

# Safety Data Sheet

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**Document group:** 45-3307-1 **Version number:** 1.00 **Revision date:** 03/01/2025 **Supersedes date:** Initial issue.

Transportation version number:

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<sup>TM</sup> Aerospace Sealant AC-251 Black B-2

### **Product Identification Numbers**

70-0003-5442-6

7100349824

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

### Identified uses

Sealant

### 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 tox.uk@mmm.com

Website: www.3M.com/uk

### 1.4. Emergency telephone number

+44 (0)1344 858 000

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

30-3448-5, 45-3052-3

## TRANSPORTATION INFORMATION

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

# KIT LABEL

### 2.1. Classification of the substance or mixture

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

### **CLASSIFICATION:**

Acute Toxicity, Category 4 - Acute Tox. 4; H302 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318 Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

For full text of H phrases, see Section 16.

### 2.2. Label elements

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) |





### **Contains:**

Dipotassium oxide; manganese dioxide; Disodium oxide

### **HAZARD STATEMENTS:**

H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure: nervous system.

### PRECAUTIONARY STATEMENTS

**Prevention:** 

P260A Do not breathe vapours. P280A Wear eye/face protection.

**Response:** 

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

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.

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

### <=125 ml Hazard statements

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure: nervous system.

## <=125 ml Precautionary statements

**Prevention:** 

P280A Wear eye/face protection.

**Response:** 

P310 Immediately call a POISON CENTRE or doctor/physician.

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

## **Revision information:**

No revision information



## Safety Data Sheet

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**Document group:** 30-3448-5 **Version number:** 5.00

**Revision date:** 12/12/2025 **Supersedes date:** 06/01/2025

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 Aerospace Sealant AC-251 B-1/2, B-1, and B-2 Black Base

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

### **Identified uses**

Sealant

### 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

## **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

### **CLASSIFICATION:**

This material is not classified as hazardous according to Regulation (EC) No. 1272/2008, as amended for Great Britain, on classification, labelling, and packaging of substances and mixtures.

## 2.2. Label elements

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

Not applicable

## SUPPLEMENTAL INFORMATION:

### **Supplemental Hazard Statements:**

EUH210

Safety data sheet available on request.

### 2.3. Other hazards

None known.

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

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

## 3.1. Substances

Not applicable

### 3.2. Mixtures

| Ingredient  | Identifier(s)                              | 9/0     | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB  |
|---|--|---------|---|
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced           | (CAS-No.) 68611-50-7                       | 55 - 65 | Substance not classified as hazardous   |
| Calcium carbonate   | (CAS-No.) 471-34-1<br>(EC-No.) 207-439-9   | 30 - 40 | Substance with a national occupational exposure limit   |
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced (MW<1800) | (CAS-No.) 68611-50-7                       | 1 - 1.9 | Aquatic Chronic 2, H411   |
| Carbon black  | (CAS-No.) 1333-86-4<br>(EC-No.) 215-609-9  | < 0.5   | Substance with a national occupational exposure limit   |
| Quartz  | (CAS-No.) 14808-60-7<br>(EC-No.) 238-878-4 | < 0.5   | STOT RE 1, H372   |
| toluene   | (CAS-No.) 108-88-3<br>(EC-No.) 203-625-9   | < 0.3   | Flam. Liq. 2, H225<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>Repr. 2, H361d<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Aquatic Chronic 3, H412 |

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

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

# **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

### Inhalation

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

### 3M Aerospace Sealant AC-251 B-1/2, B-1, and B-2 Black Base

### Skin contact

Wash with soap and water. If signs/symptoms develop, get medical attention.

### Eye contact

If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.

### If swallowed

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

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

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

Not applicable

# **SECTION 5: Fire-fighting measures**

### 5.1. Extinguishing media

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

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

None inherent in this product.

## **Hazardous Decomposition or By-Products**

| <b>Substance</b>  | <b>Condition</b>   |
|-------------------|--------------------|
| formaldehyde      | During combustion. |
| Carbon monoxide   | During combustion. |
| Carbon dioxide.   | During combustion. |
| Hydrogen Chloride | During combustion. |

### 5.3. Advice for fire-fighters

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

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

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

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

### 6.2. Environmental precautions

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

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

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent

material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

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

### 7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Use personal protective equipment (eg. gloves, respirators...) as required.

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

Store away from acids. Store away from strong bases.

### 7.3. Specific end use(s)

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

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

### 8.1 Control parameters

### Occupational exposure limits

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

| Ingredient                     | CAS Nbr    | Agency | Limit type                            | <b>Additional comments</b> |
|--------------------------------|------------|--------|---------------------------------------|----------------------------|
| toluene                        | 108-88-3   | UK HSE | TWA: 191 mg/m³ (50 ppm);              | SKIN                       |
|                                |            |        | STEL: 384 mg/m <sup>3</sup> (100 ppm) |                            |
| Carbon black                   | 1333-86-4  | UK HSE | TWA: 3.5 mg/m <sup>3</sup> ; STEL: 7  |                            |
|                                |            |        | mg/m³                                 |                            |
| Silica, respirable crystalline | 14808-60-7 | UK HSE | TWA(respirable):0.1 mg/m3             |                            |
| Dust, inhalable dust           | 471-34-1   | UK HSE | TWA(as respirable dust):4             |                            |
|                                |            |        | mg/m3;TWA(as inhalable                |                            |
|                                |            |        | dust):10 mg/m3                        |                            |

UK HSE: UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

### **Biological limit values**

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

## **8.2.** Exposure controls

### 8.2.1. Engineering controls

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

## 8.2.2. Personal protective equipment (PPE)

### Eye/face protection

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

Safety glasses with side shields.

Applicable Norms/Standards

Use eye protection conforming to EN 16321

### Skin/hand protection

No chemical protective gloves are required.

## 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:                | Paste                                       |
| Colour                                 | Black                                       |
| Odor                                   | Pungent Sulphuric                           |
| Odour threshold                        | No data available.                          |
| Melting point/freezing point           | Not applicable.                             |
| Boiling point/boiling range            | Not applicable.                             |
| Flammability                           | Not applicable.                             |
|  |   |
| Flammable Limits(LEL)                  | No data available.                          |
| Flammable Limits(UEL)                  | No data available.                          |
| Flash point                            | >=93.3 °C [Test Method:Closed Cup]          |
| Autoignition temperature               | No data available.                          |
| Decomposition temperature              | No data available.                          |
| рН                                     | substance/mixture is non-soluble (in water) |
| Kinematic Viscosity                    | No data available.                          |
| Water solubility                       | Nil   |
| Solubility- non-water                  | No data available.                          |
| Partition coefficient: n-octanol/water | No data available.                          |
| Vapour pressure                        | No data available.                          |
| Density                                | 1.61 g/ml                                   |
| Relative density                       | 1.61 [ <i>Ref Std</i> :WATER=1]             |
| Relative Vapour Density                | No data available.                          |
| Particle Characteristics               | Not applicable.                             |
|  |   |

### 9.2. Other information

### 3M Aerospace Sealant AC-251 B-1/2, B-1, and B-2 Black Base

## 9.2.2 Other safety characteristics

EU Volatile Organic CompoundsNo data available.Evaporation rateNo data available.Molecular weightNo data available.

Percent volatile 0.1 %

## **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

Reducing agents. Strong acids. Strong bases.

