

## Safety Data Sheet

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| Document group:        | 11-1417-2  | Version number:  | 15.00      |
|------------------------|------------|------------------|------------|
| Revision date:         | 17/03/2025 | Supersedes date: | 10/12/2024 |
| 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>™</sup> Scotch-Weld<sup>™</sup> Epoxy Potting Compound/Adhesive DP270 Black

| Product Identification Numbers |                |                |  |
|--------------------------------|----------------|----------------|--|
| 62-3266-1436-9                 | 62-3266-3530-7 | UU-0101-3325-2 |  |
|                                |                |                |  |
| 7100082565                     | 7100148745     | 7100200492     |  |

#### 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 000E 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:

11-1418-0, 19-0425-9

## **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 Acute Toxicity, Category 3 - Acute Tox. 3; H311 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319 Skin Sensitization, Category 1 - Skin Sens. 1; H317 Reproductive Toxicity, Category 1B - Repr. 1B; H360FD Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373 Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400 Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

For full text of H phrases, see Section 16.

#### 2.2. Label elements The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

SIGNAL WORD DANGER.

#### Symbols

GHS06 (Skull and crossbones) |GHS08 (Health Hazard) |GHS09 (Environment) |

#### Pictograms



#### **Contains:**

benzyl alcohol; Carbon black; bis-[4-(2,3-epoxipropoxi)phenyl]propane; 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine); 4-nonylphenol, branched; Benzene, ethenyl-, homopolymer (oligomeric); Phenol, 2-nonyl-, branched

| HAZARD STATEMENTS: |  |
|--------------------|--|
| H302               | Harmful if swallowed.  |
| H311               | Toxic in contact with skin.  |
| H315               | Causes skin irritation.  |
| H319               | Causes serious eye irritation.   |
| H317               | May cause an allergic skin reaction.   |
| H360Fd             | May damage fertility. Suspected of damaging the unborn child                                       |
|                    |  |
| H373               | May cause damage to organs through prolonged or repeated exposure: blood or blood-forming          |
|                    | organs   cardiovascular system   endocrine system   kidney/urinary tract   liver   musculoskeletal |
|                    | system   |

#### H410

Very toxic to aquatic life with long lasting effects.

#### **PRECAUTIONARY STATEMENTS**

| Prevention: |   |
|-------------|---|
| P201        | Obtain special instructions before use.           |
| P260A       | Do not breathe vapours.                           |
| P273        | Avoid release to the environment.                 |
| P280C       | Wear protective gloves and protective clothing.   |
| Response:   | IT many demonstrate Catana finds deine (attention |

| P308 + P313 | IF exposed or concerned: Ge       | t medical advice/attention.     |
|-------------|-----------------------------------|---------------------------------|
| 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 |  |
|----------------------------|--|
| H311                       | Toxic in contact with skin.                                  |
| H317                       | May cause an allergic skin reaction.                         |
| H360Fd                     | May damage fertility. Suspected of damaging the unborn child |

#### <=125 ml Precautionary statements

| revention:'201Obtain special instructions before use.'280CWear protective gloves and protective clothing. |  |
|---|--|
| <b>Response:</b><br>P308 + P313<br>P333 + P313  | IF exposed or concerned: Get medical advice/attention.<br>If skin irritation or rash occurs: Get medical advice/attention. |

#### SUPPLEMENTAL INFORMATION:

#### **Supplemental Precautionary Statements:**

Restricted to professional users.

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

#### **Revision information:**

GB Label: CLP Ingredients - kit components information was modified. Label: CLP Classification information was modified. Label: CLP Precautionary - Prevention information was modified. Label: CLP Precautionary - Response information was modified. Label: CLP Target Organ Hazard Statement information was added.



## **Safety Data Sheet**

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| Document group:       | 11-1418-0  | Version number:  | 19.02      |
|-----------------------|------------|------------------|------------|
| <b>Revision date:</b> | 27/02/2023 | Supersedes date: | 02/07/2021 |

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<sup>™</sup> Scotch-Weld<sup>™</sup> Epoxy Potting Compound/Adhesive DP270 Black, Part B

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

**Identified uses** Additive

#### 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:**

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Skin Sensitization, Category 1 - Skin Sens. 1; H317
Reproductive Toxicity, Category 1B - Repr. 1B; H360F
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

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

#### SIGNAL WORD

DANGER.

#### Symbols

GHS07 (Exclamation mark) |GHS08 (Health Hazard) |GHS09 (Environment) |

#### **Pictograms**



| Ingredient                              | CAS Nbr   | EC No.    | % by Wt |
|---|-----------|-----------|---------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | 216-823-5 | 90 - 99 |
| Hydrocarbon resin                       | 9003-53-6 | 500-008-9 | 1 - 10  |
| Carbon black                            | 1333-86-4 | 215-609-9 | <= 1    |

#### HAZARD STATEMENTS:

| H315  | Causes skin irritation.              |
|-------|--------------------------------------|
| H319  | Causes serious eye irritation.       |
| H317  | May cause an allergic skin reaction. |
| H360F | May damage fertility.                |
|       |                                      |

H411

Toxic to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

| Obtain special instructions before use. |                                   |
|---|-----------------------------------|
| Avoid release to the environment.       |                                   |
| Wear protective gloves.                 |                                   |
|   |                                   |
|   | Avoid release to the environment. |

| if |
|----|
|    |
|    |
|    |
|    |

#### 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. |
| H360F                      | May damage fertility.                |

#### <=125 ml Precautionary statements

| Prevention: |  |
|-------------|--|
| P201        |  |

Obtain special instructions before use.

P280E

Wear protective gloves.

#### **Response:**

| responser   |                                    |                               |
|-------------|------------------------------------|-------------------------------|
| P308 + P313 | IF exposed or concerned: Get       | medical advice/attention.     |
| P333 + P313 | If skin irritation or rash occurs: | Get medical advice/attention. |
|             |                                    |                               |

#### SUPPLEMENTAL INFORMATION:

#### **Supplemental Precautionary Statements:**

Restricted to professional users.

5% of the mixture consists of components of unknown acute oral toxicity.

Contains 6% of components with unknown hazards to the aquatic environment.

#### 2.3. Other hazards

None known. This material does not contain any substances that are assessed to be a PBT or vPvB

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

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Ingredient                              | Identifier(s)                             | %       | Classification according to Regulation<br>(EC) No. 1272/2008 [CLP], as<br>amended for GB   |
|---|---|---------|--|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | (CAS-No.) 1675-54-3<br>(EC-No.) 216-823-5 | 90 - 99 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Aquatic Chronic 2, H411 |
| Hydrocarbon resin                       | (CAS-No.) 9003-53-6<br>(EC-No.) 500-008-9 | 1 - 10  | Repr. 1B, H360F  |
| Carbon black                            | (CAS-No.) 1333-86-4<br>(EC-No.) 215-609-9 | <= 1    | Substance with a national occupational exposure limit                                      |

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

#### **Specific Concentration Limits**

| Ingredient | Identifier(s) | Specific Concentration Limits                                 |
|------------|---------------|---|
|            |               | (C >= 5%) Skin Irrit. 2, H315<br>(C >= 5%) Eye Irrit. 2, H319 |

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

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation

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

#### Skin contact

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

#### Eye contact

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

#### If swallowed

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

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

The most important symptoms and effects based on the GB CLP classification include: Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision).

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

Not applicable

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

#### 5.1. Extinguishing media

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

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

None inherent in this product.

#### Hazardous Decomposition or By-Products

| <u>Substance</u>                | <u>Condition</u>   |
|---------------------------------|--------------------|
| Aldehydes.                      | During combustion. |
| Hydrocarbons.                   | During combustion. |
| Carbon monoxide                 | During combustion. |
| Carbon dioxide.                 | During combustion. |
| Hydrogen Chloride               | During combustion. |
| Ketones.                        | During combustion. |
| Toxic vapour, gas, particulate. | During combustion. |

#### 5.3. Advice for fire-fighters

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

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

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

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

#### **6.2.** Environmental precautions

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

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

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

#### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

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

#### 7.1. Precautions for safe handling

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

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

Store away from acids. Store away from oxidising agents.

