



## Safety Data Sheet

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**Revision date:** 07/07/2023  
**Transportation version number:**

**Version number:** 22.01  
**Supersedes date:** 06/07/2023

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

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

#### 1.1. Product identifier

3M Scotch-Weld™ Urethane Adhesive DP620NS Black

#### Product Identification Numbers

62-2645-3535-2 62-2645-5031-0

7000046372 7100148737

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

**Website:** [www.3M.com/uk](http://www.3M.com/uk)

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

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

18-0364-2, 18-0391-5

### TRANSPORTATION INFORMATION

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

## KIT LABEL

### 2.1. Classification of the substance or mixture

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

#### CLASSIFICATION:

Skin Corrosion/Irritation, Category 1B - Skin Corr. 1B; H314

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

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

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

Carcinogenicity, Category 2 - Carc. 2; H351

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

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

Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

### 2.2. Label elements

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

#### SIGNAL WORD

DANGER.

#### Symbols

GHS05 (Corrosion) | GHS07 (Exclamation mark) | GHS08 (Health Hazard) |

#### Pictograms



#### Contains:

Cyclohex-1,4-ylenedimethanol; Dipotassium oxide; Disodium oxide; m-Xylene-.alpha.alpha'.-diamine; Triethoxy(3-isocyanatopropyl)silane; 3-aminomethyl-3,5,5-trimethylcyclohexylamine; 4,4'-Methylenediphenyl diisocyanate, oligomers

#### HAZARD STATEMENTS:

|      |                                                                                          |
|------|------------------------------------------------------------------------------------------|
| H314 | Causes severe skin burns and eye damage.                                                 |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled.               |
| H317 | May cause an allergic skin reaction.                                                     |
| H351 | Suspected of causing cancer.                                                             |
| H335 | May cause respiratory irritation.                                                        |
| H373 | May cause damage to organs through prolonged or repeated exposure:<br>respiratory system |
| H412 | Harmful to aquatic life with long lasting effects.                                       |

#### PRECAUTIONARY STATEMENTS

##### Prevention:

|       |                                                                                               |
|-------|-----------------------------------------------------------------------------------------------|
| P260A | Do not breathe vapours.                                                                       |
| P280J | Wear protective gloves, protective clothing, respiratory protection, 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.                           |
| P304 + P340        | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                                                       |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310               | Immediately call a POISON CENTRE or doctor/physician.                                                                            |
| P342 + P311        | If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.                                                  |

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

**<=125 ml Hazard statements**

|      |                                                                            |
|------|----------------------------------------------------------------------------|
| H314 | Causes severe skin burns and eye damage.                                   |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction.                                       |
| H351 | Suspected of causing cancer.                                               |
| H412 | Harmful to aquatic life with long lasting effects.                         |

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

|       |                                                                                               |
|-------|-----------------------------------------------------------------------------------------------|
| P260A | Do not breathe vapours.                                                                       |
| P280J | Wear protective gloves, protective clothing, respiratory protection, 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.                           |
| P304 + P340        | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                                                       |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310               | Immediately call a POISON CENTRE or doctor/physician.                                                                            |
| P342 + P311        | If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.                                                  |

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

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

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

**Revision information:**

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



## Safety Data Sheet

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**Document group:** 18-0364-2  
**Revision date:** 21/06/2024

**Version number:** 18.00  
**Supersedes date:** 07/07/2023

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

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

#### 1.1. Product identifier

3M™ Scotch-Weld™ Urethane Adhesive DP620NS Black and Urethane Adhesive 620NS 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 United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.  
**Telephone:** +44 (0)1344 858 000  
**E Mail:** tox.uk@mmm.com  
**Website:** www.3M.com/uk

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

Formerly known as DYNAMix™ Sheet Metal Bonding Adhesive 6188-1.

### SECTION 2: Hazard identification

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

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

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

##### CLASSIFICATION:

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334  
Skin Sensitization, Category 1 - Skin Sens. 1; H317

Carcinogenicity, Category 2 - Carc. 2; H351

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

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

For full text of H phrases, see Section 16.

## 2.2. Label elements

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

### SIGNAL WORD

DANGER.

### Symbols

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

### Pictograms



| Ingredient                                     | CAS Nbr    | EC No.    | % by Wt |
|------------------------------------------------|------------|-----------|---------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers |            | 500-040-3 | 40 - 85 |
| Triethoxy(3-isocyanatopropyl)silane            | 24801-88-5 | 246-467-6 | <= 1    |

### HAZARD STATEMENTS:

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

### PRECAUTIONARY STATEMENTS

#### Prevention:

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

#### Response:

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

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

#### <=125 ml Hazard statements

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

H351 Suspected of causing cancer.

#### <=125 ml Precautionary statements

##### Prevention:

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

##### Response:

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

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

**Information required per Regulation (EU) 2020/1149, amendment to REACH Regulation (1907/2006) as amended for Great Britain, as regards diisocyanates:**

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

#### 2.3. Other hazards

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

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Ingredient                                                      | Identifier(s)                              | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB                                                                                  |
|-----------------------------------------------------------------|--------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | (EC-No.) 500-040-3                         | 40 - 85 | Carc. 2, H351<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317<br>STOT SE 3, H335<br>STOT RE 2, H373 |
| Castor oil, polymer with 1,1'-methylenebis[4-isocyanatobenzene] | (CAS-No.) 68424-09-9                       | 15 - 40 | Substance with a national occupational exposure limit                                                                                                               |
| Triethoxy(3-isocyanatopropyl)silane                             | (CAS-No.) 24801-88-5<br>(EC-No.) 246-467-6 | <= 1    | Acute Tox. 1, H330<br>Acute Tox. 4, H312<br>Acute Tox. 4, H302<br>Skin Corr. 1B, H314<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317                                  |
| Carbon black                                                    | (CAS-No.) 1333-86-4<br>(EC-No.) 215-609-9  | <= 0.5  | 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                                                                                                 |
|------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | (EC-No.) 500-040-3 | (C >= 5%) Skin Irrit. 2, H315<br>(C >= 5%) Eye Irrit. 2, H319<br>(C >= 0.1%) Resp. Sens. 1, H334<br>(C >= 5%) STOT SE 3, H335 |

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation

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

#### Skin contact

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

#### Eye contact

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

#### If swallowed

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

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

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

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

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

Not applicable

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

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

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

None inherent in this product.

### Hazardous Decomposition or By-Products

#### Substance

Carbon monoxide

#### Condition

During combustion.

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

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

### **5.3. Advice for fire-fighters**

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

## **SECTION 6: Accidental release measures**

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

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

### **6.2. Environmental precautions**

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

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

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

### **6.4. Reference to other sections**

Refer to Section 8 and Section 13 for more information

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

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

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

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

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

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

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

### **8.1 Control parameters**

**Occupational exposure limits**

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

| <b>Ingredient</b> | <b>CAS Nbr</b> | <b>Agency</b> | <b>Limit type</b>                                                        | <b>Additional comments</b> |
|-------------------|----------------|---------------|--------------------------------------------------------------------------|----------------------------|
| Carbon black      | 1333-86-4      | UK HSC        | TWA: 3.5 mg/m <sup>3</sup> ; STEL: 7 mg/m <sup>3</sup>                   |                            |
| Free isocyanates  | 24801-88-5     | UK HSC        | TWA(as NCO):0.02 mg/m <sup>3</sup> ; STEL(as NCO):0.07 mg/m <sup>3</sup> | Respiratory Sensitizer     |
| Free isocyanates  | 68424-09-9     | UK HSC        | TWA(as NCO):0.02 mg/m <sup>3</sup> ; STEL(as NCO):0.07 mg/m <sup>3</sup> | Respiratory Sensitizer     |

UK HSC : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

**Biological limit values**

| <b>Ingredient</b> | <b>CAS Nbr</b> | <b>Agency</b> | <b>Determinant</b>         | <b>Biological Specimen</b> | <b>Sampling Time</b> | <b>Value</b> | <b>Additional comments</b> |
|-------------------|----------------|---------------|----------------------------|----------------------------|----------------------|--------------|----------------------------|
| Free isocyanates  | 24801-88-5     | UK EH40 BMGVs | Isocyanate-derived diamine | Creatinine in urine        | EPE                  | 1 umol/mol   |                            |
| Free isocyanates  | 68424-09-9     | UK EH40 BMGVs | Isocyanate-derived diamine | Creatinine in urine        | EPE                  | 1 umol/mol   |                            |

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

EPE: At the end of the period of exposure.