### 10.6 Hazardous decomposition products

**Substance Condition** 

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

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

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

Signs and Symptoms of Exposure

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

## Inhalation

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

### Skin contact

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

### Eye contact

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

## Ingestion

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

### **Additional Health Effects:**

### **Reproductive/Developmental Toxicity:**

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

## **Toxicological Data**

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

**Acute Toxicity** 

| Name  | Route                                 | Species | Value  |
|---|---------------------------------------|---------|--|
| Overall product   | Ingestion                             |         | No data available; calculated ATE >5,000 mg/kg |
| Propane, 1,2,3-trichloro-, polymer with 1,1'- [methylenebis(oxy)]bis[2- chloroethane] and sodium sulfide (Na2(Sx)), reduced                 | Dermal                                | Rat     | LD50 > 7,800 mg/kg                             |
| Propane, 1,2,3-trichloro-, polymer with 1,1'-<br>[methylenebis(oxy)]bis[2- chloroethane] and sodium sulfide<br>(Na2(Sx)), reduced           | Ingestion                             | Rat     | LD50 > 5,000 mg/kg                             |
| Calcium carbonate   | Dermal                                | Rat     | LD50 > 2,000 mg/kg                             |
| Calcium carbonate   | Inhalation-<br>Dust/Mist<br>(4 hours) | Rat     | LC50 3 mg/l                                    |
| Calcium carbonate   | Ingestion                             | Rat     | LD50 6,450 mg/kg                               |
| Propane, 1,2,3-trichloro-, polymer with 1,1'- [methylenebis(oxy)]bis[2- chloroethane] and sodium sulfide (Na2(Sx)), reduced (MW<1800)       | Dermal                                | Rat     | LD50 > 7,800 mg/kg                             |
| Propane, 1,2,3-trichloro-, polymer with 1,1'-<br>[methylenebis(oxy)]bis[2- chloroethane] and sodium sulfide<br>(Na2(Sx)), reduced (MW<1800) | Ingestion                             | Rat     | LD50 > 5,000 mg/kg                             |
| Carbon black  | Dermal                                | Rabbit  | LD50 > 3,000 mg/kg                             |
| Carbon black  | Ingestion                             | Rat     | LD50 > 8,000 mg/kg                             |
| Quartz  | Dermal                                |         | LD50 estimated to be > 5,000 mg/kg             |
| Quartz  | Ingestion                             |         | LD50 estimated to be > 5,000 mg/kg             |
| toluene   | Dermal                                | Rat     | LD50 12,000 mg/kg                              |
| toluene   | Inhalation-<br>Vapour (4<br>hours)    | Rat     | LC50 30 mg/l                                   |
| toluene   | Ingestion                             | Rat     | LD50 5,550 mg/kg                               |

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

| Name  | Species              | Value                     |
|---|----------------------|---------------------------|
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced           | Rabbit               | No significant irritation |
| Calcium carbonate   | Rabbit               | No significant irritation |
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced (MW<1800) | Rabbit               | No significant irritation |
| Carbon black  | Rabbit               | No significant irritation |
| Quartz  | Professio            | No significant irritation |
|   | nal<br>judgemen<br>t |                           |
| toluene   | Rabbit               | Irritant                  |

Serious Eye Damage/Irritation

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

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## 3M Aerospace Sealant AC-251 B-1/2, B-1, and B-2 Black Base

| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced           | Rabbit | No significant irritation |
|---|--------|---------------------------|
| Calcium carbonate   | Rabbit | No significant irritation |
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced (MW<1800) | Rabbit | No significant irritation |
| Carbon black  | Rabbit | No significant irritation |
| toluene   | Rabbit | Moderate irritant         |

## **Skin Sensitisation**

| Name  | Species | Value          |
|---|---------|----------------|
|   |         |                |
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced           |         | Not classified |
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced (MW<1800) |         | Not classified |
| toluene   | Guinea  | Not classified |
|   | pig     |                |

## **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  |
|--------------|----------|--|
| Carbon black | In Vitro | Not mutagenic  |
| Carbon black | In vivo  | Some positive data exist, but the data are not sufficient for classification |
| Quartz       | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Quartz       | In vivo  | Some positive data exist, but the data are not sufficient for classification |
| toluene      | In Vitro | Not mutagenic  |
| toluene      | In vivo  | Not mutagenic  |

Carcinogenicity

| Name         | Route      | Species                | Value  |
|--------------|------------|------------------------|--|
| Carbon black | Dermal     | Mouse                  | Not carcinogenic   |
| Carbon black | Ingestion  | Mouse                  | Not carcinogenic   |
| Carbon black | Inhalation | Rat                    | Carcinogenic.  |
| Quartz       | Inhalation | Human<br>and<br>animal | Carcinogenic.  |
| toluene      | Dermal     | Mouse                  | Some positive data exist, but the data are not sufficient for classification |
| toluene      | Ingestion  | Rat                    | Some positive data exist, but the data are not sufficient for classification |
| toluene      | Inhalation | Mouse                  | Some positive data exist, but the data are not sufficient for classification |

## **Reproductive Toxicity**

Reproductive and/or Developmental Effects

| Name              | Route      | Value                                  | Species | Test result            | Exposure<br>Duration         |
|-------------------|------------|--|---------|------------------------|------------------------------|
| Calcium carbonate | Ingestion  | Not classified for development         | Rat     | NOAEL 625<br>mg/kg/day | premating & during gestation |
| toluene           | Inhalation | Not classified for female reproduction | Human   | NOAEL Not available    | occupational exposure        |
| toluene           | Inhalation | Not classified for male reproduction   | Rat     | NOAEL 2.3<br>mg/l      | 1 generation                 |

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| toluene | Ingestion  | Toxic to development | Rat   | LOAEL 520<br>mg/kg/day | during<br>gestation       |
|---------|------------|----------------------|-------|------------------------|---------------------------|
| toluene | Inhalation | Toxic to development | Human | NOAEL Not<br>available | poisoning<br>and/or abuse |

# Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

| Name              | Route      | Target Organ(s)                      | Value  | Species | Test result            | Exposure<br>Duration      |
|-------------------|------------|--------------------------------------|--|---------|------------------------|---------------------------|
| Calcium carbonate | Inhalation | respiratory system                   | Not classified   | Rat     | NOAEL<br>0.812 mg/l    | 90 minutes                |
| toluene           | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Human   | NOAEL Not available    |                           |
| toluene           | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | Human   | NOAEL Not<br>available |                           |
| toluene           | Inhalation | immune system                        | Not classified   | Mouse   | NOAEL<br>0.004 mg/l    | 3 hours                   |
| toluene           | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  | Human   | NOAEL Not available    | poisoning<br>and/or abuse |