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

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

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

#### 8.1 Control parameters

#### **Occupational exposure limits**

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

| Ingredient   | CAS Nbr   | Agency | Limit type                           | Additional comments |
|--------------|-----------|--------|--------------------------------------|---------------------|
| Carbon black | 1333-86-4 | UK HSC | TWA: 3.5 mg/m <sup>3</sup> ; STEL: 7 |                     |
|              |           |        | 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.

#### **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. Indirect vented goggles.

Applicable Norms/Standards Use eye protection conforming to EN 166

#### Skin/hand protection

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

| Material         | Thickness (mm)    | Breakthrough Time |
|------------------|-------------------|-------------------|
| Polymer laminate | No data available | No data available |

Applicable Norms/Standards Use gloves tested to EN 374

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

#### **Respiratory protection**

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

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

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.            |
|------------------------------|--------------------|
| Colour                       | Black              |
| Odor                         | Very Mild Odor     |
| Odour threshold              | No data available. |
| Melting point/freezing point | No data available. |
| Boiling point/boiling range  | > 148.9 °C         |
| Flammability (solid, gas)    | Not applicable.    |
| Flammable Limits(LEL)        | Not applicable.    |
| Flammable Limits(UEL)        | Not applicable.    |

| Flash point                            |
|--|
| Autoignition temperature               |
| Decomposition temperature              |
| рН                                     |
| Kinematic Viscosity                    |
| Water solubility                       |
| Solubility- non-water                  |
| Partition coefficient: n-octanol/water |
| Vapour pressure                        |
| Density                                |
| Relative density                       |
| Relative Vapour Density                |
|  |

#### 9.2. Other information

No data available. substance/mixture is non-soluble (in water) 12,609 mm<sup>2</sup>/sec Nil No data available. <=186,158.4 Pa [@ 55 °C ] 1.15 g/ml 1.15 [Ref Std:WATER=1] Not applicable.

No data available.

> 93.3 °C [*Test Method*:Closed Cup]

| 9.2.2 Other safety characteristics |  |
|------------------------------------|--|
| EU Volatile Organic Compounds      |  |
| Evaporation rate                   |  |
| Molecular weight                   |  |

No data available. No data available. No data available.

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

#### **10.1 Reactivity**

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

**10.2 Chemical stability** Stable.

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

Hazardous polymerisation will not occur.

#### **10.4 Conditions to avoid**

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

## **10.5 Incompatible materials** Strong acids.

Strong oxidising agents.

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

**Substance** 

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.

Condition

#### Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Skin contact

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

#### Eye contact

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

#### Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. 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 |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal    | Rat     | LD50 > 1,600 mg/kg                             |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Rat     | LD50 > 1,000 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                                    |        | Value                     |
|---|--------|---------------------------|
|   |        |                           |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Rabbit | Mild irritant             |
| Carbon black                            | Rabbit | No significant irritation |

#### **Serious Eye Damage/Irritation**

| Name                                    | Species | Value                     |
|---|---------|---------------------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Rabbit  | Moderate irritant         |
| Carbon black                            | Rabbit  | No significant irritation |

#### Skin Sensitisation

| Name                                    | Species                | Value       |
|---|------------------------|-------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Human<br>and<br>animal | Sensitising |

#### **Respiratory Sensitisation**

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

#### Germ Cell Mutagenicity

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

#### Carcinogenicity

| Name                                    | Route      | Species | Value  |
|---|------------|---------|--|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal     | Mouse   | Some positive data exist, but the data are not |
|   |            |         | sufficient for classification                  |
| Carbon black                            | Dermal     | Mouse   | Not carcinogenic                               |
| Carbon black                            | Ingestion  | Mouse   | Not carcinogenic                               |
| Carbon black                            | Inhalation | Rat     | Carcinogenic.                                  |

#### **Reproductive Toxicity**

### **Reproductive and/or Developmental Effects**

| Name                                    | Route     | Value                                  | Species | Test result            | Exposure<br>Duration        |
|---|-----------|--|---------|------------------------|-----------------------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for female reproduction | Rat     | NOAEL 750<br>mg/kg/day | 2 generation                |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 750<br>mg/kg/day | 2 generation                |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal    | Not classified for development         | Rabbit  | NOAEL 300<br>mg/kg/day | during<br>organogenesis     |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for development         | Rat     | NOAEL 750<br>mg/kg/day | 2 generation                |
| Hydrocarbon resin                       | Ingestion | Toxic to female reproduction           | Rat     | NOAEL 5<br>mg/kg/day   | premating<br>into lactation |

#### 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<br>Duration  |
|---|------------|--|----------------|---------|-----------------------------|-----------------------|
| bis-[4-(2,3-<br>epoxipropoxi)phenyl]prop<br>ane | Dermal     | liver  | Not classified | Rat     | NOAEL<br>1,000<br>mg/kg/day | 2 years               |
| bis-[4-(2,3-<br>epoxipropoxi)phenyl]prop<br>ane | Dermal     | nervous system   | Not classified | Rat     | NOAEL<br>1,000<br>mg/kg/day | 13 weeks              |
| bis-[4-(2,3-<br>epoxipropoxi)phenyl]prop<br>ane | Ingestion  | auditory system  <br>heart   endocrine<br>system  <br>hematopoietic<br>system   liver   eyes  <br>kidney and/or<br>bladder | Not classified | Rat     | NOAEL<br>1,000<br>mg/kg/day | 28 days               |
| Carbon black                                    | Inhalation | pneumoconiosis   | Not classified | Human   | NOAEL Not<br>available      | occupational exposure |

#### **Aspiration Hazard**

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

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

#### 11.2. Information on other hazards

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

## **SECTION 12: Ecological information**

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

#### 12.1. Toxicity

No product test data available.

| Material  | CAS #     | Organism         | Туре  | Exposure | Test endpoint | Test result |
|---|-----------|------------------|---|----------|---------------|-------------|
| bis-[4-(2,3-<br>epoxipropoxi)phen<br>yl]propane | 1675-54-3 | Activated sludge | Analogous<br>Compound                                       | 3 hours  | IC50          | >100 mg/l   |
| bis-[4-(2,3-<br>epoxipropoxi)phen<br>yl]propane | 1675-54-3 | Rainbow trout    | Estimated   | 96 hours | LC50          | 2 mg/l      |
| bis-[4-(2,3-<br>epoxipropoxi)phen<br>yl]propane | 1675-54-3 | Water flea       | Estimated   | 48 hours | EC50          | 1.8 mg/l    |
| bis-[4-(2,3-<br>epoxipropoxi)phen<br>yl]propane | 1675-54-3 | Green algae      | Experimental  | 72 hours | ErC50         | >11 mg/l    |
| bis-[4-(2,3-<br>epoxipropoxi)phen<br>yl]propane | 1675-54-3 | Green algae      | Experimental  | 72 hours | NOEC          | 4.2 mg/l    |
| bis-[4-(2,3-<br>epoxipropoxi)phen<br>yl]propane | 1675-54-3 | Water flea       | Experimental  | 21 days  | NOEC          | 0.3 mg/l    |
| Hydrocarbon resin                               | 9003-53-6 | N/A              | Data not available<br>or insufficient for<br>classification | N/A      | N/A           | N/A         |
| Carbon black                                    | 1333-86-4 | Activated sludge | Experimental  | 3 hours  | EC50          | >=100 mg/l  |
| Carbon black                                    | 1333-86-4 | N/A              | Data not available<br>or insufficient for<br>classification | N/A      | N/A           | N/A         |