**8.2. Exposure controls****8.2.1. Engineering controls**

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

**8.2.2. Personal protective equipment (PPE)****Eye/face protection**

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

Indirect vented goggles.

*Applicable Norms/Standards*

Use eye protection conforming to EN 166

**Skin/hand protection**

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

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

| <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

**Respiratory protection**

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

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

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

*Applicable Norms/Standards*

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

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|                                        |                                                             |
|----------------------------------------|-------------------------------------------------------------|
| Physical state                         | Liquid.                                                     |
| Specific Physical Form:                | Viscous.                                                    |
| Colour                                 | Black                                                       |
| Odor                                   | Mild Isocyanate                                             |
| Odour threshold                        | <i>No data available.</i>                                   |
| Melting point/freezing point           | <i>No data available.</i>                                   |
| Boiling point/boiling range            | $\geq 204.4$ °C                                             |
| Flammability                           | Not applicable.                                             |
| Flammable Limits(LEL)                  | <i>Not applicable.</i>                                      |
| Flammable Limits(UEL)                  | <i>Not applicable.</i>                                      |
| Flash point                            | $\geq 143.3$ °C [ <i>Test Method:</i> Tagliabue closed cup] |
| Autoignition temperature               | <i>Not applicable.</i>                                      |
| Decomposition temperature              | <i>No data available.</i>                                   |
| pH                                     | <i>substance/mixture is non-soluble (in water)</i>          |
| Kinematic Viscosity                    | 2,703 mm <sup>2</sup> /sec                                  |
| Water solubility                       | Negligible                                                  |
| Solubility- non-water                  | <i>No data available.</i>                                   |
| Partition coefficient: n-octanol/water | <i>No data available.</i>                                   |
| Vapour pressure                        | $\leq 0$ Pa [ <i>@ 20 °C</i> ]                              |
| Density                                | 1.11 g/ml                                                   |
| Relative density                       | 1.11 [ <i>Ref Std:</i> WATER=1]                             |
| Relative Vapour Density                | $\geq 1$ [ <i>Ref Std:</i> AIR=1]                           |
| Particle Characteristics               | <i>Not applicable.</i>                                      |

**9.2. Other information****9.2.2 Other safety characteristics**

EU Volatile Organic Compounds

*No data available.*

Evaporation rate

$\leq 1$  [*Details:* Gels with exposure to humidity.]

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

None known.

### 10.5 Incompatible materials

Water

Strong acids.

Strong bases.

### 10.6 Hazardous decomposition products

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

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

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

#### Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Skin contact

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

#### Eye contact

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

#### Ingestion

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

**Additional Health Effects:****Prolonged or repeated exposure may cause target organ effects:**

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

**Additional information:**

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

**Toxicological Data**

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

**Acute Toxicity**

| Name                                           | Route                          | Species | Value                                          |
|------------------------------------------------|--------------------------------|---------|------------------------------------------------|
| Overall product                                | Dermal                         |         | No data available; calculated ATE >5,000 mg/kg |
| Overall product                                | Ingestion                      |         | No data available; calculated ATE >5,000 mg/kg |
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Dermal                         | Rabbit  | LD50 > 5,000 mg/kg                             |
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Inhalation-Dust/Mist (4 hours) | Rat     | LC50 0.368 mg/l                                |
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Ingestion                      | Rat     | LD50 31,600 mg/kg                              |
| Triethoxy(3-isocyanatopropyl)silane            | Dermal                         | Rabbit  | LD50 1,259 mg/kg                               |
| Triethoxy(3-isocyanatopropyl)silane            | Inhalation-Vapour (4 hours)    | Rat     | LC50 0.36 mg/l                                 |
| Triethoxy(3-isocyanatopropyl)silane            | Ingestion                      | Rat     | LD50 706 mg/kg                                 |
| 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                     |
|------------------------------------------------|-------------------------|---------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | official classification | Irritant                  |
| Triethoxy(3-isocyanatopropyl)silane            | Rabbit                  | Corrosive                 |
| Carbon black                                   | Rabbit                  | No significant irritation |

**Serious Eye Damage/Irritation**

| Name                                           | Species                 | Value                     |
|------------------------------------------------|-------------------------|---------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | official classification | Severe irritant           |
| Triethoxy(3-isocyanatopropyl)silane            | Rabbit                  | Corrosive                 |
| Carbon black                                   | Rabbit                  | No significant irritation |

**Skin Sensitisation**

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

**Respiratory Sensitisation**

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

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

### Germ Cell Mutagenicity

| Name                                           | Route    | Value                                                                        |
|------------------------------------------------|----------|------------------------------------------------------------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 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                                                                        |
|------------------------------------------------|------------|---------|------------------------------------------------------------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Inhalation | Rat     | Some positive data exist, but the data are not sufficient for classification |
| Carbon black                                   | Dermal     | Mouse   | Not carcinogenic                                                             |
| Carbon black                                   | Ingestion  | Mouse   | Not carcinogenic                                                             |
| Carbon black                                   | Inhalation | Rat     | Carcinogenic.                                                                |

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

| Name                                           | Route      | Value                          | Species | Test result      | Exposure Duration    |
|------------------------------------------------|------------|--------------------------------|---------|------------------|----------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Inhalation | Not classified for development | Rat     | NOAEL 0.004 mg/l | during organogenesis |

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

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

#### Specific Target Organ Toxicity - repeated exposure

| Name                                           | Route      | Target Organ(s)    | Value                                                          | Species | Test result         | Exposure Duration     |
|------------------------------------------------|------------|--------------------|----------------------------------------------------------------|---------|---------------------|-----------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat     | LOAEL 0.004 mg/l    | 13 weeks              |
| 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 material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

## 12.1. Toxicity

No product test data available.

| Material                                                        | CAS #      | Organism         | Type                                                  | Exposure | Test endpoint                  | Test result |
|-----------------------------------------------------------------|------------|------------------|-------------------------------------------------------|----------|--------------------------------|-------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | 500-040-3  | Water flea       | Analogous Compound                                    | 24 hours | EC50                           | >100 mg/l   |
| Castor oil, polymer with 1,1'-methylenebis[4-isocyanatobenzene] | 68424-09-9 | N/A              | Data not available or insufficient for classification | N/A      | N/A                            | NA          |
| Triethoxy(3-isocyanatopropyl)silane                             | 24801-88-5 | Green algae      | Estimated                                             | 72 hours | EC50                           | >1,000 mg/l |
| Triethoxy(3-isocyanatopropyl)silane                             | 24801-88-5 | Water flea       | Estimated                                             | 48 hours | EC50                           | 331 mg/l    |
| Triethoxy(3-isocyanatopropyl)silane                             | 24801-88-5 | Zebra Fish       | Estimated                                             | 96 hours | LC50                           | >934 mg/l   |
| Triethoxy(3-isocyanatopropyl)silane                             | 24801-88-5 | Activated sludge | Experimental                                          | 3 hours  | NOEC                           | 10 mg/l     |
| Triethoxy(3-isocyanatopropyl)silane                             | 24801-88-5 | Green algae      | Estimated                                             | 72 hours | NOEC                           | 1.3 mg/l    |
| Triethoxy(3-isocyanatopropyl)silane                             | 24801-88-5 | Water flea       | Estimated                                             | 21 days  | NOEC                           | >=100 mg/l  |
| Carbon black                                                    | 1333-86-4  | Green algae      | Experimental                                          | 72 hours | No tox obs at lmt of water sol | >100 mg/l   |
| Carbon black                                                    | 1333-86-4  | Zebra Fish       | Experimental                                          | 96 hours | No tox obs at lmt of water sol | >100 mg/l   |
| Carbon black                                                    | 1333-86-4  | Green algae      | Experimental                                          | 72 hours | No tox obs at lmt of water sol | 100 mg/l    |
| Carbon black                                                    | 1333-86-4  | Activated sludge | Experimental                                          | 3 hours  | NOEC                           | >800 mg/l   |

