



## Safety Data Sheet

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|                                       |                   |                         |            |
|---------------------------------------|-------------------|-------------------------|------------|
| <b>Document group:</b>                | 35-4036-6         | <b>Version number:</b>  | 2.00       |
| <b>Revision date:</b>                 | 17/03/2020        | <b>Supersedes date:</b> | 26/08/2019 |
| <b>Transportation version number:</b> | 2.00 (29/08/2019) |                         |            |

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

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

#### 1.1. Product identifier

3M Scotch-Weld(tm) DP-190

#### Product Identification Numbers

UU-0101-3322-9      UU-0101-3323-7

7100200489      7100200490

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

##### Identified uses

Industrial use.

#### 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

**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:**

35-4033-3, 24-4380-2

### TRANSPORTATION INFORMATION

UU-0101-3322-9,    UU-0101-3323-7

**ADR/RID:** UN3077, NOT RESTRICTED AS PER SPECIAL PROVISION 375, ENVIRONMENTALLY HAZARDOUS SUBSTANCE EXEMPTION, (EPOXY RESIN), III, --.

**IMDG-CODE:** UN3077, NOT RESTRICTED AS PER IMDG CODE 2.10.2.7, MARINE POLLUTANT EXCEPTION,

(EPOXY RESIN), III, IMDG-Code segregation code: NONE, EMS: --.

ICAO/IATA: UN3077, NOT RESTRICTED AS PER SPECIAL PROVISION A197, ENVIRONMENTALLY HAZARDOUS SUBSTANCE EXCEPTION, (EPOXY RESIN), III.

## KIT LABEL

### 2.1. Classification of the substance or mixture

#### CLP REGULATION (EC) No 1272/2008

#### CLASSIFICATION:

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

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

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

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

Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

### 2.2. Label elements

#### CLP REGULATION (EC) No 1272/2008

#### SIGNAL WORD

DANGER.

#### Symbols:

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

#### Pictograms



#### Contains:

bis-[4-(2,3-epoxipropoxy)phenyl]propane; 3,3'-Oxybis(ethyleneoxy)bis(propylamine); Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine)

#### HAZARD STATEMENTS:

|      |  |
|------|--|
| H318 | Causes serious eye damage.                       |
| H315 | Causes skin irritation.                          |
| H317 | May cause an allergic skin reaction.             |
| H336 | May cause drowsiness or dizziness.               |
| H411 | Toxic to aquatic life with long lasting effects. |

#### PRECAUTIONARY STATEMENTS

#### Prevention:

|       |   |
|-------|---|
| P261A | Avoid breathing vapours.                        |
| P280B | Wear protective gloves and eye/face protection. |
| P273  | Avoid release to the environment.               |

#### Response:

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

P310 present and easy to do. Continue rinsing.  
Immediately call a POISON CENTRE or doctor/physician.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

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

**<=125 ml Hazard statements**

H318 Causes serious eye damage.  
H317 May cause an allergic skin reaction.

**<=125 ml Precautionary statements**

**Prevention:**

P280B Wear protective gloves and 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.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

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

**Revision information:**

Kit: Component document group number(s) information was modified.  
Label: CLP Ingredients - kit components information was modified.  
Label: CLP Classification information was modified.  
Label: CLP Precautionary - Disposal information was deleted.  
Label: CLP Precautionary - Prevention information was modified.



## Safety Data Sheet

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|                                       |                   |                         |            |
|---------------------------------------|-------------------|-------------------------|------------|
| <b>Document group:</b>                | 24-4380-2         | <b>Version number:</b>  | 10.01      |
| <b>Revision date:</b>                 | 09/03/2020        | <b>Supersedes date:</b> | 04/09/2019 |
| <b>Transportation version number:</b> | 1.00 (19/11/2010) |                         |            |

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

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

#### 1.1. Product identifier

3M(tm) Scotch-Weld(tm) Epoxy Structural Adhesive DP-190 Grey : Part B

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

##### Identified uses

Structural adhesive.

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

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

CLP REGULATION (EC) No 1272/2008

##### CLASSIFICATION:

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Skin Sensitization, Category 1 - Skin Sens. 1; H317  
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

#### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

##### SIGNAL WORD

WARNING.