Specific Target Organ Toxicity - repeated exposure

| Name              | Route      | Target Organ(s)   | Value  | Species                       | Test result                 | Exposure<br>Duration      |
|-------------------|------------|---|--|-------------------------------|-----------------------------|---------------------------|
| Calcium carbonate | Inhalation | respiratory system  | Not classified   | Human                         | NOAEL Not available         | occupational exposure     |
| Carbon black      | Inhalation | pneumoconiosis  | Not classified   | Human                         | NOAEL Not available         | occupational exposure     |
| Quartz            | Inhalation | silicosis   | Causes damage to organs through prolonged or repeated exposure               | Human                         | NOAEL Not available         | occupational exposure     |
| toluene           | Inhalation | auditory system  <br>nervous system  <br>eyes   olfactory<br>system | Causes damage to organs through prolonged or repeated exposure               | Human                         | NOAEL Not available         | poisoning<br>and/or abuse |
| toluene           | Inhalation | respiratory system  | Some positive data exist, but the data are not sufficient for classification | Rat                           | LOAEL 2.3<br>mg/l           | 15 months                 |
| toluene           | Inhalation | heart   liver   kidney<br>and/or bladder                            | Not classified   | Rat                           | NOAEL 11.3<br>mg/l          | 15 weeks                  |
| toluene           | Inhalation | endocrine system  | Not classified   | Rat                           | NOAEL 1.1<br>mg/l           | 4 weeks                   |
| toluene           | Inhalation | immune system   | Not classified   | Mouse                         | NOAEL Not available         | 20 days                   |
| toluene           | Inhalation | bone, teeth, nails,<br>and/or hair                                  | Not classified   | Mouse                         | NOAEL 1.1<br>mg/l           | 8 weeks                   |
| toluene           | Inhalation | hematopoietic<br>system   vascular<br>system                        | Not classified   | Human                         | NOAEL Not available         | occupational exposure     |
| toluene           | Inhalation | gastrointestinal tract  | Not classified   | Multiple<br>animal<br>species | NOAEL 11.3<br>mg/l          | 15 weeks                  |
| toluene           | Ingestion  | nervous system  | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL 625<br>mg/kg/day      | 13 weeks                  |
| toluene           | Ingestion  | heart   | Not classified   | Rat                           | NOAEL<br>2,500<br>mg/kg/day | 13 weeks                  |
| toluene           | Ingestion  | liver   kidney and/or<br>bladder                                    | Not classified   | Multiple<br>animal<br>species | NOAEL<br>2,500<br>mg/kg/day | 13 weeks                  |
| toluene           | Ingestion  | hematopoietic<br>system   | Not classified   | Mouse                         | NOAEL 600<br>mg/kg/day      | 14 days                   |
| toluene           | Ingestion  | endocrine system  | Not classified   | Mouse                         | NOAEL 105<br>mg/kg/day      | 28 days                   |
| toluene           | Ingestion  | immune system   | Not classified   | Mouse                         | NOAEL 105                   | 4 weeks                   |

D 0 0 15

### 3M Aerospace Sealant AC-251 B-1/2, B-1, and B-2 Black Base

|                          |  |                 | mg/kg/day |
|--------------------------|--|-----------------|-----------|
|                          |  |                 |           |
| <b>Aspiration Hazard</b> |  |                 |           |
| Name                     |  | Value           |           |
| toluene                  |  | Aspiration haza | ard       |

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 |
|---|------------|---------------|---|----------|--------------------------------|-------------|
| Propane, 1,2,3-<br>trichloro-, polymer<br>with 1,1'-<br>[methylenebis(oxy)]bis[2-<br>chloroethane] and<br>sodium sulfide<br>(Na2(Sx)), reduced              | 68611-50-7 | N/A           | Data not available<br>or insufficient for<br>classification | N/A      | N/A                            | N/A         |
| Calcium carbonate   | 471-34-1   | Green algae   | Experimental  | 72 hours | EC50                           | >100 mg/l   |
| Calcium carbonate   | 471-34-1   | Rainbow trout | Experimental  | 96 hours | LC50                           | >100 mg/l   |
| Calcium carbonate   | 471-34-1   | Water flea    | Experimental  | 48 hours | EC50                           | >100 mg/l   |
| Calcium carbonate   | 471-34-1   | Green algae   | Experimental  | 72 hours | EC10                           | 100 mg/l    |
| Propane, 1,2,3-<br>trichloro-, polymer<br>with 1,1'-<br>[methylenebis(oxy)]bis[2-<br>chloroethane] and<br>sodium sulfide<br>(Na2(Sx)), reduced<br>(MW<1800) | 68611-50-7 | Green algae   | Experimental  | 72 hours | EC50                           | 17 mg/l     |
| Propane, 1,2,3-<br>trichloro-, polymer<br>with 1,1'-<br>[methylenebis(oxy)]bis[2-<br>chloroethane] and<br>sodium sulfide<br>(Na2(Sx)), reduced<br>(MW<1800) | 68611-50-7 | Water flea    | Experimental  | 48 hours | EC50                           | 4.71 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                       |
| Quartz       | 14808-60-7 | Green algae      | Estimated    | 72 hours | EC50                           | 440 mg/l                        |
| Quartz       | 14808-60-7 | Water flea       | Estimated    | 48 hours | EC50                           | 7,600 mg/l                      |
| Quartz       | 14808-60-7 | Zebra Fish       | Estimated    | 96 hours | LC50                           | 5,000 mg/l                      |
| Quartz       | 14808-60-7 | Green algae      | Estimated    | 72 hours | NOEC                           | 60 mg/l                         |
| toluene      | 108-88-3   | Coho Salmon      | Experimental | 96 hours | LC50                           | 5.5 mg/l                        |
| toluene      | 108-88-3   | Grass Shrimp     | Experimental | 96 hours | LC50                           | 9.5 mg/l                        |
| toluene      | 108-88-3   | Green algae      | Experimental | 72 hours | EC50                           | 12.5 mg/l                       |
| toluene      | 108-88-3   | Leopard frog     | Experimental | 9 days   | LC50                           | 0.39 mg/l                       |
| toluene      | 108-88-3   | Pink Salmon      | Experimental | 96 hours | LC50                           | 6.41 mg/l                       |
| toluene      | 108-88-3   | Water flea       | Experimental | 48 hours | EC50                           | 3.78 mg/l                       |
| toluene      | 108-88-3   | Coho Salmon      | Experimental | 40 days  | NOEC                           | 1.39 mg/l                       |
| toluene      | 108-88-3   | Diatom           | Experimental | 72 hours | NOEC                           | 10 mg/l                         |
| toluene      | 108-88-3   | Water flea       | Experimental | 7 days   | NOEC                           | 0.74 mg/l                       |
| toluene      | 108-88-3   | Activated sludge | Experimental | 12 hours | IC50                           | 292 mg/l                        |
| toluene      | 108-88-3   | Bacteria         | Experimental | 16 hours | NOEC                           | 29 mg/l                         |
| toluene      | 108-88-3   | Bacteria         | Experimental | 24 hours | EC50                           | 84 mg/l                         |
| toluene      | 108-88-3   | Redworm          | Experimental | 28 days  | LC50                           | >150 mg per kg of<br>bodyweight |
| toluene      | 108-88-3   | Soil microbes    | Experimental | 28 days  | NOEC                           | <26 mg/kg (Dry Weight)          |

# 12.2. Persistence and degradability

| Material  | CAS Nbr    | Test type                         | Duration | Study Type | Test result | Protocol |
|---|------------|-----------------------------------|----------|------------|-------------|----------|
| Propane, 1,2,3-<br>trichloro-, polymer<br>with 1,1'-<br>[methylenebis(oxy)]bis[2-<br>chloroethane] and<br>sodium sulfide<br>(Na2(Sx)), reduced              |            | Data not availbl-<br>insufficient | N/A      | N/A        | N/A         | N/A      |
| Calcium carbonate   | 471-34-1   | Data not availbl-<br>insufficient | N/A      | N/A        | N/A         | N/A      |
| Propane, 1,2,3-<br>trichloro-, polymer<br>with 1,1'-<br>[methylenebis(oxy)]bis[2-<br>chloroethane] and<br>sodium sulfide<br>(Na2(Sx)), reduced<br>(MW<1800) | 68611-50-7 | Data not availblinsufficient      | N/A      | N/A        | N/A         | N/A      |
| Carbon black  | 1333-86-4  | Data not availbl-<br>insufficient | N/A      | N/A        | N/A         | N/A      |
| Quartz  | 14808-60-7 | Data not availbl-<br>insufficient | N/A      | N/A        | N/A         | N/A      |