## 12.2. Persistence and degradability

| Material                                                        | CAS Nbr    | Test type                         | Duration | Study Type                  | Test result       | Protocol                  |
|-----------------------------------------------------------------|------------|-----------------------------------|----------|-----------------------------|-------------------|---------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | 500-040-3  | Analogous Compound Biodegradation | 28 days  | BOD                         | 0 %BOD/ThOD       | OECD 301C - MITI test (I) |
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | 500-040-3  | Analogous Compound Hydrolysis     |          | Hydrolytic half-life (pH 7) | <2 hours (t 1/2)  |                           |
| Castor oil, polymer with 1,1'-methylenebis[4-isocyanatobenzene] | 68424-09-9 | Data not availbl-insufficient     | N/A      | N/A                         | N/A               | N/A                       |
| Triethoxy(3-isocyanatopropyl)silane                             | 24801-88-5 | Estimated Hydrolysis              |          | Hydrolytic half-life        | 8.5 hours (t 1/2) |                           |
| Carbon black                                                    | 1333-86-4  | Data not availbl-insufficient     | N/A      | N/A                         | N/A               | N/A                       |

**12.3 : Bioaccumulative potential**

| Material                                                        | Cas No.    | Test type                                             | Duration | Study Type             | Test result | Protocol                 |
|-----------------------------------------------------------------|------------|-------------------------------------------------------|----------|------------------------|-------------|--------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers                  | 500-040-3  | Analogous Compound BCF - Fish                         | 28 days  | Bioaccumulation factor | 200         |                          |
| Castor oil, polymer with 1,1'-methylenebis[4-isocyanatobenzene] | 68424-09-9 | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                      |
| Triethoxy(3-isocyanatopropyl)silane                             | 24801-88-5 | Estimated BCF - Fish                                  | 56 days  | Bioaccumulation factor | <3.4        | OECD305-Bioconcentration |
| Carbon black                                                    | 1333-86-4  | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                      |

**12.4. Mobility in soil**

| Material                            | Cas No.    | Test type                  | Study Type | Test result | Protocol  |
|-------------------------------------|------------|----------------------------|------------|-------------|-----------|
| Triethoxy(3-isocyanatopropyl)silane | 24801-88-5 | Estimated Mobility in Soil | Koc        | 0.2 l/kg    | Episuite™ |

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

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

**12.6. Other adverse effects**

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

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

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

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

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

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

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

## SECTION 14: Transportation information

Not hazardous for transportation.

|                                                                                  | <b>Ground Transport (ADR)</b>                                          | <b>Air Transport (IATA)</b>                                            | <b>Marine Transport (IMDG)</b>                                         |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>14.1 UN number</b>                                                            | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>14.2 UN proper shipping name</b>                                              | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>14.3 Transport hazard class(es)</b>                                           | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>14.4 Packing group</b>                                                        | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>14.5 Environmental hazards</b>                                                | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>14.6 Special precautions for user</b>                                         | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. |
| <b>14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code</b> | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>Control Temperature</b>                                                       | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>Emergency Temperature</b>                                                     | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>ADR Classification Code</b>                                                   | No data available.                                                     | No data available.                                                     | No data available.                                                     |
| <b>IMDG Segregation Code</b>                                                     | No data available.                                                     | No data available.                                                     | No data available.                                                     |

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

## SECTION 15: Regulatory information

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

#### Carcinogenicity

| <u><b>Ingredient</b></u>                       | <u><b>CAS Nbr</b></u> | <u><b>Classification</b></u>  | <u><b>Regulation</b></u>                                                                                                                                  |
|------------------------------------------------|-----------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4,4'-Methylenediphenyl diisocyanate, oligomers | 500-040-3             | Carc. 2                       | Vendor classified according to the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain<br>International Agency for Research on Cancer |
| Carbon black                                   | 1333-86-4             | Grp. 2B: Possible human carc. |                                                                                                                                                           |

**Global inventory status**

Contact 3M for more information. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

**COMAH Regulation, SI 2015/483**

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

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

No chemicals listed

**15.2. Chemical Safety Assessment**

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

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

|      |                                                                            |
|------|----------------------------------------------------------------------------|
| H302 | Harmful if swallowed.                                                      |
| H312 | Harmful in contact with skin.                                              |
| H314 | Causes severe skin burns and eye damage.                                   |
| H315 | Causes skin irritation.                                                    |
| H317 | May cause an allergic skin reaction.                                       |
| H319 | Causes serious eye irritation.                                             |
| H330 | Fatal if inhaled.                                                          |
| H332 | Harmful if inhaled.                                                        |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation.                                          |
| H351 | Suspected of causing cancer.                                               |
| H373 | May cause damage to organs through prolonged or repeated exposure.         |
| H373 | May cause damage to organs through prolonged or repeated exposure.         |

**Revision information:**

Label: CLP Target Organ Hazard Statement information was modified.

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

Section 09: Flammability information information was added.

Section 09: Odor information was modified.

Section 09: Particle Characteristics N/A information was added.

Section 11: Skin Sensitization Table information was modified.

Section 12: Component ecotoxicity information information was modified.

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

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

provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

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

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



## Safety Data Sheet

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**Document group:** 18-0391-5  
**Revision date:** 05/09/2025

**Version number:** 18.00  
**Supersedes date:** 07/07/2023

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

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

#### 1.1. Product identifier

3M™ Scotch-Weld™ Urethane Adhesive DP620NS Black and Urethane Adhesive 620NS Black, Part B

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

##### Identified uses

Structural adhesive.

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

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

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

Formerly known as DYNAMix™ Sheet Metal Bonding Adhesive 6188-1.

### SECTION 2: Hazard identification

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

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

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

##### CLASSIFICATION:

Skin Corrosion/Irritation, Category 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 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

## 2.2. Label elements

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

### SIGNAL WORD

DANGER.

### Symbols

GHS05 (Corrosion) | GHS07 (Exclamation mark) |

### Pictograms



| Ingredient                                   | CAS Nbr    | EC No.    | % by Wt |
|----------------------------------------------|------------|-----------|---------|
| Cyclohex-1,4-ylenedimethanol                 | 105-08-8   | 203-268-9 | 1 - 10  |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 2855-13-2  | 220-666-8 | 0.1 - 5 |
| m-Xylene-.alpha.alpha'.-diamine              | 1477-55-0  | 216-032-5 | <= 0.5  |
| Dipotassium oxide                            | 12136-45-7 | 235-227-6 | < 3     |
| Disodium oxide                               | 1313-59-3  | 215-208-9 | <= 1    |

### HAZARD STATEMENTS:

|      |                                                    |
|------|----------------------------------------------------|
| H314 | Causes severe skin burns and eye damage.           |
| H317 | May cause an allergic skin reaction.               |
| H412 | Harmful to aquatic life with long lasting effects. |

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

## <=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.

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

Contains 41% of components with unknown hazards to the aquatic environment.