**Symbols:**

GHS07 (Exclamation mark) |GHS09 (Environment) |

**Pictograms**



**Ingredients:**

| Ingredient                              | CAS Nbr   | EC No.    | % by Wt |
|---|-----------|-----------|---------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | 216-823-5 | 73.53   |

**HAZARD STATEMENTS:**

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

**PRECAUTIONARY STATEMENTS**

**Prevention:**

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

**Response:**

|                    |  |
|--------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P333 + P313        | If skin irritation or rash occurs: Get medical advice/attention.   |

**Disposal:**

|      |  |
|------|--|
| P501 | Dispose of contents/container in accordance with applicable local/regional/national/international regulations. |
|------|--|

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

**<=125 ml Hazard statements**

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

**<=125 ml Precautionary statements**

**Prevention:**

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

**Response:**

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

**2.3. Other hazards**

None known.

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

| <b>Ingredient</b>                       | <b>CAS Nbr</b> | <b>EC No.</b> | <b>REACH<br/>Registration<br/>No.</b> | <b>% by Wt</b> | <b>Classification</b>  |
|---|----------------|---------------|---------------------------------------|----------------|--|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3      | 216-823-5     |                                       | 73.53          | Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317<br>Aquatic Chronic 2, H411 |
| Kaolin                                  | 1332-58-7      | 310-194-1     |                                       | 20 - 30        | Substance with a<br>Community level exposure<br>limit in the workplace                 |
| Titanium dioxide                        | 13463-67-7     | 236-675-5     |                                       | < 1            | Substance with a<br>Community level exposure<br>limit in the workplace                 |

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

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

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

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

**Skin contact**

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

**Eye contact**

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

**If swallowed**

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

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

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.

**5.3. Advice for fire-fighters**

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

## SECTION 6: Accidental release measures

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

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

### 6.2. Environmental precautions

Avoid release to the environment.

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

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. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

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

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

Protect from sunlight. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

### 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 |
|-------------------------|------------|--------|--|---------------------|
| DUST, INERT OR NUISANCE | 1332-58-7  | UK HSC | TWA(as inhalable dust):10<br>mg/m <sup>3</sup>                                 |                     |
| Kaolin                  | 1332-58-7  | UK HSC | TWA (as respirable dust): 2<br>mg/m <sup>3</sup>                               |                     |
| Titanium dioxide        | 13463-67-7 | UK HSC | TWA(Inhalable):10<br>mg/m <sup>3</sup> ;TWA(respirable):4<br>mg/m <sup>3</sup> |                     |

UK HSC : 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.

**Recommended monitoring procedures:**Information on recommended monitoring procedures can be obtained from UK HSC

**8.2. Exposure controls**

**8.2.1. Engineering controls**

Provide ventilated enclosure for heat curing. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

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

**Eye/face protection**

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

Indirect vented goggles.

*Applicable Norms/Standards*

Use eye protection conforming to EN 166

**Skin/hand protection**

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

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

| <b>Material</b>  | <b>Thickness (mm)</b> | <b>Breakthrough Time</b> |
|------------------|-----------------------|--------------------------|
| Butyl rubber.    | No data available     | No data available        |
| Polymer laminate | No data available     | No data available        |

*Applicable Norms/Standards*

Use gloves tested to EN 374

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

**Respiratory protection**

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

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

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

*Applicable Norms/Standards*



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

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

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

#### **Appearance**

**Physical state**  
**Colour**

Solid.  
Beige

#### **Specific Physical Form:**

Paste

#### **Odor**

Epoxy

#### **Odour threshold**

*No data available.*

#### **pH**

*Not applicable.*

#### **Boiling point/boiling range**

$\geq 200$  °C

#### **Melting point**

*No data available.*

#### **Flammability (solid, gas)**

Not classified

#### **Explosive properties**

Not classified

#### **Oxidising properties**

Not classified

#### **Flash point**

150 °C

#### **Autoignition temperature**

*No data available.*

#### **Flammable Limits(LEL)**

*Not applicable.*

#### **Flammable Limits(UEL)**

*Not applicable.*

#### **Vapour pressure**

*Not applicable.*

#### **Relative density**

1.31 - 1.39

#### **Water solubility**

*No data available.*

#### **Solubility- non-water**

*No data available.*

#### **Partition coefficient: n-octanol/water**

*No data available.*

#### **Evaporation rate**

*No data available.*

#### **Vapour density**

*Not applicable.*

#### **Decomposition temperature**

*No data available.*

#### **Viscosity**

75 - 150 Pa-s [ @ 24 °C ]

#### **Density**

*No data available.*

### **9.2. Other information**

**EU Volatile Organic Compounds**

*No data available.*

**Percent volatile**

$\leq 1$  %

## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

This material is considered to be non reactive under normal use conditions

### **10.2 Chemical stability**

Stable.