#### 12.2. Persistence and degradability

| Material  | CAS Nbr   | Test type                         | Duration | Study Type                     | Test result | Protocol                               |
|---|-----------|-----------------------------------|----------|--------------------------------|-------------|--|
| bis-[4-(2,3-<br>epoxipropoxi)phen<br>yl]propane | 1675-54-3 | Experimental<br>Biodegradation    | 28 days  | BOD                            | 5 %BOD/COD  | OECD 301F - Manometric<br>respirometry |
| bis-[4-(2,3-<br>epoxipropoxi)phen<br>yl]propane | 1675-54-3 | Experimental<br>Hydrolysis        |          | Hydrolytic half-life<br>(pH 7) |             | OECD 111 Hydrolysis func<br>of pH      |
| Hydrocarbon resin                               | 9003-53-6 | Data not availbl-<br>insufficient | N/A      | N/A                            | N/A         | N/A                                    |
| Carbon black                                    | 1333-86-4 | Data not availbl-                 | N/A      | N/A                            | N/A         | N/A                                    |

|  | insufficient |  |  |
|--|--------------|--|--|

#### **12.3 : Bioaccumulative potential**

| Material  | Cas No.   | Test type   | Duration | Study Type | Test result | Protocol                        |
|---|-----------|---|----------|------------|-------------|---------------------------------|
| bis-[4-(2,3-<br>epoxipropoxi)phen<br>yl]propane | 1675-54-3 | Experimental<br>Bioconcentration                            |          | Log Kow    | 3.242       | OECD 117 log Kow HPLC<br>method |
| Hydrocarbon resin                               | 9003-53-6 | 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<br>or insufficient for<br>classification | N/A      | N/A        | N/A         | N/A                             |

#### 12.4. Mobility in soil

| Material  | Cas No. | Test type                   | Study Type | Test result | Protocol  |
|---|---------|-----------------------------|------------|-------------|-----------|
| bis-[4-(2,3-<br>epoxipropoxi)pheny<br>l]propane |         | Modeled Mobility<br>in Soil | Koc        | 450 l/kg    | Episuite™ |

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

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

#### 12.6. 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 09\* Waste adhesives and sealants containing organic solvents or other dangerous substances

## **SECTION 14: Transportation information**

|                | Ground Transport (ADR | ) Air Transport (IATA) | Marine Transport (IMDG) |
|----------------|-----------------------|------------------------|-------------------------|
| 14.1 UN number | UN3082                | UN3082                 | UN3082                  |

| 14.2 UN proper<br>shipping name  | ENVIRONMENTALLY<br>HAZARDOUS<br>SUBSTANCE, LIQUID,<br>N.O.S.(LIQUID EPOXY<br>RESIN) | ENVIRONMENTALLY<br>HAZARDOUS<br>SUBSTANCE, LIQUID,<br>N.O.S.(LIQUID EPOXY<br>RESIN) | ENVIRONMENTALLY<br>HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S.(LIQUID EPOXY<br>RESIN) |
|--|---|---|--|
| 14.3 Transport hazard class(es)  | 9   | 9   | 9  |
| 14.4 Packing group   | III   | III   | III  |
| 14.5 Environmental<br>hazards  | Environmentally Hazardous   | Not applicable  | Marine Pollutant   |
| 14.6 Special precautions for user  | Please refer to the other<br>sections of the SDS for<br>further information.        | Please refer to the other<br>sections of the SDS for further<br>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   | M6  | Not applicable.   | Not applicable.  |
| IMDG Segregation<br>Code   | Not applicable.   | Not applicable.   | NONE   |

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

## **SECTION 15: Regulatory information**

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

| Carcinogenicity<br><u>Ingredient</u>    | <u>CAS Nbr</u> | <u>Classification</u>         | <u>Regulation</u>                           |
|---|----------------|-------------------------------|---|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3      | Gr. 3: Not classifiable       | International Agency for Research on Cancer |
| Carbon black                            | 1333-86-4      | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |
| Hydrocarbon resin                       | 9003-53-6      | 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.

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

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

#### **Global inventory status**

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

#### COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

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

Seveso named dangerous substances, Annex 1, Part 2 None

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

| H315  | Causes skin irritation.                          |
|-------|--|
| H317  | May cause an allergic skin reaction.             |
| H319  | Causes serious eye irritation.                   |
| H360F | May damage fertility.                            |
| H411  | Toxic to aquatic life with long lasting effects. |

**Revision information:** Formulation: Section 16: Annex information was deleted. GB Section 02: CLP Ingredient table information was added. GB Section 02: Other hazards phrase information was added. GB Section 04: First Aid - Symptoms and Effects (GB CLP) information was added. GB Section 04: Information on toxicological effects information was added. GB Section 12: Classification Warning information was added. GB Section 15: Carcinogenicity information information was added. GB Section 15: Chemical Safety Assessment information was added. GBSDS Section 14 Transport in bulk - Main Heading information was added. GBSDS Section 14 UN Number information was added. Industrial Use of Adhesives: Section 16: Annex information was deleted. CLP: Ingredient table information was deleted. Label: CLP Classification information was modified. Label: CLP Percent Unknown information was deleted. Section 02: Label Elements: GB Percent Unknown information was added. Section 2: Other hazards phrase information was deleted. Section 3: Composition/ Information of ingredients table information was added. Section 3: Composition/Information of ingredients table information was deleted. Section 03: SCL table information was added. Section 03: SCL table information was deleted. Section 04: First Aid - Symptoms and Effects (CLP) information was deleted. Section 04: Information on toxicological effects information was deleted. Section 8: 8.2. Exposure controls information information was deleted. Section 8: 8.2.3. Environmental exposure controls information information was deleted. Section 8: DNEL table row information was deleted. Section 8: Eye/face protection information information was modified. Section 8: Personal Protection - Skin/body information information was added. Section 8: PNEC table row information was deleted. Section 8: Skin protection - protective clothing information information was added. Section 09: Kinematic Viscosity information information was modified. Section 9: Vapour density value information was modified. Section 11: Classification disclaimer information was deleted. Section 11: GB Classification disclaimer information was added. Section 11: GB No endocrine disruptor information available warning information was added. Section 11: No endocrine disruptor information available warning information was deleted. Section 11: Reproductive Toxicity Table information was modified. Section 11: Target Organs - Repeated Table information was added. Section 11: Target Organs - Repeated Table information was deleted. Section 12: 12.6. Endocrine Disrupting Properties information was deleted. Section 12: 12.6. Other adverse effects information was added. Section 12: 12.7. Other adverse effects information was deleted. Section 12: Classification Warning information was deleted. Section 12: Component ecotoxicity information information was modified. Section 12: Mobility in soil information information was added. Prints No Data if Adverse effects information is not present information was deleted. Section 12: No Data text for mobility in soil information was deleted. Section 12: No endocrine disruptor information available warning information was added. Section 12: No endocrine disruptor information available warning information was deleted. Section 12: Persistence and Degradability information information was modified. Section 12:Bioccumulative potential information information was modified. Section 14 Classification Code - Regulation Data information was modified. Section 14 Hazard Class + Sub Risk - Regulation Data information was modified. Section 14 Hazardous/Not Hazardous for Transportation information was modified. Section 14 Multiplier - Main Heading information was deleted. Section 14 Multiplier - Regulation Data information was deleted.

Section 14 Other Dangerous Goods - Regulation Data information was modified.

Section 14 Packing Group – Regulation Data information was modified.

Section 14 Proper Shipping Name information was modified.

Section 14 Segregation – Regulation Data information was modified.

Section 14 Transport Category - Main Heading information was deleted.

Section 14 Transport Category – Regulation Data information was deleted.

Section 14 Marine transport in bulk according to IMO instruments - Main Heading information was deleted.

Section 14 Tunnel Code – Main Heading information was deleted.

Section 14 Tunnel Code – Regulation Data information was deleted.

Section 14 UN Number Column data information was modified.

Section 14 UN Number information was deleted.

Section 14: Transportation classification information was deleted.

Section 15: Carcinogenicity information information was deleted.

Section 15: Chemical Safety Assessment information was deleted.

Section 15: Restrictions on manufacture ingredients information information was added.