## 2.3. Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Ingredient                                                    | Identifier(s)                             | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB                                                                         |
|---------------------------------------------------------------|-------------------------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether                | (CAS-No.) 9082-00-2                       | 20 - 50 | Substance not classified as hazardous                                                                                                                      |
| Polyol                                                        | Trade Secret                              | 15 - 40 | Substance not classified as hazardous                                                                                                                      |
| Cyclohex-1,4-ylenedimethanol                                  | (CAS-No.) 105-08-8<br>(EC-No.) 203-268-9  | 1 - 10  | Eye Dam. 1, H318                                                                                                                                           |
| Silicon dioxide                                               | (CAS-No.) 7631-86-9<br>(EC-No.) 231-545-4 | 1 - 10  | Substance with a national occupational exposure limit                                                                                                      |
| Siloxanes and Silicones, di-Me, reaction products with silica | (CAS-No.) 67762-90-7                      | 1 - 7   | Substance with a national occupational exposure limit                                                                                                      |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | (CAS-No.) 2855-13-2<br>(EC-No.) 220-666-8 | 0.1 - 5 | Acute Tox. 4, H302(LD50 = 1030 mg/kg<br>**ATE values per GB MCL**)<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Acute Tox. 4, H332 |
| m-Xylene-.alpha.alpha'.-diamine                               | (CAS-No.) 1477-55-0<br>(EC-No.) 216-032-5 | <= 0.5  | EUH071<br>Acute Tox. 4, H332<br>Acute Tox. 4, H302<br>Skin Corr. 1B, H314                                                                                  |

|                            |                                            |         |                                                                        |
|----------------------------|--------------------------------------------|---------|------------------------------------------------------------------------|
|                            |                                            |         | Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Aquatic Chronic 3, H412     |
| 2,6-Di-tert-butyl-p-cresol | (CAS-No.) 128-37-0<br>(EC-No.) 204-881-4   | < 0.5   | Aquatic Chronic 1, H410,M=1<br>Aquatic Acute 1, H400,M=1               |
| Aluminium oxide            | (CAS-No.) 1344-28-1<br>(EC-No.) 215-691-6  | 0.1 - 5 | Substance with a national occupational exposure limit                  |
| Dipotassium oxide          | (CAS-No.) 12136-45-7<br>(EC-No.) 235-227-6 | < 3     | EUH014<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>STOT SE 3, H335   |
| Calcium oxide              | (CAS-No.) 1305-78-8<br>(EC-No.) 215-138-9  | < 3     | EUH071<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318                      |
| Disodium oxide             | (CAS-No.) 1313-59-3<br>(EC-No.) 215-208-9  | <= 1    | EUH014<br>Acute Tox. 3, H301<br>Skin Corr. 1B, H314<br>STOT SE 3, H335 |

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                                                                                                                                                                      |
|----------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Calcium oxide                                | (CAS-No.) 1305-78-8<br>(EC-No.) 215-138-9 | (C >= 50%) EUH071<br>(C >= 50%) Skin Corr. 1C, H314<br>(10% <= C < 50%) Skin Irrit. 2, H315<br>(C >= 3%) Eye Dam. 1, H318<br>(1% <= C < 3%) Eye Irrit. 2, H319<br>(20% <= C < 50%) STOT SE 3, H335 |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | (CAS-No.) 2855-13-2<br>(EC-No.) 220-666-8 | (C >= 0.001%) Skin Sens. 1A, H317                                                                                                                                                                  |

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 GB CLP classification include:

Skin burns (localized redness, swelling, itching, intense pain, blistering, and tissue destruction). Allergic skin reaction (redness, swelling, blistering, and itching).

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

Not applicable

**SECTION 5: Fire-fighting measures****5.1. Extinguishing media**

In case of fire: Use a 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.

Oxides of nitrogen.

**Condition**

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**

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

**6.2. Environmental precautions**

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

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

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

#### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Do not 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

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 |
|----------------------------|------------|--------|----------------------------------------------------------------------------------------------------------------------|---------------------|
| 2,6-Di-tert-butyl-p-cresol | 128-37-0   | UK HSE | TWA:10 mg/m <sup>3</sup>                                                                                             |                     |
| Calcium oxide              | 1305-78-8  | UK HSE | TWA(respirable fraction):1 mg/m <sup>3</sup> ;TWA:2 mg/m <sup>3</sup> ;STEL(respirable fraction):4 mg/m <sup>3</sup> |                     |
| Aluminium oxide            | 1344-28-1  | UK HSE | TWA(as respirable dust):4 mg/m <sup>3</sup> ;TWA(as inhalable dust):10 mg/m <sup>3</sup>                             |                     |
| Silicon dioxide            | 67762-90-7 | UK HSE | TWA(as respirable dust):2.4 mg/m <sup>3</sup> ;TWA(as inhalable dust):6 mg/m <sup>3</sup>                            |                     |
| DUST, INERT OR NUISANCE    | 7631-86-9  | UK HSE | TWA(as respirable dust):4 mg/m <sup>3</sup> ;TWA(as inhalable dust):10 mg/m <sup>3</sup>                             |                     |

UK HSE : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

#### Biological limit values

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

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

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

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

**Eye/face protection**

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

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. 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

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

*Applicable Norms/Standards*

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

## SECTION 9: Physical and chemical properties

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

|                                     |                    |
|-------------------------------------|--------------------|
| <b>Physical state</b>               | Liquid.            |
| <b>Specific Physical Form:</b>      | Viscous.           |
| <b>Colour</b>                       | Milky White        |
| <b>Odor</b>                         | Slight Ammoniacal  |
| <b>Odour threshold</b>              | No data available. |
| <b>Melting point/freezing point</b> | No data available. |
| <b>Boiling point/boiling range</b>  | >=198.9 °C         |
| <b>Flammability</b>                 | Not applicable.    |
| <b>Flammable Limits(LEL)</b>        | Not applicable.    |
| <b>Flammable Limits(UEL)</b>        | Not applicable.    |

|                                        |                                                     |
|----------------------------------------|-----------------------------------------------------|
| Flash point                            | $\geq 143.3$ °C [Test Method: Tagliabue closed cup] |
| Autoignition temperature               | Not applicable.                                     |
| Decomposition temperature              | No data available.                                  |
| pH                                     | substance/mixture is non-soluble (in water)         |
| Kinematic Viscosity                    | 4,269 mm <sup>2</sup> /sec                          |
| Water solubility                       | Negligible                                          |
| Solubility- non-water                  | No data available.                                  |
| Partition coefficient: n-octanol/water | No data available.                                  |
| Vapour pressure                        | Not applicable.                                     |
| Density                                | 1.054 g/ml                                          |
| Relative density                       | 1 - 1.2 [Ref Std: WATER=1]                          |
| Relative Vapour Density                | $\geq 1$ [Ref Std: AIR=1]                           |
| Particle Characteristics               | Not applicable.                                     |

## 9.2. Other information

### 9.2.2 Other safety characteristics

EU Volatile Organic Compounds

No data available.

Evaporation rate

$\leq 1$  [Ref Std: WATER=1]

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

None known.

### 10.5 Incompatible materials

Strong acids.

Strong oxidising agents.

### 10.6 Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

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

**Great Britain.****Signs and Symptoms of Exposure**

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

**Inhalation**

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

**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**

May be harmful if swallowed.