### **10.3 Possibility of hazardous reactions**

Hazardous polymerisation will not occur.

### **10.4 Conditions to avoid**

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

### **10.5 Incompatible materials**

Amines.  
Strong acids.  
Strong bases.  
Strong oxidising agents.

#### **10.6 Hazardous decomposition products**

| <u>Substance</u> | <u>Condition</u> |
|------------------|------------------|
| Aldehydes.       | Not specified.   |
| Carbon monoxide  | Not specified.   |
| Carbon dioxide.  | Not specified.   |

## **SECTION 11: Toxicological information**

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

### **11.1 Information on Toxicological effects**

#### **Signs and Symptoms of Exposure**

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

#### **Inhalation**

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain. May cause additional health effects (see below).

#### **Skin contact**

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

#### **Eye contact**

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Vapours released during curing may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Dust created by cutting, grinding, sanding, or machining may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### **Ingestion**

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

#### **Additional Health Effects:**

#### **Prolonged or repeated exposure may cause target organ effects:**

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

#### **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.

**3M(tm) Scotch-Weld(tm) Epoxy Structural Adhesive DP-190 Grey : Part B****Acute Toxicity**

| Name                                    | Route                          | Species | Value  |
|---|--------------------------------|---------|--|
| Overall product                         | Dermal                         |         | No data available; calculated ATE >5,000 mg/kg |
| Overall product                         | Ingestion                      |         | No data available; calculated ATE >5,000 mg/kg |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal                         | Rat     | LD50 > 1,600 mg/kg                             |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion                      | Rat     | LD50 > 1,000 mg/kg                             |
| Kaolin                                  | Dermal                         |         | LD50 estimated to be > 5,000 mg/kg             |
| Kaolin                                  | Ingestion                      | Human   | LD50 > 15,000 mg/kg                            |
| Titanium dioxide                        | Dermal                         | Rabbit  | LD50 > 10,000 mg/kg                            |
| Titanium dioxide                        | Inhalation-Dust/Mist (4 hours) | Rat     | LC50 > 6.82 mg/l                               |
| Titanium dioxide                        | Ingestion                      | Rat     | LD50 > 10,000 mg/kg                            |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name                                    | Species                | Value                     |
|---|------------------------|---------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Rabbit                 | Mild irritant             |
| Kaolin                                  | Professional judgement | No significant irritation |
| Titanium dioxide                        | Rabbit                 | No significant irritation |

**Serious Eye Damage/Irritation**

| Name                                    | Species                | Value                     |
|---|------------------------|---------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Rabbit                 | Moderate irritant         |
| Kaolin                                  | Professional judgement | No significant irritation |
| Titanium dioxide                        | Rabbit                 | No significant irritation |

**Skin Sensitisation**

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

**Respiratory Sensitisation**

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

**Germ Cell Mutagenicity**

| Name                                    | Route    | Value  |
|---|----------|--|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | In vivo  | Not mutagenic  |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Titanium dioxide                        | In Vitro | Not mutagenic  |
| Titanium dioxide                        | In vivo  | Not mutagenic  |

**Carcinogenicity**

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

**3M(tm) Scotch-Weld(tm) Epoxy Structural Adhesive DP-190 Grey : Part B**

|   |            |                         |  |
|---|------------|-------------------------|--|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal     | Mouse                   | Some positive data exist, but the data are not sufficient for classification |
| Kaolin                                  | Inhalation | Multiple animal species | Not carcinogenic   |
| Titanium dioxide                        | Ingestion  | Multiple animal species | Not carcinogenic   |
| Titanium dioxide                        | Inhalation | Rat                     | Carcinogenic.  |

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

| Name                                    | Route     | Value                                  | Species | Test result         | Exposure Duration    |
|---|-----------|--|---------|---------------------|----------------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for female reproduction | Rat     | NOAEL 750 mg/kg/day | 2 generation         |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 750 mg/kg/day | 2 generation         |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal    | Not classified for development         | Rabbit  | NOAEL 300 mg/kg/day | during organogenesis |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for development         | Rat     | NOAEL 750 mg/kg/day | 2 generation         |