Section 15: Seveso Hazard Category Text information was added.

Annex: Prediction of exposure statement information was deleted.

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

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

Section 16: Web address information was added.

Section 16: Web address information was deleted.

Section 2: No PBT/vPvB information available warning information was added.

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.



## Safety Data Sheet

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| Document group:       | 19-0425-9  | Version number:  | 17.00      |
|-----------------------|------------|------------------|------------|
| <b>Revision date:</b> | 14/03/2025 | Supersedes date: | 28/02/2023 |

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

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

#### 1.1. Product identifier

3M<sup>™</sup> Scotch-Weld<sup>™</sup> Epoxy Potting Compound/Adhesive DP270 Black, Part A

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

#### **Identified uses** Structural adhesive.

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

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

## **1.4. Emergency telephone number**

+44 (0)1344 858 000

## **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.

This material has been tested for eye damage/irritation and the test results are reflected in the assigned classification. This material has been tested for skin corrosion/irritation and the test results are reflected in the assigned classification.

## **CLASSIFICATION:**

Acute Toxicity, Category 4 - Acute Tox. 4; H302 Acute Toxicity, Category 3 - Acute Tox. 3; H311 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319 Reproductive Toxicity, Category 2 - Repr. 2; H361fd

Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373 Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400 Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

For full text of H phrases, see Section 16.

#### 2.2. Label elements

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

#### SIGNAL WORD

DANGER.

#### Symbols

GHS06 (Skull and crossbones) |GHS08 (Health Hazard) |GHS09 (Environment) |

**Pictograms** 



| Ingredient                                       | CAS Nbr    | EC No.    | % by Wt |
|--|------------|-----------|---------|
| 4-nonylphenol, branched                          | 84852-15-3 | 284-325-5 | 40 - 60 |
| 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) | 6864-37-5  | 229-962-1 | 15 - 40 |
| benzyl alcohol                                   | 100-51-6   | 202-859-9 | 1 - 10  |
| Phenol, 2-nonyl-, branched                       | 91672-41-2 | 294-048-1 | < 10    |

| HAZARD STATEMENTS: |  |
|--------------------|--|
| H302               | Harmful if swallowed.  |
| H311               | Toxic in contact with skin.  |
| H315               | Causes skin irritation.  |
| H319               | Causes serious eye irritation.   |
| H361fd             | Suspected of damaging fertility. Suspected of damaging the unborn child.   |
| H373               | May cause damage to organs through prolonged or repeated exposure: blood or blood-forming organs   cardiovascular system   endocrine system   kidney/urinary tract   liver   musculoskeletal system. |
| H410               | Very toxic to aquatic life with long lasting effects.  |

#### PRECAUTIONARY STATEMENTS

| Prevention:<br>P260A<br>P273<br>P280C          | Do not breathe vapours.<br>Avoid release to the environment.<br>Wear protective gloves and protective clothing.                |                           |
|--|--|---------------------------|
| <b>Response:</b><br>P305 + P351 + P338<br>P391 | IF IN EYES: Rinse cautiously with water for several minutes.<br>present and easy to do. Continue rinsing.<br>Collect spillage. | Remove contact lenses, if |

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

#### <=125 ml Hazard statements

| H311   | Toxic in contact with skin.  |
|--------|--|
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |

#### <=125 ml Precautionary statements

#### Prevention:

P280C Wear protective gloves and protective clothing.

9% of the mixture consists of components of unknown acute dermal toxicity.

#### 2.3. Other hazards

Contains a substance identified as an endocrine disrupter in the list established in accordance with REACH Article 59(1), as amended by UK REACH Regulations SI 2019/758 This material does not contain any substances that are assessed to be a PBT or vPvB

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

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Ingredient   | Identifier(s)                              | %       | Classification according to Regulation<br>(EC) No. 1272/2008 [CLP], as<br>amended for GB  |
|--|--|---------|---|
| 4-nonylphenol, branched                              | (CAS-No.) 84852-15-3<br>(EC-No.) 284-325-5 | 40 - 60 | Acute Tox. 4, H302<br>Skin Corr. 1B, H314<br>Repr. 2, H361df<br>Aquatic Acute 1, H400,M=10<br>Aquatic Chronic 1, H410,M=10<br>Eye Dam. 1, H318<br>Repr. 2, H361df |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexylamine) | (CAS-No.) 6864-37-5<br>(EC-No.) 229-962-1  | 15 - 40 |   |
| Phenol, 2-nonyl-, branched                           | (CAS-No.) 91672-41-2<br>(EC-No.) 294-048-1 | < 10    | Acute Tox. 4, H302<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Repr. 2, H361df<br>Aquatic Acute 1, H400,M=10<br>Aquatic Chronic 1, H410,M=10                    |
| benzyl alcohol                                       | (CAS-No.) 100-51-6<br>(EC-No.) 202-859-9   | 1 - 10  | Acute Tox. 4, H332<br>Acute Tox. 4, H302  |

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. Get medical attention. Wash clothing before reuse.

#### Eye contact

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

#### If swallowed

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

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

The most important symptoms and effects based on the GB CLP classification include: Toxic in contact with skin. Irritation to the skin (localized redness, swelling, itching, and dryness). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired 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

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

| <u>Substance</u>                |
|---------------------------------|
| Amine compounds.                |
| Carbon monoxide                 |
| Carbon dioxide.                 |
| Oxides of nitrogen.             |
| Toxic vapour, gas, particulate. |

#### 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

## <u>Condition</u> During combustion. During combustion. During combustion. During combustion.

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

#### **6.2.** Environmental precautions

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

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

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

#### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

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

#### 7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. 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. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

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

Store away from acids. Store away from oxidising agents.

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

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

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

#### 8.1 Control parameters

#### **Occupational exposure limits**

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

#### **Biological limit values**

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

#### 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. Indirect vented goggles.

*Applicable Norms/Standards* Use eye protection conforming to EN 166

#### **Skin/hand protection**

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

**Material** Polymer laminate Thickness (mm) No data available **Breakthrough Time** No data available

Applicable Norms/Standards Use gloves tested to EN 374

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

#### **Respiratory protection**

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

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

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

#### Applicable Norms/Standards

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

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

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

| Physical state               | Liquid.   |
|------------------------------|---|
| Colour                       | Colourless  |
| Odor                         | Mild Amine, Pungent Odour   |
| Odour threshold              | No data available.  |
| Melting point/freezing point | No data available.  |
| Boiling point/boiling range  | 205 °C [ <i>Details</i> :CONDITIONS: @ 760mm Hg (benzyl alcohol)] |
| Flammability                 | Not applicable.   |

| Flammable Limits(LEL)                  | No data available.                                  |  |
|--|---|--|
| Flammable Limits(UEL)                  | No data available.                                  |  |
| Flash point                            | > 115.6 °C [ <i>Test Method</i> :Closed Cup]        |  |
| Autoignition temperature               | No data available.                                  |  |
| Decomposition temperature              | No data available.                                  |  |
| рН                                     | substance/mixture is non-soluble (in water)         |  |
| Kinematic Viscosity                    | 13,500 mm <sup>2</sup> /sec                         |  |
| Water solubility                       | Slight (less than 10%)                              |  |
| Solubility- non-water                  | No data available.                                  |  |
| Partition coefficient: n-octanol/water | No data available.                                  |  |
| Vapour pressure                        | 13.3 Pa [Details:CONDITIONS: @ 86F (30C); 13.3mm Hg |  |
|  | @ 212F (100C).]                                     |  |
| Density                                | 1 g/ml  |  |
| Relative density                       | 1 [ <i>Ref Std</i> :WATER=1]                        |  |
| Relative Vapour Density                | 3.72 [ <i>Ref Std</i> :AIR=1]                       |  |
| Particle Characteristics               | Not applicable.                                     |  |
|  |   |  |

#### 9.2. Other information

| 9.2.2 Other safety characteristics |                    |
|------------------------------------|--------------------|
| EU Volatile Organic Compounds      | No data available. |
| Evaporation rate                   | No data available. |
| Molecular weight                   | No data available. |

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

#### 10.1 Reactivity

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

#### 10.2 Chemical stability

Stable.