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                                | Ingestion                      |                   | No data available; calculated ATE >2,000 - =5,000 mg/kg |
| Glycerol poly(oxyethylene, oxypropylene) ether | Dermal                         | similar compounds | LD50 > 2,000 mg/kg                                      |
| Glycerol poly(oxyethylene, oxypropylene) ether | Inhalation-Dust/Mist (4 hours) | similar compounds | LC50 > 3.2 mg/l                                         |
| Glycerol poly(oxyethylene, oxypropylene) ether | Ingestion                      | similar compounds | LD50 > 5,000 mg/kg                                      |
| Polyol                                         | Dermal                         | Rat               | LD50 > 2,000 mg/kg                                      |
| Polyol                                         | Inhalation-Dust/Mist (4 hours) | Rat               | LC50 > 50 mg/l                                          |
| Polyol                                         | Ingestion                      | Rat               | LD50 4,600 mg/kg                                        |
| Cyclohex-1,4-ylenedimethanol                   | Dermal                         | Rat               | LD50 > 2,000 mg/kg                                      |
| Cyclohex-1,4-ylenedimethanol                   | Ingestion                      | Rat               | LD50 > 2,000 mg/kg                                      |
| Silicon dioxide                                | Dermal                         | Rabbit            | LD50 > 5,000 mg/kg                                      |
| Silicon dioxide                                | Inhalation-Dust/Mist (4 hours) | Rat               | LC50 > 0.691 mg/l                                       |
| Silicon dioxide                                | Ingestion                      | Rat               | LD50 > 5,110 mg/kg                                      |
| Aluminium oxide                                | Dermal                         |                   | LD50 estimated to be > 5,000 mg/kg                      |
| Aluminium oxide                                | Inhalation-Dust/Mist (4 hours) | Rat               | LC50 > 2.3 mg/l                                         |

**3M™ Scotch-Weld™ Urethane Adhesive DP620NS Black and Urethane Adhesive 620NS Black, Part B**

|                                                               |                                |                        |                                     |
|---------------------------------------------------------------|--------------------------------|------------------------|-------------------------------------|
| Aluminium oxide                                               | 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                  |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | Dermal                         | Rat                    | LD50 > 2,000 mg/kg                  |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | Inhalation-Dust/Mist (4 hours) | Rat                    | LC50 estimated to be 1 - 5 mg/l     |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | Ingestion                      | Rat                    | LD50 1,030 mg/kg                    |
| Disodium oxide                                                | Ingestion                      | Professional judgement | LD50 estimated to be 50 - 300 mg/kg |
| Calcium oxide                                                 | Ingestion                      | Rat                    | LD50 > 2,500 mg/kg                  |
| Calcium oxide                                                 | Dermal                         | similar compounds      | LD50 > 2,500 mg/kg                  |
| m-Xylene-.alpha.alpha'.-diamine                               | Dermal                         | Rabbit                 | LD50 > 2,000 mg/kg                  |
| m-Xylene-.alpha.alpha'.-diamine                               | Inhalation-Dust/Mist (4 hours) | Rat                    | LC50 1.2 mg/l                       |
| m-Xylene-.alpha.alpha'.-diamine                               | Ingestion                      | Rat                    | LD50 980 mg/kg                      |
| 2,6-Di-tert-butyl-p-cresol                                    | Dermal                         | Rat                    | LD50 > 2,000 mg/kg                  |
| 2,6-Di-tert-butyl-p-cresol                                    | Ingestion                      | Rat                    | LD50 > 2,930 mg/kg                  |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name                                                          | Species                 | Value                     |
|---------------------------------------------------------------|-------------------------|---------------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether                | similar compounds       | Minimal irritation        |
| Polyol                                                        | Rabbit                  | No significant irritation |
| Cyclohex-1,4-ylenedimethanol                                  | Rabbit                  | No significant irritation |
| Silicon dioxide                                               | Rabbit                  | No significant irritation |
| Aluminium oxide                                               | Rabbit                  | No significant irritation |
| Siloxanes and Silicones, di-Me, reaction products with silica | Rabbit                  | No significant irritation |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | official classification | Corrosive                 |
| Dipotassium oxide                                             | official classification | Corrosive                 |
| Calcium oxide                                                 | Human                   | Corrosive                 |
| Disodium oxide                                                | similar compounds       | Corrosive                 |
| m-Xylene-.alpha.alpha'.-diamine                               | Rat                     | Corrosive                 |
| 2,6-Di-tert-butyl-p-cresol                                    | Human and animal        | Minimal irritation        |

**Serious Eye Damage/Irritation**

| Name                                           | Species           | Value                     |
|------------------------------------------------|-------------------|---------------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether | similar compounds | Mild irritant             |
| Polyol                                         | Rabbit            | Mild irritant             |
| Cyclohex-1,4-ylenedimethanol                   | Rabbit            | Corrosive                 |
| Silicon dioxide                                | Rabbit            | No significant irritation |
| Aluminium oxide                                | Rabbit            | No significant irritation |

|                                                               |                        |                           |
|---------------------------------------------------------------|------------------------|---------------------------|
| Siloxanes and Silicones, di-Me, reaction products with silica | Rabbit                 | No significant irritation |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | Rabbit                 | Corrosive                 |
| Dipotassium oxide                                             | similar health hazards | Corrosive                 |
| Calcium oxide                                                 | Rabbit                 | Corrosive                 |
| Disodium oxide                                                | similar compounds      | Corrosive                 |
| m-Xylene-.alpha.alpha'.-diamine                               | Rabbit                 | Corrosive                 |
| 2,6-Di-tert-butyl-p-cresol                                    | Rabbit                 | Mild irritant             |

### Skin Sensitisation

| Name                                                          | Species           | Value          |
|---------------------------------------------------------------|-------------------|----------------|
| Glycerol poly(oxyethylene, oxypropylene) ether                | similar compounds | Not classified |
| Cyclohex-1,4-ylenedimethanol                                  | Guinea pig        | Not classified |
| Silicon dioxide                                               | Human and animal  | Not classified |
| Siloxanes and Silicones, di-Me, reaction products with silica | Human and animal  | Not classified |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | Guinea pig        | Sensitising    |
| m-Xylene-.alpha.alpha'.-diamine                               | Guinea pig        | Sensitising    |
| 2,6-Di-tert-butyl-p-cresol                                    | Human             | Not classified |

### Respiratory Sensitisation

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

### Germ Cell Mutagenicity

| Name                                                          | Route    | Value         |
|---------------------------------------------------------------|----------|---------------|
| Glycerol poly(oxyethylene, oxypropylene) ether                | In Vitro | Not mutagenic |
| Cyclohex-1,4-ylenedimethanol                                  | In Vitro | Not mutagenic |
| Cyclohex-1,4-ylenedimethanol                                  | In vivo  | Not mutagenic |
| Silicon dioxide                                               | In Vitro | Not mutagenic |
| Aluminium oxide                                               | In Vitro | Not mutagenic |
| Siloxanes and Silicones, di-Me, reaction products with silica | In Vitro | Not mutagenic |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | In Vitro | Not mutagenic |
| Calcium oxide                                                 | In Vitro | Not mutagenic |
| m-Xylene-.alpha.alpha'.-diamine                               | In Vitro | Not mutagenic |
| m-Xylene-.alpha.alpha'.-diamine                               | In vivo  | Not mutagenic |
| 2,6-Di-tert-butyl-p-cresol                                    | In Vitro | Not mutagenic |
| 2,6-Di-tert-butyl-p-cresol                                    | In vivo  | Not mutagenic |

### Carcinogenicity

| Name                                                          | Route          | Species                 | Value                                                                        |
|---------------------------------------------------------------|----------------|-------------------------|------------------------------------------------------------------------------|
| Silicon dioxide                                               | Not specified. | Mouse                   | Some positive data exist, but the data are not sufficient for classification |
| Aluminium oxide                                               | Inhalation     | Rat                     | Not carcinogenic                                                             |
| Siloxanes and Silicones, di-Me, reaction products with silica | Not specified. | Mouse                   | Some positive data exist, but the data are not sufficient for classification |
| 2,6-Di-tert-butyl-p-cresol                                    | Ingestion      | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |