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

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

**Specific Target Organ Toxicity - repeated exposure**

| Name                                    | Route      | Target Organ(s)  | Value  | Species | Test result           | Exposure Duration     |
|---|------------|--|--|---------|-----------------------|-----------------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal     | liver  | Not classified   | Rat     | NOAEL 1,000 mg/kg/day | 2 years               |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal     | nervous system   | Not classified   | Rat     | NOAEL 1,000 mg/kg/day | 13 weeks              |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion  | auditory system   heart   endocrine system   hematopoietic system   liver   eyes   kidney and/or bladder | Not classified   | Rat     | NOAEL 1,000 mg/kg/day | 28 days               |
| Kaolin                                  | Inhalation | pneumoconiosis   | Causes damage to organs through prolonged or repeated exposure               | Human   | NOAEL NA              | occupational exposure |
| Kaolin                                  | Inhalation | pulmonary fibrosis   | Not classified   | Rat     | NOAEL Not available   |                       |
| Titanium dioxide                        | Inhalation | respiratory system   | Some positive data exist, but the data are not sufficient for classification | Rat     | LOAEL 0.01 mg/l       | 2 years               |
| Titanium dioxide                        | Inhalation | pulmonary fibrosis   | Not classified   | Human   | NOAEL Not available   | occupational exposure |

**Aspiration Hazard**

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

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

**SECTION 12: Ecological information**

**3M(tm) Scotch-Weld(tm) Epoxy Structural Adhesive DP-190 Grey : Part B**

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

**12.1. Toxicity**

No product test data available.

| Material                                | CAS #      | Organism       | Type         | Exposure | Test endpoint | Test result  |
|---|------------|----------------|--------------|----------|---------------|--------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3  | Rainbow trout  | Estimated    | 96 hours | LC50          | 2 mg/l       |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3  | Water flea     | Estimated    | 48 hours | EC50          | 1.8 mg/l     |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3  | Green Algae    | Experimental | 72 hours | EC50          | >11 mg/l     |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3  | Green Algae    | Experimental | 72 hours | NOEC          | 4.2 mg/l     |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3  | Water flea     | Experimental | 21 days  | NOEC          | 0.3 mg/l     |
| Kaolin                                  | 1332-58-7  | Water flea     | Experimental | 48 hours | LC50          | >1,100 mg/l  |
| Titanium dioxide                        | 13463-67-7 | Diatom         | Experimental | 72 hours | EC50          | >10,000 mg/l |
| Titanium dioxide                        | 13463-67-7 | Fathead minnow | Experimental | 96 hours | LC50          | >100 mg/l    |
| Titanium dioxide                        | 13463-67-7 | Water flea     | Experimental | 48 hours | EC50          | >100 mg/l    |
| Titanium dioxide                        | 13463-67-7 | Diatom         | Experimental | 72 hours | NOEC          | 5,600 mg/l   |

**12.2. Persistence and degradability**

| Material                                | CAS Nbr    | Test type                          | Duration | Study Type           | Test result       | Protocol                            |
|---|------------|------------------------------------|----------|----------------------|-------------------|-------------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3  | Experimental Hydrolysis            |          | Hydrolytic half-life | 117 hours (t 1/2) | Other methods                       |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3  | Experimental Biodegradation        | 28 days  | BOD                  | 5 %BOD/COD        | OECD 301F - Manometric respirometry |
| Kaolin                                  | 1332-58-7  | Data not available or insufficient |          |                      | N/A               |                                     |
| Titanium dioxide                        | 13463-67-7 | Data not available or insufficient |          |                      | N/A               |                                     |

**12.3 : Bioaccumulative potential**

| Material                                | Cas No.    | Test type   | Duration | Study Type             | Test result | Protocol      |
|---|------------|---|----------|------------------------|-------------|---------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3  | Experimental Bioconcentration                         |          | Log Kow                | 3.242       | Other methods |
| Kaolin                                  | 1332-58-7  | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A           |
| Titanium dioxide                        | 13463-67-7 | Experimental BCF-Carp                                 | 42 days  | Bioaccumulation factor | 9.6         | Other methods |

**12.4. Mobility in soil**

## 3M(tm) Scotch-Weld(tm) Epoxy Structural Adhesive DP-190 Grey : Part B

Please contact manufacturer for more details

### 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

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

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

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

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

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

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

## SECTION 14: Transportation information

IATA: UN3077; Environmentally hazardous substance; solid; n.o.s. (Epoxy Resin); 9; III.

IMDG: UN3077; Environmentally hazardous substance; solid; n.o.s. (Epoxy Resin); 9; III; Marine pollutant (Epoxy Resin); FA, SF.

Exemption: For vessels containing a net quantity of 5 l or a net mass of 5 kg or less per single or inner packaging, special provision 375 (ADR), exemption per 2.10.2.7 (IMDG) or special provision A197 (IATA) may be applied, if applicable  
ADR: UN3077; Environmentally Hazardous Substance, Solid, N.O.S. (Epoxy resin); 9; III; (--); M7.