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

Hazardous polymerisation will not occur.

#### **10.4 Conditions to avoid**

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

## **10.5 Incompatible materials**

Strong acids. Strong oxidising agents.

#### 10.6 Hazardous decomposition products

<u>Substance</u>

None known.

**Condition** 

Refer to section 5.2 for hazardous decomposition products during combustion.

## **SECTION 11: Toxicological information**

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

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

#### Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Skin contact

Toxic in contact with skin.

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

#### Eye contact

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

#### Ingestion

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:

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

Cardiac effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal. Hematopoietic effects: Signs/symptoms may include generalised weakness, fatigue and alterations in numbers of circulating blood cells. Liver effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice. Muscular effects: Signs/symptoms may include generalised muscle weakness, paralysis and atrophy. Endocrine effects: Signs/symptoms may include disruption of gonadal, thyroid, adrenal, or pancreatic function, changes in hormone production, alterations in circulating hormone levels, and/or changes in tissue response to hormones. Kidney/Bladder effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

#### **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 | Dermal    |         | No data available; calculated ATE >200 - =1,000 |
|                 |           |         | mg/kg   |
| Overall product | Ingestion |         | No data available; calculated ATE >300 - =2,000 |
|                 | -         |         | mg/kg   |

| 4-nonylphenol, branched                          | Dermal      | Rabbit | LD50 > 2,000 mg/kg |
|--|-------------|--------|--------------------|
| 4-nonylphenol, branched                          | Ingestion   | Rat    | LD50 1,531 mg/kg   |
| 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) | Dermal      | Rabbit | LD50 > 200 mg/kg   |
| 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) | Inhalation- | Rat    | LC50 0.42 mg/l     |
|  | Dust/Mist   |        |                    |
|  | (4 hours)   |        |                    |
| 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) | Ingestion   | Rat    | LD50 > 320 mg/kg   |
| benzyl alcohol                                   | Inhalation- | Rat    | LC50 8.8 mg/l      |
|  | Dust/Mist   |        |                    |
|  | (4 hours)   |        |                    |
| benzyl alcohol                                   | Ingestion   | Rat    | LD50 1,200 mg/kg   |
| Phenol, 2-nonyl-, branched                       | Dermal      | Rabbit | LD50 > 2,000 mg/kg |
| Phenol, 2-nonyl-, branched                       | Ingestion   | Rat    | LD50 1,531 mg/kg   |
| ATE - aguta taxiaity actimate                    |             |        |                    |

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

| Name   | Species  | Value         |
|--|----------|---------------|
|  |          |               |
| Overall product                                  | In vitro | Irritant      |
|  | data     |               |
| 4-nonylphenol, branched                          | Rabbit   | Corrosive     |
| 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) | Rabbit   | Corrosive     |
| benzyl alcohol                                   | Multiple | Mild irritant |
|  | animal   |               |
|  | species  |               |
| Phenol, 2-nonyl-, branched                       | Rabbit   | Corrosive     |

#### Serious Eye Damage/Irritation

| Name   | Species | Value           |
|--|---------|-----------------|
|  |         |                 |
| Overall product                                  | similar | Severe irritant |
|  | health  |                 |
|  | hazards |                 |
| 4-nonylphenol, branched                          | Rabbit  | Corrosive       |
| 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) | Rabbit  | Corrosive       |
| benzyl alcohol                                   | Rabbit  | Severe irritant |
| Phenol, 2-nonyl-, branched                       | Rabbit  | Corrosive       |

#### **Skin Sensitisation**

| Name   | Species | Value  |
|--|---------|--|
|  |         |  |
| 4-nonylphenol, branched                          | Guinea  | Not classified                                 |
|  | pig     |  |
| 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) | Guinea  | Not classified                                 |
|  | pig     |  |
| benzyl alcohol                                   | Human   | Some positive data exist, but the data are not |
|  |         | sufficient for classification                  |
| Phenol, 2-nonyl-, branched                       | 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  |
|--|----------|--|
|  |          |  |
| 4-nonylphenol, branched                          | In Vitro | Not mutagenic                                  |
| 4-nonylphenol, branched                          | In vivo  | Not mutagenic                                  |
| 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) | In Vitro | Not mutagenic                                  |
| benzyl alcohol                                   | In vivo  | Not mutagenic                                  |
| benzyl alcohol                                   | In Vitro | Some positive data exist, but the data are not |
|  |          | sufficient for classification                  |

| Phenol, 2-nonyl-, branched | In Vitro | Not mutagenic |
|----------------------------|----------|---------------|
| Phenol, 2-nonyl-, branched | In vivo  | Not mutagenic |

#### Carcinogenicity

| Name           | Route     | Species  | Value            |
|----------------|-----------|----------|------------------|
| benzyl alcohol | Ingestion | Multiple | Not carcinogenic |
|                |           | animal   |                  |
|                |           | species  |                  |

#### **Reproductive Toxicity**

## **Reproductive and/or Developmental Effects**

| Name   | Route     | Value                                  | Species                        | Test result            | Exposure<br>Duration    |
|--|-----------|--|--------------------------------|------------------------|-------------------------|
| 4-nonylphenol, branched                              | Ingestion | Not classified for male reproduction   | Rat                            | NOAEL 400<br>mg/kg/day | 28 days                 |
| 4-nonylphenol, branched                              | Ingestion | Toxic to female reproduction           | official<br>classificat<br>ion | NOAEL Not<br>available |                         |
| 4-nonylphenol, branched                              | Ingestion | Toxic to development                   | official<br>classificat<br>ion | NOAEL Not<br>available |                         |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexylamine) | Ingestion | Not classified for female reproduction | Rat                            | NOAEL 1.5<br>mg/kg/day | 1 generation            |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexylamine) | Ingestion | Not classified for male reproduction   | Rat                            | NOAEL 1.5<br>mg/kg/day | 1 generation            |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexylamine) | Ingestion | Not classified for development         | Rat                            | NOAEL 45<br>mg/kg/day  | during gestation        |
| benzyl alcohol                                       | Ingestion | Not classified for development         | Mouse                          | NOAEL 550<br>mg/kg/day | during<br>organogenesis |
| Phenol, 2-nonyl-, branched                           | Ingestion | Not classified for male reproduction   | Rat                            | NOAEL 400<br>mg/kg/day | 28 days                 |
| Phenol, 2-nonyl-, branched                           | Ingestion | Toxic to female reproduction           | official<br>classificat<br>ion | NOAEL Not<br>available |                         |
| Phenol, 2-nonyl-, branched                           | Ingestion | Toxic to development                   | official<br>classificat<br>ion | NOAEL Not<br>available |                         |

## Target Organ(s)

### Specific Target Organ Toxicity - single exposure

| Name   | Route      | Target Organ(s)                      | Value  | Species                      | Test result            | Exposure<br>Duration |
|--|------------|--------------------------------------|--|------------------------------|------------------------|----------------------|
| 4-nonylphenol, branched                                  | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | similar<br>health<br>hazards | NOAEL Not<br>available |                      |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexyla<br>mine) | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | Rat                          | NOAEL Not<br>available |                      |
| benzyl alcohol   | Inhalation | central nervous system depression    | May cause drowsiness or<br>dizziness   |                              | NOAEL Not<br>available |                      |
| benzyl alcohol   | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification |                              | NOAEL Not<br>available |                      |
| benzyl alcohol   | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  |                              | NOAEL Not<br>available |                      |
| Phenol, 2-nonyl-, branched                               | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | similar<br>health<br>hazards | NOAEL Not<br>available |                      |