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## 3M Aerospace Sealant AC-251 B-1/2, B-1, and B-2 Black Base

| toluene | 108-88-3 | Experimental   | 20 days | BOD                  | 80 %BOD/ThOD     | APHA Std Meth    |
|---------|----------|----------------|---------|----------------------|------------------|------------------|
|         |          | Biodegradation | -       |                      |                  | Water/Wastewater |
| toluene | 108-88-3 | Experimental   |         | Photolytic half-life | 5.2 days (t 1/2) |                  |
|         |          | Photolysis     |         | (in air)             |                  |                  |

## 12.3 : Bioaccumulative potential

| Material  | Cas No.    | Test type   | Duration | Study Type             | Test result | Protocol |
|---|------------|---|----------|------------------------|-------------|----------|
| Propane, 1,2,3-<br>trichloro-, polymer<br>with 1,1'-<br>[methylenebis(oxy)]bis[2-<br>chloroethane] and<br>sodium sulfide<br>(Na2(Sx)), reduced              | 68611-50-7 | Data not available<br>or insufficient for<br>classification | N/A      | N/A                    | N/A         | N/A      |
| Calcium carbonate   | 471-34-1   | Data not available or insufficient for classification       | N/A      | N/A                    | N/A         | N/A      |
| Propane, 1,2,3-<br>trichloro-, polymer<br>with 1,1'-<br>[methylenebis(oxy)]bis[2-<br>chloroethane] and<br>sodium sulfide<br>(Na2(Sx)), reduced<br>(MW<1800) | 68611-50-7 | Data not available<br>or insufficient for<br>classification | N/A      | N/A                    | N/A         | N/A      |
| Carbon black  | 1333-86-4  | Data not available or insufficient for classification       | N/A      | N/A                    | N/A         | N/A      |
| Quartz  | 14808-60-7 | Data not available or insufficient for classification       |          | N/A                    | N/A         | N/A      |
| toluene   | 108-88-3   | Experimental BCF - Other                                    | 72 hours | Bioaccumulation factor | 90          |          |
| toluene   | 108-88-3   | Experimental Bioconcentration                               |          | Log Kow                | 2.73        |          |

## 12.4. Mobility in soil

| Material | Cas No.  | Test type        | Study Type | Test result | Protocol |
|----------|----------|------------------|------------|-------------|----------|
| toluene  | 108-88-3 | Experimental     | Koc        | 37-160 l/kg |          |
|          |          | Mobility in Soil |            |             |          |

### 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. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of

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

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

## EU waste code (product as sold)

08 04 10 Waste adhesives and sealants other than those mentioned in 08 04 09

## **SECTION 14: Transportation information**

Not hazardous for transportation.

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

| <b>SECTION 15: Regulatory information</b> |
|---|
|---|

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

### Carcinogenicity

| <u>Ingredient</u> | CAS Nbr    | <u>Classification</u>   | Regulation             |
|-------------------|------------|-------------------------|------------------------|
| Carbon black      | 1333-86-4  | Grp. 2B: Possible human | International Agency   |
|                   |            | carc.                   | for Research on Cancer |
| Quartz            | 14808-60-7 | Grp. 1: Carcinogenic to | International Agency   |
|                   |            | humans                  | for Research on Cancer |
| toluene           | 108-88-3   | Gr. 3: Not classifiable | International Agency   |
|                   |            |                         | for Research on Cancer |

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

The following substance(s) contained in this product is/are subject to Annex XVII of regulation (EC) 1907/2006, as amended for GB, with regard to restrictions on the manufacture, placing on the market and use when present in certain dangerous conditions. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

| <u>Ingredient</u> | CAS Nbr  |
|-------------------|----------|
| toluene           | 108-88-3 |

Restriction status: listed in UK REACH Annex XVII

Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 as amended for Great Britain for Conditions of

Restriction

### Regulation UK regulation 2023/63 (marketing and use of explosive precursors and poisons)

This product contains a reportable substance according to UK legislation 1972/66: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see UK Regulation 2023/63 for further details.

### Global inventory status

Contact 3M for more information. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

### 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

| H225  | Highly flammable liquid and vapour.                                |
|-------|--|
| H304  | May be fatal if swallowed and enters airways.                      |
| H315  | Causes skin irritation.  |
| H336  | May cause drowsiness or dizziness.                                 |
| H361d | Suspected of damaging the unborn child.                            |
| H372  | Causes damage to organs through prolonged or repeated exposure.    |
| H373  | May cause damage to organs through prolonged or repeated exposure. |
| H411  | 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 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.

Section 9: Property description for optional properties information was modified.

Section 15: Seveso Substance Text information was deleted.

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### 3M SDSs for Great Britain are available at 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:** 45-3052-3 **Version number:** 1.00

**Revision date:** 24/12/2024 **Supersedes date:** Initial issue.

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

Aerospace Sealant AC-251 B-2 Catalyst

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

### **Identified uses**

Curing Agent

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

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

**Telephone:** +44 (0)1344 858 000 **E Mail:** tox.uk@mmm.com **Website:** www.3M.com/uk

### 1.4. Emergency telephone number

+44 (0)1344 858 000

## **SECTION 2: Hazard identification**

## 2.1. Classification of the substance or mixture

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

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

## **CLASSIFICATION:**

Acute Toxicity, Category 4 - Acute Tox. 4; H302 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318 Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

For full text of H phrases, see Section 16.

### 2.2. Label elements

## 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**



| Ingredient        | CAS Nbr    | EC No.    | % by Wt |
|-------------------|------------|-----------|---------|
| manganese dioxide | 1313-13-9  | 215-202-6 | 15 - 60 |
| Disodium oxide    | 1313-59-3  | 215-208-9 | < 3     |
| Dipotassium oxide | 12136-45-7 | 235-227-6 | < 2     |

## **HAZARD STATEMENTS:**

H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure: nervous system.

### PRECAUTIONARY STATEMENTS

**Prevention:** 

P260A Do not breathe vapours. P280A Wear eye/face protection.

Response:

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

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.

1% of the mixture consists of components of unknown acute oral toxicity.

### 2.3. Other hazards

None known.

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

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

## 3.1. Substances

Not applicable

### 3.2. Mixtures

| Ingredient  | Identifier(s)                              | 0/0     | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB |
|---|--|---------|--|
| manganese dioxide   | (CAS-No.) 1313-13-9<br>(EC-No.) 215-202-6  | 15 - 60 | Acute Tox. 4, H332<br>Acute Tox. 4, H302<br>EUH031<br>STOT RE 2, H373              |
| Oxydiethylene dibenzoate  | (CAS-No.) 120-55-8<br>(EC-No.) 204-407-6   | 15 - 45 | Substance not classified as hazardous  |
| Oxydipropyl dibenzoate  | (CAS-No.) 27138-31-4<br>(EC-No.) 248-258-5 | < 15    | Aquatic Chronic 3, H412  |
| Zeolites  | (CAS-No.) 1318-02-1<br>(EC-No.) 215-283-8  | 1 - 10  | Substance with a national occupational exposure limit                              |
| Silicon dioxide   | (CAS-No.) 7631-86-9<br>(EC-No.) 231-545-4  | < 5     | Substance with a national occupational exposure limit                              |
| Disodium oxide  | (CAS-No.) 1313-59-3<br>(EC-No.) 215-208-9  | < 3     | EUH014<br>Acute Tox. 3, H301<br>Skin Corr. 1B, H314<br>STOT SE 3, H335             |
| Aluminium Oxide (non-fibrous)   | (CAS-No.) 1344-28-1<br>(EC-No.) 215-691-6  | < 3     | Substance with a national occupational exposure limit                              |
| Carbon black  | (CAS-No.) 1333-86-4<br>(EC-No.) 215-609-9  | < 2.5   | Substance with a national occupational exposure limit                              |
| Dipotassium oxide   | (CAS-No.) 12136-45-7<br>(EC-No.) 235-227-6 | < 2     | EUH014<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>STOT SE 3, H335               |
| Heterocyclic Organic Compound   | Trade Secret                               | < 2     | Substance not classified as hazardous  |
| Silanamine, 1,1,1-trimethyl-N-<br>(trimethylsilyl)-, hydrolysis products with<br>silica | (CAS-No.) 68909-20-6<br>(EC-No.) 272-697-1 | < 2     | EUH066<br>STOT RE 2, H373  |
| sodium hydroxide  | (CAS-No.) 1310-73-2<br>(EC-No.) 215-185-5  | < 1     | Skin Corr. 1A, H314<br>Eye Dam. 1, H318<br>Met. Corr. 1, H290                      |