## SECTION 15: Regulatory information

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

#### Carcinogenicity

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

### 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.

## **SECTION 16: Other information**

### **List of relevant H statements**

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

### **Revision information:**

CLP: Ingredient table information was modified.  
Section 3: Composition/ Information of ingredients table information was modified.  
Section 8: Occupational exposure limit table information was modified.  
Section 10: Hazardous decomposition or by-products table information was modified.  
Section 11: Acute Toxicity table information was modified.  
Section 11: Carcinogenicity Table information was modified.  
Section 11: Germ Cell Mutagenicity Table information was modified.  
Section 11: Reproductive Toxicity Table information was modified.  
Section 11: Respiratory Sensitization Table information was modified.  
Section 11: Serious Eye Damage/Irritation Table information was modified.  
Section 11: Skin Corrosion/Irritation Table information was modified.  
Section 11: Skin Sensitization Table information was modified.  
Section 11: Target Organs - Repeated Table information was modified.  
Section 12: Component ecotoxicity information information was modified.  
Section 12: Persistence and Degradability information information was modified.  
Section 12: Biocumulative potential information information was modified.  
Section 15: Carcinogenicity information information was modified.  
Section 16: UK disclaimer information was deleted.

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

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



## Safety Data Sheet

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|                                       |                   |                         |            |
|---------------------------------------|-------------------|-------------------------|------------|
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| <b>Transportation version number:</b> | 1.00 (13/08/2019) |                         |            |

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

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

#### 1.1. Product identifier

3M (tm) Scotch-Weld(tm) DP-190 Part A

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

##### Identified uses

Industrial use.

#### 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

CLP REGULATION (EC) No 1272/2008

##### CLASSIFICATION:

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318  
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Skin Sensitization, Category 1A - Skin Sens. 1A; H317  
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336

For full text of H phrases, see Section 16.

#### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

##### SIGNAL WORD

DANGER.



**Symbols:**

GHS05 (Corrosion) | GHS07 (Exclamation mark) |

**Pictograms**



**Ingredients:**

| Ingredient   | CAS Nbr    | EC No.    | % by Wt |
|--|------------|-----------|---------|
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | 68911-25-1 |           | 30 - 60 |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | 4246-51-9  | 224-207-2 | 7 - 13  |

**HAZARD STATEMENTS:**

|      |                                      |
|------|--------------------------------------|
| H318 | Causes serious eye damage.           |
| H315 | Causes skin irritation.              |
| H317 | May cause an allergic skin reaction. |
| H336 | May cause drowsiness or dizziness.   |

**PRECAUTIONARY STATEMENTS**

**Prevention:**

|       |   |
|-------|---|
| P261A | Avoid breathing vapours.                        |
| P280B | Wear protective gloves and 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.  |
| P333 + P313        | If skin irritation or rash occurs: Get medical advice/attention.   |

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

**<=125 ml Hazard statements**

|      |                                      |
|------|--------------------------------------|
| H318 | Causes serious eye damage.           |
| H317 | May cause an allergic skin reaction. |

**<=125 ml Precautionary statements**

**Prevention:**

|       |   |
|-------|---|
| P280B | Wear protective gloves and 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.  |
| P333 + P313        | If skin irritation or rash occurs: Get medical advice/attention.   |

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

**Notes on labelling**

All or part of the classification is based on toxicity test data.

### 2.3. Other hazards

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

## SECTION 3: Composition/information on ingredients

| Ingredient   | CAS Nbr    | EC No.    | REACH Registration No. | % by Wt | Classification  |
|--|------------|-----------|------------------------|---------|---|
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | 68911-25-1 |           |                        | 30 - 60 | Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1A, H317; STOT SE 3, H336 |
| Kaolin   | 1332-58-7  | 310-194-1 |                        | 30 - 60 | Substance with a Community level exposure limit in the workplace              |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | 4246-51-9  | 224-207-2 |                        | 7 - 13  | Skin Sens. 1, H317<br>Skin Corr. 1B, H314                                     |
| Carbon black   | 1333-86-4  | 215-609-9 |                        | < 1     | Substance with a Community level exposure limit in the workplace              |
| Titanium dioxide   | 13463-67-7 | 236-675-5 |                        | 0.1 - 1 | Substance with a Community level exposure limit in the workplace              |

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

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation

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

#### Skin contact

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

#### Eye contact

Immediately flush with large amounts of water 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

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.