## Specific Target Organ Toxicity - repeated exposure

|  | Name | Route | Target Organ(s) | Value | Species | Test result | Exposure<br>Duration |
|--|------|-------|-----------------|-------|---------|-------------|----------------------|
|--|------|-------|-----------------|-------|---------|-------------|----------------------|

| 4-nonylphenol, branched                                  | Ingestion   | endocrine system  <br>hematopoietic<br>system   liver  | Not classified   | Rat   | NOAEL 400<br>mg/kg/day | 28 days                  |
|--|---|--|--|-------|------------------------|--------------------------|
| 4-nonylphenol, branched                                  | Ingestion   | kidney and/or<br>bladder   heart  <br>bone, teeth, nails,<br>and/or hair  <br>immune system  <br>muscles   nervous<br>system   respiratory<br>system | Not classified   | Rat   | NOAEL 150<br>mg/kg/day | 90 days                  |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexyla<br>mine) | Inhalation  | endocrine system  <br>hematopoietic<br>system   liver  <br>kidney and/or<br>bladder   respiratory<br>system  | Not classified   | Rat   | NOAEL<br>0.048 mg/l    | 3 months                 |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexyla<br>mine) | Inhalation  | skin   | Not classified   | Human | NOAEL Not<br>available | occupational<br>exposure |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexyla<br>mine) | 2,2'-dimethyl-4,4'- Inhalation heart   gastrointestinal tract |  | Not classified   | Rat   | NOAEL<br>0.048 mg/l    | 3 months                 |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexyla<br>mine) | Ingestion   | muscles  | May cause damage to organs<br>though prolonged or repeated<br>exposure | Rat   | NOAEL 5<br>mg/kg/day   | 3 months                 |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexyla<br>mine) | Ingestion   | heart   kidney and/or<br>bladder   | May cause damage to organs<br>though prolonged or repeated<br>exposure | Rat   | NOAEL 2.5<br>mg/kg/day | 3 months                 |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexyla<br>mine) | Ingestion   | endocrine system  <br>hematopoietic<br>system   liver  | May cause damage to organs<br>though prolonged or repeated<br>exposure | Rat   | NOAEL 12<br>mg/kg/day  | 3 months                 |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclohexyla<br>mine) | Ingestion   | gastrointestinal tract<br>  immune system  <br>nervous system  <br>eyes   respiratory<br>system  | Not classified   | Rat   | NOAEL 5<br>mg/kg/day   | 3 months                 |
| benzyl alcohol   | Ingestion   | endocrine system  <br>muscles   kidney<br>and/or bladder   | Not classified   | Rat   | NOAEL 400<br>mg/kg/day | 13 weeks                 |
| benzyl alcohol   | Ingestion   | nervous system  <br>respiratory system   | Not classified   | Mouse | NOAEL 645<br>mg/kg/day | 8 days                   |
| Phenol, 2-nonyl-, branched                               | Ingestion   | endocrine system  <br>hematopoietic<br>system   liver  | Not classified   | Rat   | NOAEL 400<br>mg/kg/day | 28 days                  |
| Phenol, 2-nonyl-, branched                               | Ingestion   | kidney and/or<br>bladder   heart  <br>bone, teeth, nails,<br>and/or hair  <br>immune system  <br>muscles   nervous<br>system   respiratory<br>system | Not classified   | Rat   | NOAEL 150<br>mg/kg/day | 90 days                  |

#### 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          | Туре          | Exposure          | Test endpoint | Test result             |
|---------------------|------------|-------------------|---------------|-------------------|---------------|-------------------------|
| 4-nonylphenol,      | 84852-15-3 | Fish              | Analogous     | 96 hours          | LC50          | 0.05 mg/l               |
| branched            |            |                   | Compound      |                   |               |                         |
| 4-nonylphenol,      | 84852-15-3 | Green algae       | Analogous     | 72 hours          | ErC50         | 0.323 mg/l              |
| branched            |            | E E               | Compound      |                   |               | 6                       |
| 4-nonylphenol,      | 84852-15-3 | Invertebrate      | Analogous     | 96 hours          | LC50          | 0.038 mg/l              |
| branched            |            |                   | Compound      |                   |               |                         |
| 4-nonylphenol,      | 84852-15-3 | Diatom            | Experimental  | 96 hours          | EC50          | 0.027 mg/l              |
| branched            | 01002 10 0 | Dimtoin           | Emperation    | 50 110 110        | 2000          | 0.027 mg/1              |
| 4-nonylphenol,      | 84852-15-3 | Fish              | Experimental  | 96 hours          | LC50          | 0.017 mg/l              |
| branched            |            |                   |               |                   |               |                         |
| 4-nonylphenol,      | 84852-15-3 | Water flea        | Experimental  | 48 hours          | LC50          | 0.02 mg/l               |
| branched            | 01002 10 0 | in aller freu     | Liperintental | io nouio          | 2000          | 0.02 mg 1               |
| 4-nonylphenol,      | 84852-15-3 | Green algae       | Analogous     | 72 hours          | ErC10         | 0.0251 mg/l             |
| branched            | 01002 10 0 | or con ungat      | Compound      | , <b>2</b> notito | Liero         | 0.0201 mg/1             |
| 4-nonylphenol,      | 84852-15-3 | Midge             | Analogous     | 28 days           | EC10          | 203 mg/kg (Dry Weight)  |
| branched            | 01002 10 0 | ininge            | Compound      | 20 au 35          | Leite         |                         |
| 4-nonylphenol,      | 84852-15-3 | Rainbow trout     | Analogous     | 91 days           | NOEC          | 0.006 mg/l              |
| branched            | 04052 15 5 | Rumoow trout      | Compound      | JI duys           | Role          | 0.000 mg/1              |
| 4-nonylphenol,      | 84852-15-3 | Water flea        | Analogous     | 21 days           | NOEC          | 0.024 mg/l              |
| branched            | 04052 15 5 | Water nea         | Compound      | 21 duy5           | NOLC          | 0.024 mg/1              |
| 4-nonylphenol,      | 84852-15-3 | Mysid Shrimp      | Experimental  | 28 days           | NOEC          | 0.0039 mg/l             |
| branched            | 04052 15 5 | Niysia Shi hip    | Experimental  | 20 uuys           | Role          | 0.0059 mg/1             |
| 4-nonylphenol,      | 84852-15-3 | Activated sludge  | Analogous     | 3 hours           | EC50          | 950 mg/l                |
| branched            | 04052 15 5 | retivated studge  | Compound      | 5 110015          | 1000          | 550 mg/1                |
| 4-nonylphenol,      | 84852-15-3 | Japanese quail    | Analogous     | 147 days          | NOEC          | -10 ppm diet            |
| branched            | 04052 15 5 | supunese quan     | Compound      | 147 duys          | NOLC          | ro ppin diet            |
| 4-nonylphenol,      | 84852-15-3 | Lettuce           | Analogous     | 14 days           | EC50          | 625 mg/kg (Dry Weight)  |
| branched            | 01002 10 0 | Lottude           | Compound      | 1 augs            | 1000          |                         |
| 4-nonylphenol,      | 84852-15-3 | Soil microbes     | Analogous     | 40 days           | NOEC          | 100 mg/kg (Dry Weight)  |
| branched            | 01002 10 0 | Son merodes       | Compound      | io adys           | NOLC          |                         |
| 4-nonylphenol,      | 84852-15-3 | Springtail        | Analogous     | 21 days           | EC10          | 23 mg/kg (Dry Weight)   |
| branched            | 01002 10 0 | opringuin         | Compound      | 21 auys           | 2010          |                         |
| 4-nonylphenol,      | 84852-15-3 | Worm              | Analogous     | 14 days           | LC50          | 88.6 mg/kg (Wet Weight) |
| branched            | 01002 10 0 | W OTHE            | Compound      | 1 augs            | 2000          |                         |
| 4-nonylphenol,      | 84852-15-3 | Worm              | Analogous     | 28 days           | NOEC          | 24 mg/kg (Dry Weight)   |
| branched            | 01002 10 0 | W OTHE            | Compound      | 20 au 35          | Rolle         |                         |
| 2,2'-dimethyl-4,4'- | 6864-37-5  | Activated sludge  | Experimental  | 30 minutes        | EC20          | 160 mg/l                |
| methylenebis(cyclo  | 0001 57 5  | rich valou shuugo | Experimental  | 50 minutes        | 1020          | l'oo mg l               |
| hexylamine)         |            |                   |               |                   |               |                         |
| 2,2'-dimethyl-4,4'- | 6864-37-5  | Bacteria          | Experimental  | 17 hours          | EC50          | 96 mg/l                 |
| methylenebis(cyclo  |            |                   |               | - / 110410        |               |                         |
| hexylamine)         |            |                   |               |                   |               |                         |
| 2,2'-dimethyl-4,4'- | 6864-37-5  | Green algae       | Experimental  | 72 hours          | ErC50         | 7.9 mg/l                |
| methylenebis(cyclo  |            |                   | r             |                   |               |                         |
| hexylamine)         |            |                   |               |                   |               |                         |
| 2,2'-dimethyl-4,4'- | 6864-37-5  | Medaka            | Experimental  | 96 hours          | LC50          | 22 mg/l                 |
| methylenebis(cyclo  |            |                   | r ·           |                   |               | 6                       |
| hexylamine)         |            |                   |               |                   |               |                         |
| 2.2'-dimethyl-4.4'- | 6864-37-5  | Water flea        | Experimental  | 48 hours          | EC50          | 4.6 mg/l                |
| methylenebis(cyclo  |            |                   |               |                   |               |                         |
|                     | 1          | 1                 | 1             | 1                 | 1             | 1                       |