### Reproductive Toxicity

**Reproductive and/or Developmental Effects**

| Name                                                          | Route     | Value                                  | Species | Test result           | Exposure Duration        |
|---------------------------------------------------------------|-----------|----------------------------------------|---------|-----------------------|--------------------------|
| Cyclohex-1,4-ylenedimethanol                                  | Ingestion | Not classified for female reproduction | Rat     | NOAEL 1,360 mg/kg/day | premating into lactation |
| Cyclohex-1,4-ylenedimethanol                                  | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 479 mg/kg/day   | 91 days                  |
| Cyclohex-1,4-ylenedimethanol                                  | Ingestion | Not classified for development         | Rat     | NOAEL 854 mg/kg/day   | premating into lactation |
| Silicon dioxide                                               | Ingestion | Not classified for female reproduction | Rat     | NOAEL 509 mg/kg/day   | 1 generation             |
| Silicon dioxide                                               | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 497 mg/kg/day   | 1 generation             |
| Silicon dioxide                                               | Ingestion | Not classified for development         | Rat     | NOAEL 1,350 mg/kg/day | during organogenesis     |
| 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     |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | Ingestion | Not classified for development         | Rat     | NOAEL 250 mg/kg/day   | during gestation         |
| m-Xylene-.alpha.alpha'.-diamine                               | Ingestion | Not classified for female reproduction | Rat     | NOAEL 450 mg/kg/day   | premating into lactation |
| m-Xylene-.alpha.alpha'.-diamine                               | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 450 mg/kg/day   | 48 days                  |
| m-Xylene-.alpha.alpha'.-diamine                               | Ingestion | Not classified for development         | Rat     | NOAEL 450 mg/kg/day   | premating into lactation |
| 2,6-Di-tert-butyl-p-cresol                                    | Ingestion | Not classified for female reproduction | Rat     | NOAEL 500 mg/kg/day   | 2 generation             |
| 2,6-Di-tert-butyl-p-cresol                                    | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 500 mg/kg/day   | 2 generation             |
| 2,6-Di-tert-butyl-p-cresol                                    | Ingestion | Not classified for development         | Rat     | NOAEL 100 mg/kg/day   | 2 generation             |

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

| Name                                         | Route      | Target Organ(s)        | Value                                                                        | Species                | Test result         | Exposure Duration     |
|----------------------------------------------|------------|------------------------|------------------------------------------------------------------------------|------------------------|---------------------|-----------------------|
| Cyclohex-1,4-ylenedimethanol                 | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available |                       |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Rat                    | NOAEL not available |                       |
| Dipotassium oxide                            | Inhalation | respiratory irritation | May cause respiratory irritation                                             | similar health hazards | NOAEL Not available |                       |
| Calcium oxide                                | Inhalation | respiratory irritation | May cause respiratory irritation                                             | Not available          | NOAEL Not available | occupational exposure |
| Disodium oxide                               | Inhalation | respiratory irritation | May cause respiratory irritation                                             | Professional judgement | NOAEL Not available |                       |
| m-Xylene-.alpha.alpha'.-diamine              | Inhalation | respiratory irritation | May cause respiratory irritation                                             | similar health hazards | NOAEL Not available |                       |

**Specific Target Organ Toxicity - repeated exposure**

| Name                                                          | Route      | Target Organ(s)                                                                                                                                                                                                       | Value                                                                        | Species | Test result           | Exposure Duration     |
|---------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------|-----------------------|-----------------------|
| Cyclohex-1,4-ylenedimethanol                                  | Ingestion  | heart   immune system   kidney and/or bladder   endocrine system   hematopoietic system   liver   nervous system   eyes                                                                                               | Not classified                                                               | Rat     | NOAEL 861 mg/kg/day   | 13 weeks              |
| Silicon dioxide                                               | Inhalation | respiratory system   silicosis                                                                                                                                                                                        | Not classified                                                               | Human   | NOAEL Not available   | occupational exposure |
| Aluminium oxide                                               | Inhalation | pneumoconiosis                                                                                                                                                                                                        | Some positive data exist, but the data are not sufficient for classification | Human   | NOAEL Not available   | occupational exposure |
| Aluminium oxide                                               | Inhalation | pulmonary fibrosis                                                                                                                                                                                                    | Not classified                                                               | Human   | NOAEL Not available   | occupational exposure |
| Siloxanes and Silicones, di-Me, reaction products with silica | Inhalation | respiratory system   silicosis                                                                                                                                                                                        | Not classified                                                               | Human   | NOAEL Not available   | occupational exposure |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | Ingestion  | hematopoietic system   liver   kidney and/or bladder                                                                                                                                                                  | Not classified                                                               | Rat     | NOAEL 160 mg/kg/day   | 13 weeks              |
| m-Xylene-.alpha.alpha'.-diamine                               | Inhalation | respiratory system                                                                                                                                                                                                    | Not classified                                                               | Rat     | NOAEL 0.005 mg/l      | 13 weeks              |
| m-Xylene-.alpha.alpha'.-diamine                               | Inhalation | heart   skin   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   vascular system | Not classified                                                               | Rat     | NOAEL 0.03 mg/l       | 13 weeks              |
| m-Xylene-.alpha.alpha'.-diamine                               | Ingestion  | endocrine system   hematopoietic system                                                                                                                                                                               | Not classified                                                               | Rat     | NOAEL 600 mg/kg/day   | 28 days               |
| m-Xylene-.alpha.alpha'.-diamine                               | Ingestion  | gastrointestinal tract                                                                                                                                                                                                | Not classified                                                               | Rat     | NOAEL 150 mg/kg/day   | 28 days               |
| m-Xylene-.alpha.alpha'.-diamine                               | Ingestion  | heart   liver   immune system   kidney and/or bladder                                                                                                                                                                 | Not classified                                                               | Rat     | NOAEL 600 mg/kg/day   | 28 days               |
| 2,6-Di-tert-butyl-p-cresol                                    | Ingestion  | liver                                                                                                                                                                                                                 | Some positive data exist, but the data are not sufficient for classification | Rat     | NOAEL 250 mg/kg/day   | 28 days               |
| 2,6-Di-tert-butyl-p-cresol                                    | Ingestion  | kidney and/or bladder                                                                                                                                                                                                 | Not classified                                                               | Rat     | NOAEL 500 mg/kg/day   | 2 generation          |
| 2,6-Di-tert-butyl-p-cresol                                    | Ingestion  | blood                                                                                                                                                                                                                 | Not classified                                                               | Rat     | LOAEL 420 mg/kg/day   | 40 days               |
| 2,6-Di-tert-butyl-p-cresol                                    | Ingestion  | endocrine system                                                                                                                                                                                                      | Not classified                                                               | Rat     | NOAEL 25 mg/kg/day    | 2 generation          |
| 2,6-Di-tert-butyl-p-cresol                                    | Ingestion  | heart                                                                                                                                                                                                                 | Not classified                                                               | Mouse   | NOAEL 3,480 mg/kg/day | 10 weeks              |

### Aspiration Hazard

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

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

## 11.2. Information on other hazards

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

## SECTION 12: Ecological information

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

### 12.1. Toxicity

No product test data available.