### 5.3. Advice for fire-fighters

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

## SECTION 6: Accidental release measures

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

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

### 6.2. Environmental precautions

Avoid release to the environment.

### 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. Seal the container. Dispose of collected material as soon as possible.

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid breathing of dust created by cutting, sanding, grinding or machining. For industrial/occupational use only. Not for consumer sale or use. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

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

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

### 7.3. Specific end use(s)

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

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### Occupational exposure limits

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

| <b>Ingredient</b> | <b>CAS Nbr</b> | <b>Agency</b> | <b>Limit type</b>  | <b>Additional comments</b> |
|-------------------|----------------|---------------|--|----------------------------|
| Kaolin            | 1332-58-7      | UK HSC        | TWA (as respirable dust): 2 mg/m <sup>3</sup>                            |                            |
| Carbon black      | 1333-86-4      | UK HSC        | TWA: 3.5 mg/m <sup>3</sup> ; STEL: 7 mg/m <sup>3</sup>                   |                            |
| Titanium dioxide  | 13463-67-7     | UK HSC        | TWA(Inhalable):10 mg/m <sup>3</sup> ;TWA(respirable):4 mg/m <sup>3</sup> |                            |

UK HSC : 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.

**Recommended monitoring procedures:**Information on recommended monitoring procedures can be obtained from UK HSC

## 8.2. Exposure controls

### 8.2.1. Engineering controls

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

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

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

Full face shield.

Indirect vented goggles.

#### *Applicable Norms/Standards*

Use eye/face protection conforming to EN 166

#### Skin/hand protection

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

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

| <b>Material</b>  | <b>Thickness (mm)</b> | <b>Breakthrough Time</b> |
|------------------|-----------------------|--------------------------|
| Polymer laminate | No data available     | No data available        |

#### *Applicable Norms/Standards*

Use gloves tested to EN 374

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

**Respiratory protection**

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

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

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

*Applicable Norms/Standards*

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

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

Liquid.

**Colour**

Dark Gray

**Specific Physical Form:**

Paste

**Odor**

Amine

**Odour threshold***No data available.***pH***No data available.***Boiling point/boiling range** $\geq 152.2$  °C**Melting point***No data available.***Flammability (solid, gas)**

Not applicable.

**Explosive properties**

Not classified

**Oxidising properties**

Not classified

**Flash point** $\geq 151.7$  °C [*Test Method: Closed Cup*]**Autoignition temperature***No data available.***Flammable Limits(LEL)***No data available.***Flammable Limits(UEL)***No data available.***Vapour pressure***No data available.***Relative density**1.24 - 1.32 [*Ref Std: WATER=1*]**Water solubility***No data available.***Solubility- non-water***No data available.***Partition coefficient: n-octanol/water***No data available.***Evaporation rate***No data available.***Vapour density***No data available.***Decomposition temperature***No data available.***Viscosity**40 - 80 Pa-s [*@ 23 °C*]**Density***No data available.***9.2. Other information****EU Volatile Organic Compounds***No data available.***Molecular weight***Not applicable.***SECTION 10: Stability and reactivity****10.1 Reactivity**

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

**10.2 Chemical stability**

Stable.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

None known.

### 10.5 Incompatible materials

Strong acids.

Strong oxidising agents.

### 10.6 Hazardous decomposition products

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

## SECTION 11: Toxicological information

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

### 11.1 Information on Toxicological effects

#### Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Skin contact

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

#### Eye contact

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

#### Ingestion

May be harmful if swallowed.