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   |
|------------------|---|---|
| sodium hydroxide | (CAS-No.) 1310-73-2<br>(EC-No.) 215-185-5 | (C >= 5%) Skin Corr. 1A, H314<br>(2% =< C < 5%) Skin Corr. 1B, H314<br>(0.5% =< C < 2%) Skin Irrit. 2, H315<br>(C >= 2%) Eye Dam. 1, H318 |

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.

### Eve 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. If you feel unwell, get medical attention.

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

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

Irritation to the skin (localized redness, swelling, itching, and dryness). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Harmful if swallowed. 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

DO NOT USE WATER In case of fire: Use a fire fighting agent suitable for water-reactives such as dry chemical to extinguish.

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

None inherent in this product.

### **Hazardous Decomposition or By-Products**

Substance
Carbon monoxide
Carbon dioxide.
Oxides of nitrogen.
Oxides of sulphur.

### Condition

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

## 5.3. Advice for fire-fighters

No special protective actions for fire-fighters are anticipated.

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

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

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

### 6.2. Environmental precautions

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

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

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

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

# **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Use personal protective equipment (eg. gloves, respirators...) as required.

## 7.2. Conditions for safe storage including any incompatibilities

Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container.

### 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 |
|--------------------------------|------------|--------|---|---------------------|
| sodium hydroxide               | 1310-73-2  | UK HSE | STEL:2 mg/m3  |                     |
| Manganese, inorganic compounds | 1313-13-9  | UK HSE | TWA(as Mn, respirable fraction):0.05 mg/m3                            |                     |
| Aluminium oxides               | 1318-02-1  | UK HSE | TWA(as respirable dust):4<br>mg/m3;TWA(as inhalable<br>dust):10 mg/m3 |                     |
| Carbon black                   | 1333-86-4  | UK HSE | TWA: 3.5 mg/m³; STEL: 7 mg/m³   |                     |
| Aluminium Oxide (non-fibrous)  | 1344-28-1  | UK HSE | TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3       |                     |
| Silicon dioxide                | 68909-20-6 | UK HSE | TWA(as respirable dust):2.4 mg/m3;TWA(as inhalable dust):6 mg/m3      |                     |
| DUST, INERT OR NUISANCE        | 7631-86-9  | UK HSE | TWA(as respirable dust):4 mg/m3;TWA(as inhalable                      |                     |

dust):10 mg/m3

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:

MaterialThickness (mm)Breakthrough TimePolymer laminateNo data availableNo 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 mask or full facepiece air-purifying respirator with P3 particulate filters.

Half facepiece or full facepiece air-purifying respirator suitable for particulates

Half facepiece or full facepiece supplied-air respirator

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

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136

Use a respirator conforming to EN 140 or EN 136: filter type P

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

9.1. Information on basic physical and chemical properties

| Liquid.                      |  |
|------------------------------|--|
| Black-Brown                  |  |
| No data available.           |  |
| No data available.           |  |
| Not applicable.              |  |
| No data available.           |  |
| Not applicable.              |  |
|                              |  |
| No data available.           |  |
| No data available.           |  |
| Flash point > 93 °C (200 °F) |  |
| No data available.           |  |
| No data available.           |  |
| 10                           |  |
| Not applicable.              |  |
| Not applicable.              |  |
| No data available.           |  |
| No data available.           |  |
| No data available.           |  |
| 1.6 kg/l                     |  |
| 1.61                         |  |
| No data available.           |  |
| Not applicable.              |  |
|                              |  |
|                              |  |

### 9.2. Other information

## 9.2.2 Other safety characteristics

EU Volatile Organic CompoundsNo data available.Evaporation rateNo data available.Percent volatile0.8 % weight

# **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

Not determined

### 10.5 Incompatible materials

Reducing agents.

## 10.6 Hazardous decomposition products

## **Substance**

### Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## **SECTION 11: Toxicological information**

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

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

Signs and Symptoms of Exposure

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

### Inhalation

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

### Skin contact

May be harmful in contact with skin. Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain.

### Eve 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**

Harmful if swallowed.

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:

Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate. 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.

## Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

### **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 >2,000 - =5,000 mg/kg |
| Overall product | Ingestion |         | No data available; calculated ATE >300 - =2,000 mg/kg   |

| manganese dioxide   | Dermal      | Rat       | LD50 2,000 mg/kg                    |
|---|-------------|-----------|-------------------------------------|
| manganese dioxide   | Inhalation- | Rat       | LC50 > 1.5 mg/l                     |
|   | Dust/Mist   |           |                                     |
|   | (4 hours)   |           |                                     |
| manganese dioxide   | Ingestion   | Rat       | LD50 > 2,197 mg/kg                  |
| Oxydipropyl dibenzoate                                      | Dermal      | Rat       | LD50 > 2,000 mg/kg                  |
| Oxydipropyl dibenzoate                                      | Inhalation- | Rat       | LC50 > 200 mg/l                     |
|   | Dust/Mist   |           |                                     |
|   | (4 hours)   |           |                                     |
| Oxydipropyl dibenzoate                                      | Ingestion   | Rat       | LD50 3,295 mg/kg                    |
| Zeolites  | Dermal      | Rabbit    | LD50 > 2,000 mg/kg                  |
| Zeolites  | Inhalation- | Rat       | LC50 > 4.57  mg/l                   |
|   | Dust/Mist   |           |                                     |
|   | (4 hours)   |           |                                     |
| Zeolites  | Ingestion   | Rat       | LD50 > 5,000 mg/kg                  |
| Silicon dioxide   | Dermal      | Rabbit    | LD50 > 5,000 mg/kg                  |
| Silicon dioxide   | Inhalation- | Rat       | LC50 > 0.691 mg/l                   |
|   | Dust/Mist   |           |                                     |
|   | (4 hours)   | -         | X 750 . 5110 . 4                    |
| Silicon dioxide   | Ingestion   | Rat       | LD50 > 5,110 mg/kg                  |
| Aluminium Oxide (non-fibrous)                               | Dermal      |           | LD50 estimated to be > 5,000 mg/kg  |
| Aluminium Oxide (non-fibrous)                               | Inhalation- | Rat       | LC50 > 2.3  mg/l                    |
|   | Dust/Mist   |           |                                     |
|   | (4 hours)   |           |                                     |
| Aluminium Oxide (non-fibrous)                               | Ingestion   | Rat       | LD50 > 5,000 mg/kg                  |
| Disodium oxide  | Ingestion   | Professio | LD50 estimated to be 50 - 300 mg/kg |
|   |             | nal       |                                     |
|   |             | judgeme   |                                     |
|   | P   1       | nt        | LD50: 2.000 //                      |
| Carbon black  | Dermal      | Rabbit    | LD50 > 3,000 mg/kg                  |
| Carbon black  | Ingestion   | Rat       | LD50 > 8,000 mg/kg                  |
| Heterocyclic Organic Compound                               | Ingestion   | Rat       | LD50 > 5,000 mg/kg                  |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis | Ingestion   | Rat       | LD50 > 2,000 mg/kg                  |
| products with silica  | 1           | ļ         |                                     |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis | Dermal      | similar   | LD50 estimated to be > 5,000 mg/kg  |
| products with silica  |             | health    |                                     |
| A MITT  |             | hazards   |                                     |