| Material                                                      | CAS #        | Organism         | Type                                                  | Exposure | Test endpoint                  | Test result  |
|---------------------------------------------------------------|--------------|------------------|-------------------------------------------------------|----------|--------------------------------|--------------|
| Glycerol poly(oxyethylene, oxypropylene) ether                | 9082-00-2    | N/A              | Data not available or insufficient for classification | N/A      | N/A                            | N/A          |
| Polyol                                                        | Trade Secret | Golden Orfe      | Experimental                                          | 96 hours | LC50                           | >1,000 mg/l  |
| Polyol                                                        | Trade Secret | Green algae      | Experimental                                          | 72 hours | ErC50                          | >100 mg/l    |
| Polyol                                                        | Trade Secret | Water flea       | Experimental                                          | 48 hours | EC50                           | >100 mg/l    |
| Polyol                                                        | Trade Secret | Green algae      | Experimental                                          | 72 hours | NOEC                           | >100 mg/l    |
| Cyclohex-1,4-ylenedimethanol                                  | 105-08-8     | Green algae      | Experimental                                          | 72 hours | ErC50                          | >122.9 mg/l  |
| Cyclohex-1,4-ylenedimethanol                                  | 105-08-8     | Medaka           | Experimental                                          | 96 hours | LC50                           | >125.3 mg/l  |
| Cyclohex-1,4-ylenedimethanol                                  | 105-08-8     | Water flea       | Experimental                                          | 48 hours | EC50                           | >100 mg/l    |
| Cyclohex-1,4-ylenedimethanol                                  | 105-08-8     | Green algae      | Experimental                                          | 72 hours | NOEC                           | 122.9 mg/l   |
| Silicon dioxide                                               | 7631-86-9    | 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          |
| 2,6-Di-tert-butyl-p-cresol                                    | 128-37-0     | Activated sludge | Experimental                                          | 3 hours  | EC50                           | >10,000 mg/l |
| 2,6-Di-tert-butyl-p-cresol                                    | 128-37-0     | Green algae      | Experimental                                          | 72 hours | EC50                           | >0.4 mg/l    |
| 2,6-Di-tert-butyl-p-cresol                                    | 128-37-0     | Water flea       | Experimental                                          | 48 hours | EC50                           | 0.48 mg/l    |
| 2,6-Di-tert-butyl-p-cresol                                    | 128-37-0     | Zebra Fish       | Experimental                                          | 96 hours | No tox obs at lmt of water sol | >100 mg/l    |
| 2,6-Di-tert-butyl-p-cresol                                    | 128-37-0     | Green algae      | Experimental                                          | 72 hours | EC10                           | 0.4 mg/l     |
| 2,6-Di-tert-butyl-p-cresol                                    | 128-37-0     | Medaka           | Experimental                                          | 42 days  | NOEC                           | 0.053 mg/l   |
| 2,6-Di-tert-butyl-p-cresol                                    | 128-37-0     | Water flea       | Experimental                                          | 21 days  | NOEC                           | 0.023 mg/l   |
| Aluminium oxide                                               | 1344-28-1    | Fish             | Experimental                                          | 96 hours | LC50                           | >100 mg/l    |
| Aluminium oxide                                               | 1344-28-1    | Green algae      | Experimental                                          | 72 hours | EC50                           | >100 mg/l    |
| Aluminium oxide                                               | 1344-28-1    | Water flea       | Experimental                                          | 48 hours | LC50                           | >100 mg/l    |
| Aluminium oxide                                               | 1344-28-1    | Green algae      | Experimental                                          | 72 hours | NOEC                           | >100 mg/l    |

|                                              |            |                  |                                                       |            |       |             |
|----------------------------------------------|------------|------------------|-------------------------------------------------------|------------|-------|-------------|
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 2855-13-2  | Golden Orfe      | Experimental                                          | 96 hours   | LC50  | 110 mg/l    |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 2855-13-2  | Green algae      | Experimental                                          | 72 hours   | ErC50 | >50 mg/l    |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 2855-13-2  | Water flea       | Experimental                                          | 48 hours   | EC50  | 23 mg/l     |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 2855-13-2  | Green algae      | Experimental                                          | 72 hours   | ErC10 | 11.2 mg/l   |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 2855-13-2  | Water flea       | Experimental                                          | 21 days    | NOEC  | 3 mg/l      |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 2855-13-2  | Bacteria         | Experimental                                          | 18 hours   | EC10  | 1,120 mg/l  |
| m-Xylene-.alpha.alpha.alpha'-diamine         | 1477-55-0  | Activated sludge | Experimental                                          | 30 minutes | EC50  | >1,000 mg/l |
| m-Xylene-.alpha.alpha.alpha'-diamine         | 1477-55-0  | Bacteria         | Experimental                                          | 16 hours   | EC10  | 24 mg/l     |
| m-Xylene-.alpha.alpha.alpha'-diamine         | 1477-55-0  | Green algae      | Experimental                                          | 72 hours   | ErC50 | 28 mg/l     |
| m-Xylene-.alpha.alpha.alpha'-diamine         | 1477-55-0  | Medaka           | Experimental                                          | 96 hours   | LC50  | 87.6 mg/l   |
| m-Xylene-.alpha.alpha.alpha'-diamine         | 1477-55-0  | Water flea       | Experimental                                          | 48 hours   | EC50  | 15.2 mg/l   |
| m-Xylene-.alpha.alpha.alpha'-diamine         | 1477-55-0  | Green algae      | Experimental                                          | 72 hours   | NOEC  | 9.8 mg/l    |
| m-Xylene-.alpha.alpha.alpha'-diamine         | 1477-55-0  | Water flea       | Experimental                                          | 21 days    | NOEC  | 4.7 mg/l    |
| Calcium oxide                                | 1305-78-8  | Common Carp      | Experimental                                          | 96 hours   | LC50  | 1,070 mg/l  |
| Dipotassium oxide                            | 12136-45-7 | Water flea       | Estimated                                             | 48 hours   | EC50  | 112 mg/l    |
| Dipotassium oxide                            | 12136-45-7 | Fish             | Experimental                                          | 96 hours   | LC50  | 917.6 mg/l  |
| Dipotassium oxide                            | 12136-45-7 | Water flea       | Estimated                                             | 21 days    | NOEC  | 68 mg/l     |
| Disodium oxide                               | 1313-59-3  | N/A              | Data not available or insufficient for classification | N/A        | N/A   | N/A         |

## 12.2. Persistence and degradability

| Material                                       | CAS Nbr      | Test type                   | Duration | Study Type    | Test result                       | Protocol                          |
|------------------------------------------------|--------------|-----------------------------|----------|---------------|-----------------------------------|-----------------------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether | 9082-00-2    | Modeled Biodegradation      | 28 days  | BOD           | 20 %BOD/ThOD                      | Catalogic™                        |
| Polyol                                         | Trade Secret | Experimental Biodegradation | 28 days  | CO2 evolution | 38 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |

**3M™ Scotch-Weld™ Urethane Adhesive DP620NS Black and Urethane Adhesive 620NS Black, Part B**

|                                                               |            |                                          |         |                                |                                   |                                   |
|---------------------------------------------------------------|------------|------------------------------------------|---------|--------------------------------|-----------------------------------|-----------------------------------|
| Cyclohex-1,4-ylenedimethanol                                  | 105-08-8   | Experimental Biodegradation              | 28 days | Dissolv. Organic Carbon Deplet | 99.2 %removal of DOC              | OECD 301A - DOC Die Away Test     |
| Cyclohex-1,4-ylenedimethanol                                  | 105-08-8   | Experimental Biodegradation              |         | Dissolv. Organic Carbon Deplet | 98 %removal of DOC                | OECD 302B Zahn-Wellens/EVPA       |
| Silicon dioxide                                               | 7631-86-9  | Data not availbl-insufficient            | N/A     | N/A                            | N/A                               | N/A                               |
| Siloxanes and Silicones, di-Me, reaction products with silica | 67762-90-7 | Data not availbl-insufficient            | N/A     | N/A                            | N/A                               | N/A                               |
| 2,6-Di-tert-butyl-p-cresol                                    | 128-37-0   | Data not availbl-insufficient            | N/A     | N/A                            | N/A                               | N/A                               |
| Aluminium oxide                                               | 1344-28-1  | Data not availbl-insufficient            | N/A     | N/A                            | N/A                               | N/A                               |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | 2855-13-2  | Experimental Biodegradation              | 28 days | Dissolv. Organic Carbon Deplet | 8 %removal of DOC                 | EC C.4.A. DOC Die-Away Test       |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | 2855-13-2  | Experimental Biodegradation              | 6 hours | Dissolv. Organic Carbon Deplet | 42.0 %removal of DOC              | OECD 303A - Simulated Aerobic     |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine                  | 2855-13-2  | Experimental Hydrolysis                  |         | Hydrolytic half-life (pH 7)    | >1 years (t 1/2)                  | EC C.7 Hydrolysis at pH           |
| m-Xylene-.alpha.alpha.a'-diamine                              | 1477-55-0  | Experimental Biodegradation              | 28 days | CO2 evolution                  | 49 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| m-Xylene-.alpha.alpha.a'-diamine                              | 1477-55-0  | Experimental Aquatic Inherent Biodegrad. | 28 days | BOD                            | 22 %BOD/ThOD                      | OECD 302C - Modified MITI (II)    |
| Calcium oxide                                                 | 1305-78-8  | Data not availbl-insufficient            | N/A     | N/A                            | N/A                               | N/A                               |
| Dipotassium oxide                                             | 12136-45-7 | Data not availbl-insufficient            | N/A     | N/A                            | N/A                               | N/A                               |
| Disodium oxide                                                | 1313-59-3  | Data not availbl-insufficient            | N/A     | N/A                            | N/A                               | N/A                               |