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

#### Additional Health Effects:

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

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

#### Additional information:

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

**3M (tm) Scotch-Weld(tm) DP-190 Part A****Toxicological Data**

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

**Acute Toxicity**

| Name   | Route                          | Species | Value   |
|--|--------------------------------|---------|---|
| Overall product  | Dermal                         |         | No data available; calculated ATE >5,000 mg/kg        |
| Overall product  | Ingestion                      |         | No data available; calculated ATE 2,000 - 5,000 mg/kg |
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | Dermal                         | Rat     | LD50 > 2,000 mg/kg                                    |
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | Ingestion                      | Rat     | LD50 > 2,000 mg/kg                                    |
| Kaolin   | Dermal                         |         | LD50 estimated to be > 5,000 mg/kg                    |
| Kaolin   | Ingestion                      | Human   | LD50 > 15,000 mg/kg                                   |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | Dermal                         | Rabbit  | LD50 2,500 mg/kg                                      |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | Ingestion                      | Rat     | LD50 3,160 mg/kg                                      |
| Titanium dioxide   | Dermal                         | Rabbit  | LD50 > 10,000 mg/kg                                   |
| Titanium dioxide   | Inhalation-Dust/Mist (4 hours) | Rat     | LC50 > 6.82 mg/l                                      |
| Titanium dioxide   | Ingestion                      | Rat     | LD50 > 10,000 mg/kg                                   |
| Carbon black   | Dermal                         | Rabbit  | LD50 > 3,000 mg/kg                                    |
| Carbon black   | Ingestion                      | Rat     | LD50 > 8,000 mg/kg                                    |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name   | Species                | Value                     |
|--|------------------------|---------------------------|
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | Rat                    | Irritant                  |
| Kaolin   | Professional judgement | No significant irritation |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | Rabbit                 | Corrosive                 |
| Titanium dioxide   | Rabbit                 | No significant irritation |
| Carbon black   | Rabbit                 | No significant irritation |

**Serious Eye Damage/Irritation**

| Name   | Species                | Value                     |
|--|------------------------|---------------------------|
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | In vitro data          | Severe irritant           |
| Kaolin   | Professional judgement | No significant irritation |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | similar health hazards | Corrosive                 |
| Titanium dioxide   | Rabbit                 | No significant irritation |
| Carbon black   | Rabbit                 | No significant irritation |

**Skin Sensitisation**

| Name   | Species          | Value          |
|--|------------------|----------------|
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | Guinea pig       | Sensitising    |
| Titanium dioxide   | Human and animal | 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  |
|--|----------|--|
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | In Vitro | Not mutagenic  |
| Titanium dioxide   | In Vitro | Not mutagenic  |
| Titanium dioxide   | In vivo  | Not mutagenic  |
| Carbon black   | In Vitro | Not mutagenic  |
| Carbon black   | In vivo  | Some positive data exist, but the data are not sufficient for classification |

### Carcinogenicity

| Name             | Route      | Species                 | Value            |
|------------------|------------|-------------------------|------------------|
| Kaolin           | Inhalation | Multiple animal species | Not carcinogenic |
| Titanium dioxide | Ingestion  | Multiple animal species | Not carcinogenic |
| Titanium dioxide | Inhalation | Rat                     | 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

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

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

| Name   | Route      | Target Organ(s)                   | Value  | Species                | Test result         | Exposure Duration |
|--|------------|-----------------------------------|--|------------------------|---------------------|-------------------|
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | similar health hazards | Irritation Positive |                   |
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Rat                    | NOAEL Not available |                   |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification |                        | NOAEL Not available |                   |

#### Specific Target Organ Toxicity - repeated exposure

| Name             | Route      | Target Organ(s)    | Value  | Species | Test result         | Exposure Duration     |
|------------------|------------|--------------------|--|---------|---------------------|-----------------------|
| Kaolin           | Inhalation | pneumoconiosis     | Causes damage to organs through prolonged or repeated exposure               | Human   | NOAEL NA            | occupational exposure |
| Kaolin           | Inhalation | pulmonary fibrosis | Not classified   | Rat     | NOAEL Not available |                       |
| Titanium dioxide | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat     | LOAEL 0.01 mg/l     | 2 years               |
| Titanium dioxide | Inhalation | pulmonary fibrosis | Not classified   | Human   | NOAEL Not           | occupational          |



**3M (tm) Scotch-Weld(tm) DP-190 Part A**

|              |            |                |                |       |                                     |                                      |
|--------------|------------|----------------|----------------|-------|-------------------------------------|--------------------------------------|
| Carbon black | Inhalation | pneumoconiosis | Not classified | Human | available<br>NOAEL Not<br>available | exposure<br>occupational<br>exposure |
|--------------|------------|----------------|----------------|-------|-------------------------------------|--------------------------------------|

**Aspiration Hazard**

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

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

**SECTION 12: Ecological information**

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

**12.1. Toxicity**

No product test data available.