ATE = acute toxicity estimate

## **Skin Corrosion/Irritation**

| Name   | Species     | Value                     |
|--|-------------|---------------------------|
|  |             |                           |
| manganese dioxide  | Rabbit      | No significant irritation |
| Oxydipropyl dibenzoate   | Rabbit      | No significant irritation |
| Zeolites   | Rabbit      | No significant irritation |
| Silicon dioxide  | Rabbit      | No significant irritation |
| Aluminium Oxide (non-fibrous)  | Rabbit      | No significant irritation |
| Disodium oxide   | similar     | Corrosive                 |
|  | compoun     |                           |
|  | ds          |                           |
| Carbon black   | Rabbit      | No significant irritation |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Rabbit      | No significant irritation |
| Dipotassium oxide  | official    | Corrosive                 |
|  | classificat |                           |
|  | ion         |                           |
| sodium hydroxide   | Rabbit      | Corrosive                 |

Serious Eve Damage/Irritation

| Name                   | Species | Value                     |
|------------------------|---------|---------------------------|
| manganese dioxide      | Rabbit  | Mild irritant             |
| Oxydipropyl dibenzoate | Rabbit  | No significant irritation |
| Zeolites               | Rabbit  | Mild irritant             |
| Silicon dioxide        | Rabbit  | No significant irritation |

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| Aluminium Oxide (non-fibrous)  | Rabbit  | No significant irritation |
|--|---------|---------------------------|
| Disodium oxide   | similar | Corrosive                 |
|  | compoun |                           |
|  | ds      |                           |
| Carbon black   | Rabbit  | No significant irritation |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Rabbit  | No significant irritation |
| Dipotassium oxide  | similar | Corrosive                 |
|  | health  |                           |
|  | hazards |                           |
| sodium hydroxide   | Rabbit  | Corrosive                 |

## **Skin Sensitisation**

| Name   | Species | Value          |
|--|---------|----------------|
|  |         |                |
| manganese dioxide  | Mouse   | Not classified |
| Oxydipropyl dibenzoate   | Guinea  | Not classified |
|  | pig     |                |
| Silicon dioxide  | Human   | Not classified |
|  | and     |                |
|  | animal  |                |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Guinea  | Not classified |
|  | pig     |                |
| sodium hydroxide   | 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 |  |  |  |
|--|-------------|--|--|--|
|  |             |  |  |  |
| manganese dioxide  | In Vitro    | Some positive data exist, but the data are not sufficient for classification |  |  |
| manganese dioxide  | In vivo     | Some positive data exist, but the data are not sufficient for classification |  |  |
| Oxydipropyl dibenzoate   | In Vitro    | Not mutagenic  |  |  |
| Silicon dioxide  | In Vitro    | Not mutagenic  |  |  |
| Aluminium Oxide (non-fibrous)  | In Vitro    | Not mutagenic  |  |  |
| Carbon black   | In Vitro    | Not mutagenic  |  |  |
| Carbon black   | In vivo     | Some positive data exist, but the data are not sufficient for classification |  |  |
| Heterocyclic Organic Compound  | In Vitro    | Not mutagenic  |  |  |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | In Vitro    | Not mutagenic  |  |  |
| sodium hydroxide   | In Vitro    | Not mutagenic  |  |  |

Carcinogenicity

| Name                          | Route      | Species | Value  |
|-------------------------------|------------|---------|--|
| Silicon dioxide               | Not        | Mouse   | Some positive data exist, but the data are not |
|                               | specified. |         | sufficient for classification                  |
| Aluminium Oxide (non-fibrous) | Inhalation | Rat     | Not carcinogenic                               |
| 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<br>Duration |
|-------------------|------------|--|---------|--------------------|----------------------|
| manganese dioxide | Inhalation | Not classified for female reproduction | Rat     | NOAEL 20<br>mg/m³  | 2 generation         |
| manganese dioxide | Inhalation | Not classified for male reproduction   | Rabbit  | LOAEL 250<br>mg/kg | 1 days               |

| manganese dioxide   | Ingestion  | Not classified for development         | Rat | LOAEL 354<br>mg/kg/day      | premating into lactation |
|---|------------|--|-----|-----------------------------|--------------------------|
| manganese dioxide   | Inhalation | Not classified for development         | Rat | LOAEL 61<br>mg/m³           | gestation into lactation |
| Oxydipropyl dibenzoate  | Ingestion  | Not classified for female reproduction | Rat | NOAEL 500<br>mg/kg/day      | 2 generation             |
| Oxydipropyl dibenzoate  | Ingestion  | Not classified for male reproduction   | Rat | NOAEL 400<br>mg/kg/day      | 2 generation             |
| Oxydipropyl dibenzoate  | Ingestion  | Not classified for development         | Rat | NOAEL<br>1,000<br>mg/kg/day | during<br>gestation      |
| Silicon dioxide   | Ingestion  | Not classified for female reproduction | Rat | NOAEL 509<br>mg/kg/day      | 1 generation             |
| Silicon dioxide   | Ingestion  | Not classified for male reproduction   | Rat | NOAEL 497<br>mg/kg/day      | 1 generation             |
| Silicon dioxide   | Ingestion  | Not classified for development         | Rat | NOAEL<br>1,350<br>mg/kg/day | during<br>organogenesis  |
| Silanamine, 1,1,1-trimethyl-N-<br>(trimethylsilyl)-, hydrolysis products with<br>silica | Ingestion  | Not classified for female reproduction | Rat | NOAEL 509<br>mg/kg/day      | 1 generation             |
| Silanamine, 1,1,1-trimethyl-N-<br>(trimethylsilyl)-, hydrolysis products with<br>silica | Ingestion  | Not classified for male reproduction   | Rat | NOAEL 497<br>mg/kg/day      | 1 generation             |

# Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name              | Route      | Target Organ(s)        | Value                            | Species   | Test result | Exposure |
|-------------------|------------|------------------------|----------------------------------|-----------|-------------|----------|
|                   |            |                        |                                  |           |             | Duration |
| Disodium oxide    | Inhalation | respiratory irritation | May cause respiratory irritation | Professio | NOAEL Not   |          |
|                   |            |                        |                                  | nal       | available   |          |
|                   |            |                        |                                  | judgeme   |             |          |
|                   |            |                        |                                  | nt        |             |          |
| Dipotassium oxide | Inhalation | respiratory irritation | May cause respiratory irritation | similar   | NOAEL Not   |          |
|                   |            |                        |                                  | health    | available   |          |
|                   |            |                        |                                  | hazards   |             |          |
| sodium hydroxide  | Inhalation | respiratory irritation | May cause respiratory irritation | Human     | NOAEL Not   |          |
| -                 |            | -                      |                                  |           | available   |          |