| hexylamine)  |            |                  |                       |          |       |                         |
|--|------------|------------------|-----------------------|----------|-------|-------------------------|
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclo<br>hexylamine) | 6864-37-5  | Green algae      | Experimental          | 72 hours | NOEC  | 0.13 mg/l               |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclo<br>hexylamine) | 6864-37-5  | Water flea       | Experimental          | 21 days  | NOEC  | 4 mg/l                  |
| benzyl alcohol   | 100-51-6   | Activated sludge | Experimental          | 3 hours  | EC50  | 1,385 mg/l              |
| benzyl alcohol   | 100-51-6   | Fathead minnow   | Experimental          | 96 hours | LC50  | 460 mg/l                |
| benzyl alcohol   | 100-51-6   | Green algae      | Experimental          | 72 hours | ErC50 | 770 mg/l                |
| enzyl alcohol  | 100-51-6   | Water flea       | Experimental          | 48 hours | EC50  | 230 mg/l                |
| benzyl alcohol   | 100-51-6   | Green algae      | Experimental          | 72 hours | NOEC  | 310 mg/l                |
| benzyl alcohol   | 100-51-6   | Water flea       | Experimental          | 21 days  | NOEC  | 51 mg/l                 |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Diatom           | Analogous<br>Compound | 96 hours | EC50  | 0.027 mg/l              |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Fish             | Analogous<br>Compound | 96 hours | LC50  | 0.017 mg/l              |
| Phenol, 2-nonyl-,<br>pranched                            | 91672-41-2 | Fish             | Analogous<br>Compound | 96 hours | LC50  | 0.05 mg/l               |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Green algae      | Analogous<br>Compound | 72 hours | ErC50 | 0.323 mg/l              |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Invertebrate     | Analogous<br>Compound | 96 hours | LC50  | 0.038 mg/l              |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Water flea       | Analogous<br>Compound | 48 hours | LC50  | 0.02 mg/l               |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Green algae      | Analogous<br>Compound | 72 hours | ErC10 | 0.0251 mg/l             |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Midge            | Analogous<br>Compound | 28 days  | EC10  | 203 mg/l                |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Mysid Shrimp     | Analogous<br>Compound | 28 days  | NOEC  | 0.0039 mg/l             |
| Phenol, 2-nonyl-,<br>pranched                            | 91672-41-2 | Rainbow trout    | Analogous<br>Compound | 91 days  | NOEC  | 0.006 mg/l              |
| Phenol, 2-nonyl-,<br>pranched                            | 91672-41-2 | Water flea       | Analogous<br>Compound | 21 days  | NOEC  | 0.024 mg/l              |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Activated sludge | Analogous<br>Compound | 3 hours  | EC50  | 950 mg/l                |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Japanese quail   | Analogous<br>Compound | 147 days | NOEC  | -10 ppm diet            |
| Phenol, 2-nonyl-,<br>pranched                            | 91672-41-2 | Lettuce          | Analogous<br>Compound | 14 days  | EC50  | 625 mg/kg (Dry Weight)  |
| Phenol, 2-nonyl-,<br>pranched                            | 91672-41-2 | Soil microbes    | Analogous<br>Compound | 40 days  | NOEC  | 100 mg/kg (Dry Weight)  |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Springtail       | Analogous<br>Compound | 21 days  | EC10  | 23 mg/kg (Dry Weight)   |
| Phenol, 2-nonyl-,<br>pranched                            | 91672-41-2 | Worm             | Analogous<br>Compound | 14 days  | LC50  | 88.6 mg/kg (Dry Weight) |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Worm             | Analogous<br>Compound | 28 days  | NOEC  | 24 mg/kg (Dry Weight)   |

## 12.2. Persistence and degradability

| Material                   | CAS Nbr    | Test type                      | Duration | Study Type | Test result | Protocol                             |
|----------------------------|------------|--------------------------------|----------|------------|-------------|--------------------------------------|
| 4-nonylphenol,<br>branched | 84852-15-3 | Experimental<br>Biodegradation | 28 days  |            |             | OECD 301B - Modified<br>sturm or CO2 |
| 2,2'-dimethyl-4,4'-        | 6864-37-5  | Experimental                   | 28 days  | BOD        | 0 %BOD/ThOD | OECD 301C - MITI test (I)            |

| methylenebis(cyclo<br>hexylamine)                        |            | Biodegradation                          |         |                                   |              |                                      |
|--|------------|---|---------|-----------------------------------|--------------|--------------------------------------|
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclo<br>hexylamine) | 6864-37-5  | Experimental<br>Biodegradation          | 28 days | Dissolv. Organic<br>Carbon Deplet |              | OECD 302B Zahn-<br>Wellens/EVPA      |
| benzyl alcohol   | 100-51-6   | Experimental<br>Biodegradation          | 14 days | BOD                               | 94 %BOD/ThOD | OECD 301C - MITI test (I)            |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Analogous<br>Compound<br>Biodegradation | 28 days | CO2 evolution                     |              | OECD 301B - Modified<br>sturm or CO2 |

#### 12.3 : Bioaccumulative potential

| Material   | Cas No.    | Test type                                 | Duration | Study Type                | Test result | Protocol                          |
|--|------------|---|----------|---------------------------|-------------|-----------------------------------|
| 4-nonylphenol,<br>branched                               | 84852-15-3 | Experimental BCF<br>- Fish                | 28 days  | Bioaccumulation factor    | 984         |                                   |
| 4-nonylphenol,<br>branched                               | 84852-15-3 | Experimental BCF<br>- Fish                | 16 days  | Bioaccumulation factor    | 1300        | similar to OECD 305               |
| 4-nonylphenol,<br>branched                               | 84852-15-3 | Experimental Bioconcentration             |          | Log Kow                   | 5.4         | OECD 117 log Kow HPLC<br>method   |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclo<br>hexylamine) | 6864-37-5  | Experimental BCF<br>- Fish                | 60 days  | Bioaccumulation factor    | 60          | OECD305-Bioconcentration          |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclo<br>hexylamine) | 6864-37-5  | Experimental<br>Bioconcentration          |          | Log Kow                   | 2.51        | OECD 107 log Kow shke<br>flsk mtd |
| benzyl alcohol   | 100-51-6   | Experimental<br>Bioconcentration          |          | Log Kow                   | 1.10        |                                   |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Analogous<br>Compound BCF -<br>Fish       | 28 days  | Bioaccumulation<br>factor | 984         |                                   |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Analogous<br>Compound BCF -<br>Fish       | 16 days  | Bioaccumulation factor    | 1300        | similar to OECD 305               |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Analogous<br>Compound<br>Bioconcentration |          | Log Kow                   | 5.4         | OECD 117 log Kow HPLC<br>method   |