| Material   | CAS #      | Organism       | Type  | Exposure | Test endpoint            | Test result  |
|--|------------|----------------|---|----------|--------------------------|--------------|
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | 68911-25-1 |                | Data not available or insufficient for classification |          |                          |              |
| Kaolin   | 1332-58-7  | Water flea     | Experimental  | 48 hours | LC50                     | >1,100 mg/l  |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | 4246-51-9  | Golden Orfe    | Experimental  | 96 hours | LC50                     | >1,000 mg/l  |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | 4246-51-9  | Green algae    | Experimental  | 72 hours | EC50                     | >500 mg/l    |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | 4246-51-9  | Water flea     | Experimental  | 48 hours | EC50                     | 218.16 mg/l  |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | 4246-51-9  | Green algae    | Experimental  | 72 hours | Effect Concentration 10% | 5.4 mg/l     |
| Carbon black   | 1333-86-4  |                | Data not available or insufficient for classification |          |                          |              |
| Titanium dioxide   | 13463-67-7 | Diatom         | Experimental  | 72 hours | EC50                     | >10,000 mg/l |
| Titanium dioxide   | 13463-67-7 | Fathead minnow | Experimental  | 96 hours | LC50                     | >100 mg/l    |
| Titanium dioxide   | 13463-67-7 | Water flea     | Experimental  | 48 hours | EC50                     | >100 mg/l    |
| Titanium dioxide   | 13463-67-7 | Diatom         | Experimental  | 72 hours | NOEC                     | 5,600 mg/l   |

**12.2. Persistence and degradability**

| Material   | CAS Nbr    | Test type                       | Duration | Study Type | Test result | Protocol |
|--|------------|---------------------------------|----------|------------|-------------|----------|
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | 68911-25-1 | Data not available-insufficient |          |            | N/A         |          |
| Kaolin   | 1332-58-7  | Data not available-             |          |            | N/A         |          |

**3M (tm) Scotch-Weld(tm) DP-190 Part A**

|  |            |                                 |         |                               |   |   |
|--|------------|---------------------------------|---------|-------------------------------|---|---|
|  |            | insufficient                    |         |                               |   |   |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9  | Estimated Photolysis            |         | Photolytic half-life (in air) | 2.96 hours (t <sub>1/2</sub> )                                | Other methods                                 |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9  | Experimental Biodegradation     | 25 days | CO <sub>2</sub> evolution     | -8 %CO <sub>2</sub> evolution/THC<br>O <sub>2</sub> evolution | OECD 301B - Modified sturm or CO <sub>2</sub> |
| Carbon black                             | 1333-86-4  | Data not available/insufficient |         |                               | N/A   |   |
| Titanium dioxide                         | 13463-67-7 | Data not available/insufficient |         |                               | N/A   |   |

**12.3 : Bioaccumulative potential**

| Material   | Cas No.    | Test type   | Duration | Study Type             | Test result | Protocol      |
|--|------------|---|----------|------------------------|-------------|---------------|
| Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine) | 68911-25-1 | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A           |
| Kaolin   | 1332-58-7  | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A           |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine)   | 4246-51-9  | Experimental Bioconcentration                         |          | Log Kow                | -1.25       | Other methods |
| Carbon black   | 1333-86-4  | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A           |
| Titanium dioxide   | 13463-67-7 | Experimental BCF-Carp                                 | 42 days  | Bioaccumulation factor | 9.6         | Other methods |

**12.4. Mobility in soil**

Please contact manufacturer for more details

**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**

No information available.

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

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

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

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

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

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

## SECTION 14: Transportation information

ADR/IMDG/IATA: Not restricted for transport.

## SECTION 15: Regulatory information

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

#### Carcinogenicity

| <u>Ingredient</u> | <u>CAS Nbr</u> | <u>Classification</u>         | <u>Regulation</u>                           |
|-------------------|----------------|-------------------------------|---|
| Carbon black      | 1333-86-4      | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |
| Titanium dioxide  | 13463-67-7     | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |

### 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.

## SECTION 16: Other information

### List of relevant H statements

|      |  |
|------|--|
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation.                  |
| H317 | May cause an allergic skin reaction.     |
| H318 | Causes serious eye damage.               |
| H319 | Causes serious eye irritation.           |
| H336 | May cause drowsiness or dizziness.       |

### Revision information:

Label: CLP Classification information was modified.

Label: CLP Percent Unknown information was deleted.

Label: CLP Precautionary - Prevention information was modified.

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

Section 6: Accidental release clean-up information information was modified.

Section 7: Conditions safe storage information was modified.

Section 7: Precautions safe handling information information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Cancer Hazards information information was deleted.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Health Effects - Ingestion information information was modified.

Section 11: Health Effects - Inhalation information information was modified.

Section 11: Serious Eye Damage/Irritation Table information was modified.

Section 11: Single exposure may cause standard phrases information was added.

Section 11: Skin Corrosion/Irritation Table information was modified.

Section 11: Target Organs - Single Table information was modified.

Section 12: Component ecotoxicity information information was modified.

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

information was modified.

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

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