------------------------------------|
| 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 <sub>1/2</sub> ) | OECD 111 Hydrolysis function of pH  |
| Acrylic Polymer                                                   | Trade Secret | Data not available - insufficient | N/A      | N/A                         | N/A                           | N/A                                 |
| Siloxanes and Silicones, dimethyl-, reaction products with silica | 67762-90-7   | Data not available - insufficient | N/A      | N/A                         | N/A                           | N/A                                 |
| Carbon black                                                      | 1333-86-4    | Data not available - 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 |
| Acrylic Polymer                                                   | Trade Secret | Data not available or insufficient for classification | N/A      | N/A        | N/A         | N/A                          |
| Siloxanes and Silicones, dimethyl-, reaction products with silica | 67762-90-7   | Data not available or insufficient for classification | N/A      | N/A        | N/A         | N/A                          |
| Carbon black                                                      | 1333-86-4    | Data not available or insufficient for classification | N/A      | N/A        | N/A         | N/A                          |

**12.4. Mobility in soil**

| Material                                | Cas No.   | Test type                | Study Type | Test result | Protocol  |
|-----------------------------------------|-----------|--------------------------|------------|-------------|-----------|
| 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**

|                                                                   | <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.(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 |
| Carbon black                            | 1333-86-4      | 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.                   |
| H411 | Toxic to aquatic life with long lasting effects. |

### Revision information:

Section 1: Address information was modified.

Section 1: E-mail address information was modified.

Section 6: Accidental release personal information information was modified.

Section 7: Conditions safe storage information was modified.

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

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

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

## Annex

|                                                               |                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Title</b>                                               |                                                                                                                                                                                                                                                                                                                                             |
| <b>Substance identification</b>                               |                                                                                                                                                                                                                                                                                                                                             |
| <b>Exposure Scenario Name</b>                                 | Formulation                                                                                                                                                                                                                                                                                                                                 |
| <b>Lifecycle Stage</b>                                        | Formulation or re-packing                                                                                                                                                                                                                                                                                                                   |
| <b>Contributing activities</b>                                | 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>                | Batch manufacture of a chemical substance or formulation (including polymerisation reactions).                                                                                                                                                                                                                                              |
| <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>Emission days per year: <= 225 days per year;                                                                                                                                                                                    |
| <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>Waste Water treatment - Incineration; |
| <b>Waste management measures</b>                              | Do not apply industrial sludge to natural soils;<br>Prevent leaks and prevent soil / water pollution caused by leaks;                                                                                                                                                                                                                       |
| <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)**