#### 12.4. Mobility in soil

| Material   | Cas No.    | Test type                                 | Study Type | Test result | Protocol                          |
|--|------------|---|------------|-------------|-----------------------------------|
| 4-nonylphenol,<br>branched                               | 84852-15-3 | Analogous<br>Compound Mobility<br>in Soil | Koc        | 11,060 l/kg | OECD 106 Adsp-Desb Batch<br>Equil |
| 2,2'-dimethyl-4,4'-<br>methylenebis(cyclo<br>hexylamine) | 6864-37-5  | Modeled Mobility<br>in Soil               | Koc        | ≤1.5        | ACD/Labs ChemSketch™              |
| benzyl alcohol   | 100-51-6   | Experimental<br>Mobility in Soil          | Koc        | 29 l/kg     |                                   |
| Phenol, 2-nonyl-,<br>branched                            | 91672-41-2 | Analogous<br>Compound Mobility<br>in Soil | Koc        | 11,060 l/kg | OECD 106 Adsp-Desb Batch<br>Equil |

## 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

| Ingredient | CAS Nbr | Environmental endocrine |
|------------|---------|-------------------------|
|            |         | disruptor information   |

|  | transgenerational effects or changes in<br>the gene pool, and exposure may<br>result in reproductive disorders and<br>dysfunction in wildlife. |
|--|--|
|--|--|

## **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 substances20 01 27\*Paint, inks, adhesives and resins containing dangerous substances

| <b>SECTION 14:</b> | <b>Transportation</b> | information |
|--------------------|-----------------------|-------------|
|--------------------|-----------------------|-------------|

|   | Ground Transport (ADR)  | Air Transport (IATA)  | Marine Transport (IMDG)   |
|---|---|---|---|
| 14.1 UN number                                  | UN2810  | UN2810  | UN2810  |
| 14.2 UN proper<br>shipping name                 | TOXIC LIQUID,<br>ORGANIC, N.O.S.(4,4-<br>METHYLENEBIS(2-<br>METHYLCYCLOHEXYLA<br>MINE); 4-NONYL<br>PHENOL,BRANCHED) | TOXIC LIQUID, ORGANIC,<br>N.O.S.(4,4-<br>METHYLENEBIS(2-<br>METHYLCYCLOHEXYLA<br>MINE); 4-NONYL<br>PHENOL,BRANCHED) | TOXIC LIQUID, ORGANIC,<br>N.O.S.(4,4-METHYLENEBIS(2-<br>METHYLCYCLOHEXYLAMINE);<br>4-NONYL PHENOL,BRANCHED) |
| 14.3 Transport hazard class(es)                 | 6.1   | 6.1   | 6.1   |
| 14.4 Packing group                              | III   | III   | III   |
| 14.5 Environmental<br>hazards                   | Not Environmentally<br>Hazardous  | Not applicable  | Not a Marine Pollutant  |
| 14.6 Special precautions for user               | Please refer to the other<br>sections of the SDS for<br>further information.  | Please refer to the other<br>sections of the SDS for further<br>information.  | Please refer to the other sections of the SDS for further information.                                      |
| 14.7 Transport in bulk<br>according to Annex II | No data available.  | No data available.  | No data available.  |

| of Marpol 73/78 and<br>IBC Code |                    |                    |                    |
|---------------------------------|--------------------|--------------------|--------------------|
| <b>Control Temperature</b>      | 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      | T1                 | Not applicable.    | Not applicable.    |
| IMDG Segregation<br>Code        | Not applicable.    | Not applicable.    | NONE               |

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

| SECTION 15: Regulatory information |   |
|------------------------------------|---|
|                                    | Γ |

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

#### Authorisation status under UK REACH:

The following substance/s contained in this product might be or is/are subject to authorisation in accordance with UK REACH:

| Ingredient              | CAS Nbr    |
|-------------------------|------------|
| 4-nonylphenol, branched | 84852-15-3 |

Authorisation status: listed in the UK REACH Candidate List of Substances of Very High Concern for Authorisation

#### **Global inventory status**

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

#### COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

| Hazard Categories           | Qualifying quantity (tonnes) for the application of |                         |
|-----------------------------|---|-------------------------|
|                             | Lower-tier requirements                             | Upper-tier requirements |
| E1 Hazardous to the Aquatic | 100   | 200                     |
| environment                 |   |                         |

Seveso named dangerous substances, Annex 1, Part 2

| Dangerous Substances        | Identifier(s) | Qualifying quantity (tonn  | es) for the application of |
|-----------------------------|---------------|----------------------------|----------------------------|
|                             |               | Lower-tier<br>requirements | Upper-tier requirements    |
| 2,2'-dimethyl-4,4'-         | 6864-37-5     | 50                         | 200                        |
| methylenebis(cyclohexylamin |               |                            |                            |
| e)                          |               |                            |                            |
| Phenol, 2-nonyl-, branched  | 91672-41-2    | 100                        | 200                        |
| 4-nonylphenol, branched     | 84852-15-3    | 100                        | 200                        |

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

| Chemical                   | Identifier(s) | Annex I |
|----------------------------|---------------|---------|
| Phenol, 2-nonyl-, branched | 91672-41-2    | Part 2  |
| 4-nonylphenol, branched    | 84852-15-3    | Part 2  |

#### 15.2. Chemical Safety Assessment

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

## **SECTION 16: Other information**

#### List of relevant H statements

| H302   | Harmful if swallowed.   |
|--------|---|
| H311   | Toxic in contact with skin.   |
| H314   | Causes severe skin burns and eye damage.  |
| H315   | Causes skin irritation.   |
| H318   | Causes serious eye damage.  |
| H319   | Causes serious eye irritation.  |
| H330   | Fatal if inhaled.   |
| H332   | Harmful if inhaled.   |
| H361df | Suspected of damaging fertility. Suspected of damaging the unborn child.  |
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child.  |
| H373   | May cause damage to organs through prolonged or repeated exposure.  |
| H373   | May cause damage to organs through prolonged or repeated exposure: blood or blood-forming organs<br>  cardiovascular system   endocrine system   kidney/urinary tract   liver   musculoskeletal system. |
| H400   | Very toxic to aquatic life.   |
| H410   | Very toxic to aquatic life with long lasting effects.   |
| H411   | Toxic to aquatic life with long lasting effects.  |

#### **Revision information:**

GB Section 02: CLP Ingredient table information was modified.

GB Section 04: First Aid - Symptoms and Effects (GB CLP) information was modified.

GB Section 15: Authorisation status under REACH: SVHC Authorisation ingredient information information was added.

Label: CLP Classification information was modified.

Label: CLP Precautionary - Prevention information was modified.

Label: CLP Target Organ Hazard Statement information was added.

Section 02: Label Elements: GB Percent Unknown information was deleted.

Section 02: Label Elements: GB Percent Unknown information was modified.

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

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

Section 6: Accidental release personal information information was modified.

Section 7: Conditions safe storage information was modified.

Section 7: Precautions safe handling information information was modified.

Section 8: Appropriate Engineering controls information information was modified.

Section 8: Eye/face protection information information was modified.

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

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

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

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

Section 09: Flammability information information was added.

Section 09: Odor information was modified.

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

Section 11: Acute Toxicity table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

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

Lactation Table information was deleted.

Section 11: Prolonged or repeated exposure may cause standard phrases information was added.

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

Section 12: Component ecotoxicity information information was modified.

Section 12: Endocrine disruptor table row information was added.

Section 12: Mobility in soil information information was modified.

Section 12: No endocrine disruptor information available warning information was deleted.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential 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.

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