**12.3 : Bioaccumulative potential**

| Material                                                      | Cas No.      | Test type                                             | Duration | Study Type             | Test result | Protocol                 |
|---------------------------------------------------------------|--------------|-------------------------------------------------------|----------|------------------------|-------------|--------------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether                | 9082-00-2    | Modeled Bioconcentration                              |          | Bioaccumulation factor | 2           | Catalogic™               |
| Glycerol poly(oxyethylene, oxypropylene) ether                | 9082-00-2    | Modeled Bioconcentration                              |          | Log Kow                | -2.6        | Episuite™                |
| Polyol                                                        | Trade Secret | Experimental BCF - Fish                               | 42 days  | Bioaccumulation factor | ≤7          |                          |
| Cyclohex-1,4-ylenedimethanol                                  | 105-08-8     | Modeled Bioconcentration                              |          | Bioaccumulation factor | 2.8         | Catalogic™               |
| Cyclohex-1,4-ylenedimethanol                                  | 105-08-8     | Modeled Bioconcentration                              |          | Log Kow                | 1.5         | Episuite™                |
| Silicon dioxide                                               | 7631-86-9    | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                      |
| Siloxanes and Silicones, di-Me, reaction products with silica | 67762-90-7   | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                      |
| 2,6-Di-tert-butyl-p-cresol                                    | 128-37-0     | Experimental BCF - Fish                               | 56 days  | Bioaccumulation factor | 1277        | OECD305-Bioconcentration |
| Aluminium oxide                                               | 1344-28-1    | Data not available or insufficient for                | N/A      | N/A                    | N/A         | N/A                      |

|                                              |            | classification                                        |         |                        |      |                                 |
|----------------------------------------------|------------|-------------------------------------------------------|---------|------------------------|------|---------------------------------|
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 2855-13-2  | Experimental BCF - Fish                               | 42 days | Bioaccumulation factor | 3.4  | OECD305-Bioconcentration        |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 2855-13-2  | Experimental Bioconcentration                         |         | Log Kow                | 0.99 | EC A.8 Partition Coefficient    |
| m-Xylene-.alpha.alpha.a'-diamine             | 1477-55-0  | Experimental BCF - Fish                               | 42 days | Bioaccumulation factor | <2.7 | OECD305-Bioconcentration        |
| m-Xylene-.alpha.alpha.a'-diamine             | 1477-55-0  | Extrapolated Bioconcentration                         |         | Log Kow                | 0.18 | OECD 107 log Kow shke flask mtd |
| Calcium oxide                                | 1305-78-8  | Data not available or insufficient for classification | N/A     | N/A                    | N/A  | N/A                             |
| Dipotassium oxide                            | 12136-45-7 | Data not available or insufficient for classification | N/A     | N/A                    | N/A  | N/A                             |
| Disodium oxide                               | 1313-59-3  | Data not available or insufficient for classification | N/A     | N/A                    | N/A  | N/A                             |

#### 12.4. Mobility in soil

| Material                                       | Cas No.   | Test type                  | Study Type | Test result | Protocol             |
|------------------------------------------------|-----------|----------------------------|------------|-------------|----------------------|
| Glycerol poly(oxyethylene, oxypropylene) ether | 9082-00-2 | Modeled Mobility in Soil   | Koc        | 13 l/kg     | Episuite™            |
| Cyclohex-1,4-ylenedimethanol                   | 105-08-8  | Modeled Mobility in Soil   | Koc        | 10 l/kg     | Episuite™            |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine   | 2855-13-2 | Estimated Mobility in Soil | Koc        | 928 l/kg    |                      |
| m-Xylene-.alpha.alpha.a'-diamine               | 1477-55-0 | Modeled Mobility in Soil   | Koc        | <1 l/kg     | ACD/Labs ChemSketch™ |

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

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

#### 12.6. Other adverse effects

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

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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 (ADR)</b>                                                 | <b>Air Transport (IATA)</b>                                                   | <b>Marine Transport (IMDG)</b>                                                |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| <b>14.1 UN number</b>                                                            | UN3267                                                                        | UN3267                                                                        | UN3267                                                                        |
| <b>14.2 UN proper shipping name</b>                                              | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.(ISOPHORONE DIAMINE; POTASSIUM OXIDE) | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.(ISOPHORONE DIAMINE; POTASSIUM OXIDE) | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.(ISOPHORONE DIAMINE; POTASSIUM OXIDE) |
| <b>14.3 Transport hazard class(es)</b>                                           | 8                                                                             | 8                                                                             | 8                                                                             |
| <b>14.4 Packing group</b>                                                        | III                                                                           | III                                                                           | III                                                                           |
| <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 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code</b> | No data available.                                                            | No data available.                                                            | No data available.                                                            |
| <b>Control Temperature</b>                                                       | No data available.                                                            | No data available.                                                            | No data available.                                                            |
| <b>Emergency Temperature</b>                                                     | No data available.                                                            | No data available.                                                            | No data available.                                                            |
| <b>ADR Classification Code</b>                                                   | 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****Carcinogenicity**

| <u><b>Ingredient</b></u>   | <u><b>CAS Nbr</b></u> | <u><b>Classification</b></u> | <u><b>Regulation</b></u>                       |
|----------------------------|-----------------------|------------------------------|------------------------------------------------|
| 2,6-Di-tert-butyl-p-cresol | 128-37-0              | Gr. 3: Not classifiable      | International Agency<br>for Research on Cancer |
| Silicon dioxide            | 7631-86-9             | Gr. 3: Not classifiable      | International Agency<br>for Research on Cancer |

**Global inventory status**

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

**COMAH Regulation, SI 2015/483**

Seveso hazard categories, Annex 1, Part 1  
None

Seveso named dangerous substances, Annex 1, Part 2  
None

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

No chemicals listed

**15.2. Chemical Safety Assessment**

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

## SECTION 16: Other information

**List of relevant H statements**

|        |                                                       |
|--------|-------------------------------------------------------|
| EUH014 | Reacts violently with water.                          |
| EUH071 | Corrosive to the respiratory tract.                   |
| H301   | Toxic if swallowed.                                   |
| H302   | Harmful if swallowed.                                 |
| H314   | Causes severe skin burns and eye damage.              |
| H317   | May cause an allergic skin reaction.                  |
| H318   | Causes serious eye damage.                            |
| H332   | Harmful if inhaled.                                   |
| H335   | May cause respiratory irritation.                     |
| H400   | Very toxic to aquatic life.                           |
| H410   | Very toxic to aquatic life with long lasting effects. |
| H412   | Harmful to aquatic life with long lasting effects.    |

**Revision information:**

Section 1: E-mail address information was modified.

Section 3: Composition/ Information of ingredients table information was modified.  
Section 6: Accidental release personal information information was modified.  
Section 7: Conditions safe storage information was modified.  
Section 8: Occupational exposure limit table information was modified.  
OEL Reg Agency Desc 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.  
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 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.  
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material.  
information was modified.

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

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

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