**Specific Target Organ Toxicity - repeated exposure** 

| Name   | Route      | Target Organ(s)                   | Value  | Species | Test result                 | Exposure<br>Duration  |
|--|------------|-----------------------------------|--|---------|-----------------------------|-----------------------|
| manganese dioxide  | Inhalation | respiratory system                | Causes damage to organs through prolonged or repeated exposure               | Monkey  | LOAEL 1.1<br>mg/m³          | 10 months             |
| manganese dioxide  | Inhalation | nervous system                    | Causes damage to organs through prolonged or repeated exposure               | Human   | NOAEL Not available         | occupational exposure |
| Oxydipropyl dibenzoate   | Ingestion  | hematopoietic<br>system   liver   | Not classified   | Rat     | NOAEL<br>2,500<br>mg/kg/day | 90 days               |
| Silicon dioxide  | Inhalation | respiratory system  <br>silicosis | Not classified   | Human   | NOAEL Not available         | occupational exposure |
| Aluminium Oxide (non-<br>fibrous)  | Inhalation | pneumoconiosis                    | Some positive data exist, but the data are not sufficient for classification | Human   | NOAEL Not available         | occupational exposure |
| Aluminium Oxide (non-<br>fibrous)  | Inhalation | pulmonary fibrosis                | Not classified   | Human   | NOAEL Not available         | occupational exposure |
| Carbon black   | Inhalation | pneumoconiosis                    | Not classified   | Human   | NOAEL Not available         | occupational exposure |
| Silanamine, 1,1,1-<br>trimethyl-N-<br>(trimethylsilyl)-,<br>hydrolysis products with<br>silica | Inhalation | respiratory system                | May cause damage to organs though prolonged or repeated exposure             | Rat     | LOAEL<br>0.035 mg/l         | 13 weeks              |
| Silanamine, 1,1,1-<br>trimethyl-N-   | Inhalation | hematopoietic<br>system   kidney  | Not classified   | Rat     | NOAEL<br>0.035 mg/l         | 13 weeks              |

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| (trimethylsilyl)-,       |           | and/or bladder |                |     |           |         |
|--------------------------|-----------|----------------|----------------|-----|-----------|---------|
| hydrolysis products with |           |                |                |     |           |         |
| silica                   |           |                |                |     |           |         |
| Silanamine, 1,1,1-       | Ingestion | liver          | Not classified | Rat | NOAEL     | 5 weeks |
| trimethyl-N-             |           |                |                |     | 1,000     |         |
| (trimethylsilyl)-,       |           |                |                |     | mg/kg/day |         |
| hydrolysis products with |           |                |                |     |           |         |
| silica                   |           |                |                |     |           |         |

### **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               |
|-----------------------------|------------|---------------------|-----------------------|----------|---------------|---------------------------|
| manganese dioxide           | 1313-13-9  | Rainbow trout       | Endpoint not reached  | 96 hours | LC50          | >100 mg/l                 |
| manganese dioxide           | 1313-13-9  | Green algae         | Experimental          | 72 hours | EC50          | >100 mg/l                 |
| manganese dioxide           | 1313-13-9  | Water flea          | Experimental          | 48 hours | EC50          | >100 mg/l                 |
| manganese dioxide           | 1313-13-9  | Green algae         | Experimental          | 72 hours | EC10          | 100 mg/l                  |
| manganese dioxide           | 1313-13-9  | Water flea          | Experimental          | 8 days   | NOEC          | 100 mg/l                  |
| Oxydiethylene<br>dibenzoate | 120-55-8   | Green algae         | Experimental          | 72 hours | EL50          | 11 mg/l                   |
| Oxydiethylene<br>dibenzoate | 120-55-8   | Rainbow trout       | Experimental          | 96 hours | LL50          | 2.9 mg/l                  |
| Oxydiethylene<br>dibenzoate | 120-55-8   | Water flea          | Experimental          | 48 hours | EL50          | 6.7 mg/l                  |
| Oxydiethylene<br>dibenzoate | 120-55-8   | Green algae         | Experimental          | 72 hours | NOEL          | 2.2 mg/l                  |
| Oxydiethylene<br>dibenzoate | 120-55-8   | Activated sludge    | Experimental          | 3 hours  | EC50          | >100 mg/l                 |
| Oxydiethylene<br>dibenzoate | 120-55-8   | Redworm             | Experimental          | 14 days  | LC50          | >1,000 mg/kg (Dry Weight) |
| Oxydipropyl<br>dibenzoate   | 27138-31-4 | Fathead minnow      | Experimental          | 96 hours | LC50          | 3.7 mg/l                  |
| Oxydipropyl dibenzoate      | 27138-31-4 | Green algae         | Experimental          | 72 hours | EL50          | 4.9 mg/l                  |
| Oxydipropyl dibenzoate      | 27138-31-4 | Water flea          | Experimental          | 48 hours | EL50          | 19.31 mg/l                |
| Oxydipropyl<br>dibenzoate   | 27138-31-4 | Green algae         | Experimental          | 72 hours | EC10          | 0.89 mg/l                 |
| Zeolites                    | 1318-02-1  | African clawed frog | Analogous<br>Compound | 96 hours | LC50          | 1,800 mg/l                |

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| Zeolites   | 1318-02-1    | Fathead minnow                | Analogous<br>Compound                                 | 96 hours | LC50                           | >680 mg/l                |
|--|--------------|-------------------------------|---|----------|--------------------------------|--------------------------|
| Zeolites   | 1318-02-1    | Green algae                   | Analogous<br>Compound                                 | 72 hours | EC50                           | 130 mg/l                 |
| Zeolites   | 1318-02-1    | Sediment organism             | Analogous<br>Compound                                 | 22 days  | EC50                           | 364.9 mg/l               |
| Zeolites   | 1318-02-1    | Water flea                    | Analogous<br>Compound                                 | 48 hours | EC50                           | >100 mg/l                |
| Zeolites   | 1318-02-1    | Fathead minnow                | Analogous<br>Compound                                 | 30 days  | NOEC                           | 86.7 mg/l                |
| Zeolites   | 1318-02-1    | Green algae                   | Analogous<br>Compound                                 | 72 hours | NOEC                           | 18 mg/l                  |
| Zeolites   | 1318-02-1    | Water flea                    | Analogous<br>Compound                                 | 21 days  | NOEC                           | 32 mg/l                  |
| Zeolites   | 1318-02-1    | Bacteria                      | Experimental  | 16 hours | EC50                           | 950 mg/l                 |
| Zeolites   | 1318-02-1    | Radish                        | Experimental  | 23 days  | EC50                           | 4,000 mg/kg (Dry Weight) |
| Silicon dioxide  | 7631-86-9    | N/A                           | Data not available or insufficient for classification | N/A      | N/A                            | N/A                      |
| Aluminium Oxide<br>(non-fibrous)   | 1344-28-1    | N/A                           | Experimental  | 96 hours | LC50                           | >100 mg/l                |
| Aluminium Oxide<br>(non-fibrous)   | 1344-28-1    | Green algae                   | Experimental  | 72 hours | EC50                           | >100 mg/l                |
| Aluminium Oxide<br>(non-fibrous)   | 1344-28-1    | Water flea                    | Experimental  | 48 hours | LC50                           | >100 mg/l                |
| Aluminium Oxide<br>(non-fibrous)   | 1344-28-1    | Green algae                   | Experimental  | 72 hours | NOEC                           | >100 mg/l                |
| Disodium oxide   | 1313-59-3    | N/A                           | Data not available or insufficient for classification | N/A      | N/A                            | N/A                      |
| Carbon black   | 1333-86-4    | Green algae                   | Experimental  | 72 hours | No tox obs at lmt of water sol | >100 mg/l                |
| Carbon black   | 1333-86-4    | Zebra Fish                    | Experimental  | 96 hours | No tox obs at lmt of water sol | >100 mg/l                |
| Carbon black   | 1333-86-4    | Green algae                   | Experimental  | 72 hours | No tox obs at lmt of water sol | 100 mg/l                 |
| Carbon black   | 1333-86-4    | Activated sludge              | Experimental  | 3 hours  | NOEC                           | >800 mg/l                |
| Heterocyclic<br>Organic Compound   | Trade Secret | Green algae                   | Experimental  | 72 hours | EC50                           | >100 mg/l                |
| Heterocyclic<br>Organic Compound   | Trade Secret | Green algae                   | Experimental  | 72 hours | NOEC                           | 100 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                  |
| Silanamine, 1,1,1-<br>trimethyl-N-<br>(trimethylsilyl)-,<br>hydrolysis products<br>with silica | 68909-20-6   | Algae or other aquatic plants | Estimated   | 72 hours | EC50                           | >100 mg/l                |
| sodium hydroxide   | 1310-73-2    | 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                          |
|--------------------------|-----------|-----------------------------------|----------|------------|-------------|-----------------------------------|
| manganese dioxide        | 1313-13-9 | Data not availbl-<br>insufficient | N/A      | N/A        | N/A         | N/A                               |
| Oxydiethylene dibenzoate | 120-55-8  | Experimental Biodegradation       | 28 days  |            |             | OECD 301B - Modified sturm or CO2 |

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|  |              |                                     |         |                      | evolution                               |                                     |
|--|--------------|-------------------------------------|---------|----------------------|---|-------------------------------------|
| Oxydipropyl<br>dibenzoate  | 27138-31-4   | Experimental<br>Biodegradation      | 28 days | CO2 evolution        | 85 %CO2<br>evolution/THCO2<br>evolution | OECD 301B - Modified sturm or CO2   |
| Zeolites   | 1318-02-1    | Analogous<br>Compound<br>Hydrolysis |         | Hydrolytic half-life | 60 days (t 1/2)                         |                                     |
| Silicon dioxide  | 7631-86-9    | Data not availbl-<br>insufficient   | N/A     | N/A                  | N/A                                     | N/A                                 |
| Aluminium Oxide (non-fibrous)  | 1344-28-1    | Data not availbl-<br>insufficient   | N/A     | N/A                  | N/A                                     | N/A                                 |
| Disodium oxide   | 1313-59-3    | Data not availbl-<br>insufficient   | N/A     | N/A                  | N/A                                     | N/A                                 |
| Carbon black   | 1333-86-4    | Data not availbl-<br>insufficient   | N/A     | N/A                  | N/A                                     | N/A                                 |
| Heterocyclic<br>Organic Compound   | Trade Secret | Experimental Biodegradation         | 28 days | BOD                  | 0 %BOD/ThOD                             | OECD 301F - Manometric respirometry |
| Dipotassium oxide  | 12136-45-7   | Data not availbl-<br>insufficient   | N/A     | N/A                  | N/A                                     | N/A                                 |
| Silanamine, 1,1,1-<br>trimethyl-N-<br>(trimethylsilyl)-,<br>hydrolysis products<br>with silica | 68909-20-6   | Data not availblinsufficient        | N/A     | N/A                  | N/A                                     | N/A                                 |
| sodium hydroxide   | 1310-73-2    | Data not availbl-<br>insufficient   | N/A     | N/A                  | N/A                                     | N/A                                 |

# 12.3 : Bioaccumulative potential

| Material   | Cas No.      | Test type   | Duration | Study Type             | Test result | Protocol   |
|--|--------------|---|----------|------------------------|-------------|------------|
|  | 1313-13-9    | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A        |
| Oxydiethylene dibenzoate   | 120-55-8     | Experimental Bioconcentration                         |          | Log Kow                | 3.2         |            |
| Oxydipropyl dibenzoate   | 27138-31-4   | Modeled<br>Bioconcentration                           |          | Bioaccumulation factor | 8           | Catalogic™ |
| Zeolites   | 1318-02-1    | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A        |
| Silicon dioxide  | 7631-86-9    | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A        |
| Aluminium Oxide (non-fibrous)  | 1344-28-1    | 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        |
| Carbon black   | 1333-86-4    | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A        |
| Heterocyclic<br>Organic Compound   | Trade Secret | Estimated<br>Bioconcentration                         |          | Bioaccumulation factor | 2.8         |            |
| Dipotassium oxide  | 12136-45-7   | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A        |
| Silanamine, 1,1,1-<br>trimethyl-N-<br>(trimethylsilyl)-,<br>hydrolysis products<br>with silica | 68909-20-6   | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A        |
| sodium hydroxide   | 1310-73-2    | 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                          |
|----------------------------------|--------------|----------------------------------|------------|-------------|-----------------------------------|
| Oxydiethylene dibenzoate         |              | Experimental<br>Mobility in Soil | Koc        | 1,500 l/kg  | OECD 121 Estim. of Koc by<br>HPLC |
| Heterocyclic<br>Organic Compound | Trade Secret | Modeled Mobility in Soil         | Koc        | 37,000 l/kg | Episuite <sup>TM</sup>            |

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

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

### EU waste code (product as sold)

08 04 09\* Waste adhesives and sealants containing organic solvents or other dangerous substances

# SECTION 14: Transportation information

Not hazardous for transportation.

|                                 | Ground Transport (ADR)    | Air Transport (IATA)      | Marine Transport (IMDG)                   |
|---------------------------------|---------------------------|---------------------------|---|
| 14.1 UN number                  | No data available.        | No data available.        | No data available.                        |
| 14.2 UN proper shipping name    | No data available.        | No data available.        | No data available.                        |
| 14.3 Transport hazard class(es) | No data available.        | No data available.        | No data available.                        |
| 14.4 Packing group              | No data available.        | No data available.        | No data available.                        |
| 14.5 Environmental hazards      | No data available.        | No data available.        | No data available.                        |
| 14.6 Special                    | Please refer to the other | Please refer to the other | Please refer to the other sections of the |

\_\_\_\_\_

| precautions for user   | sections of the SDS for further information. | sections of the SDS for further information. | SDS for further information. |
|--|--|--|------------------------------|
| 14.7 Transport in bulk<br>according to Annex II<br>of Marpol 73/78 and<br>IBC Code | No data available.                           | No data available.                           | No data available.           |
| Control Temperature  | No data available.                           | No data available.                           | No data available.           |
| Emergency<br>Temperature   | No data available.                           | No data available.                           | No data available.           |
| ADR Classification<br>Code   | No data available.                           | No data available.                           | No data available.           |
| IMDG Segregation<br>Code   | No data available.                           | No data available.                           | No data available.           |

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

# **SECTION 15: Regulatory information**

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

## Carcinogenicity

| Ingredient      | CAS Nbr   | Classification                | Regulation                                     |
|-----------------|-----------|-------------------------------|--|
| Zeolites        | 1318-02-1 | 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 |
| Carbon black    | 1333-86-4 | Grp. 2B: Possible human carc. | International Agency<br>for Research on Cancer |

## Global inventory status

Contact 3M for more information. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

### 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.             |
|--------|--|
| EUH031 | Contact with acid liberates toxic gas.   |
| H290   | May be corrosive to metals.              |
| H301   | Toxic if swallowed.                      |
| H302   | Harmful if swallowed.                    |
| H314   | Causes severe skin burns and eye damage. |
| H315   | Causes skin irritation.                  |
| H318   | Causes serious eye damage.               |
| H332   | Harmful if inhaled.                      |
| H335   | May cause respiratory irritation.        |
| 11070  |  |

H373 May cause damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure: nervous system.

H412 Harmful to aquatic life with long lasting effects.

### **Revision information:**

No revision information

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

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