



Safety Data Sheet

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Version number: 7.01
Supersedes date: 04/01/2023

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

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

1.1. Product identifier

3M™ SCOTCH-WELD™ EC-7210 B/A Kit

Product Identification Numbers

FS-9100-5412-1 UU-0109-4249-6

7000146244 7100229992

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

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

30-9401-8, 30-9282-2

TRANSPORTATION INFORMATION

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

KIT LABEL**2.1. Classification of the substance or mixture****CLP REGULATION (EC) No 1272/2008****CLASSIFICATION:**

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

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

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

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

For full text of H phrases, see Section 16.

2.2. Label elements**CLP REGULATION (EC) No 1272/2008****SIGNAL WORD**

DANGER.

Symbols

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

Pictograms

Contains:

3,6-diazaoctanethylenediamin; bis-[4-(2,3-epoxipropoxy)phenyl]propane; Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine; Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide; 2,4,6-tris(dimethylaminomethyl)phenol

HAZARD STATEMENTS:

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS**Prevention:**

P260A Do not breathe vapours.

P273 Avoid release to the environment.

P280B Wear protective gloves and eye/face protection.

Response:

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

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

P310 Immediately call a POISON CENTRE or doctor/physician.

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

<=125 ml Hazard statements

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

<=125 ml Precautionary statements

Prevention:

| | |
|-------|-------------------------------------------------|
| P260A | Do not breathe vapours. |
| P280B | Wear protective gloves and eye/face protection. |

Response:

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

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

Revision information:

Section 1: Product identification numbers information was modified.

Section 01: SAP Material Numbers information was modified.



Safety Data Sheet

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Document group: 30-9401-8
Revision date: 16/03/2023

Version number: 6.02
Supersedes date: 12/01/2023

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

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

1.1. Product identifier

3M™ SCOTCH-WELD™ Epoxy Structural Adhesive EC-7210 (Part B)

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

Identified uses

Structural adhesive.

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

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

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

WARNING.

Symbols

GHS07 (Exclamation mark) | GHS09 (Environment) |

Pictograms

| Ingredient | CAS Nbr | EC No. | % by Wt |
|-----------------------------------------|-----------|-----------|---------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | 216-823-5 | 70 - 78 |

HAZARD STATEMENTS:

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

PRECAUTIONARY STATEMENTS**Prevention:**

P280E Wear protective gloves.

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

<=125 ml Hazard statements

H317 May cause an allergic skin reaction.

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

P280E Wear protective gloves.

16% of the mixture consists of components of unknown acute oral toxicity.

Contains 23% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

Contains a substance that meets the criteria for vPvB according to Regulation (EC) No 1907/2006, Annex XIII, as amended by UK REACH Regulations SI 2019/758

SECTION 3: Composition/information on ingredients**3.1. Substances**

Not applicable

3.2. Mixtures

| Ingredient | Identifier(s) | % | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB |
|---------------------------------------------------------|--------------------------------------------|---------|--------------------------------------------------------------------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | (CAS-No.) 1675-54-3 (EC-No.) 216-823-5 | 70 - 78 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 |
| Acrylic copolymer | Trade Secret | 5 - 15 | Substance not classified as hazardous |
| Hydrogenated terphenyl | (CAS-No.) 61788-32-7 (EC-No.) 262-967-7 | 1 - 10 | Aquatic Chronic 2, H411 |
| Polyphenyls, quater- and higher, partially hydrogenated | (CAS-No.) 68956-74-1 (EC-No.) 273-316-1 | < 2 | Substance not classified as hazardous |
| Terphenyl | (CAS-No.) 26140-60-3 (EC-No.) 247-477-3 | < 1 | Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=10 |

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

Specific Concentration Limits

| Ingredient | Identifier(s) | Specific Concentration Limits |
|-----------------------------------------|-------------------------------------------|---------------------------------------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | (CAS-No.) 1675-54-3 (EC-No.) 216-823-5 | (C >= 5%) Skin Irrit. 2, H315 (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**Substance**

Aldehydes.
Hydrocarbons.
Carbon monoxide
Carbon dioxide.
Hydrogen Chloride

Condition

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

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. 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

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from oxidising agents. Store away from amines.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters**Occupational exposure limits**

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

| Ingredient | CAS Nbr | Agency | Limit type | Additional comments |
|------------------------|----------------|---------------|------------------------------------------|----------------------------|
| Terphenyl | 26140-60-3 | UK HSC | STEL:4.8 mg/m3(0.5 ppm) | |
| Hydrogenated terphenyl | 61788-32-7 | UK HSC | TWA:19 mg/m3(2 ppm);STEL:48 mg/m3(5 ppm) | |

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 | >0.30 | =>8 hours |

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

Applicable Norms/Standards

Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - 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. |
| Specific Physical Form: | Paste |
| Colour | Milky White |
| Odor | Slight Epoxy |
| Odour threshold | No data available. |
| Melting point/freezing point | No data available. |
| Boiling point/boiling range | > 200 °C [Details:MITS data] |
| Flammability (solid, gas) | Not applicable. |
| Flammable Limits(LEL) | No data available. |
| Flammable Limits(UEL) | No data available. |
| Flash point | > 150 °C [Test Method:Closed Cup] |
| Autoignition temperature | No data available. |
| Decomposition temperature | No data available. |
| pH | substance/mixture is non-soluble (in water) |
| Kinematic Viscosity | 18,349 mm ² /sec |
| Water solubility | Negligible |
| Solubility- non-water | No data available. |
| Partition coefficient: n-octanol/water | No data available. |
| Vapour pressure | No data available. |
| Density | 1.09 - 1.14 g/ml [@ 23 °C] |
| Relative density | 1.09 - 1.14 [@ 23 °C] [Ref Std:WATER=1] |
| Relative Vapour Density | No data available. |

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. |
| Percent volatile | 0 % weight |

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

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

10.5 Incompatible materials

Amines.

Strong oxidising agents.

10.6 Hazardous decomposition products

| <u>Substance</u> | <u>Condition</u> |
|------------------|------------------|
|------------------|------------------|

| | |
|-------------|--|
| None known. | |
|-------------|--|

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the 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

No known health effects.

Skin contact

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

Eye contact

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

Ingestion

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

Toxicological Data

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

Acute Toxicity

| Name | Route | Species | Value |
|-----------------------------------------|--------------------------------|---------|------------------------------------------------|
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | Rat | LD50 > 1,600 mg/kg |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | Rat | LD50 > 1,000 mg/kg |
| Hydrogenated terphenyl | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| Hydrogenated terphenyl | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 4.7 mg/l |
| Hydrogenated terphenyl | Ingestion | Rat | LD50 > 10,000 mg/kg |
| Terphenyl | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Terphenyl | Inhalation-Dust/Mist (4 hours) | Rat | LD50 > 3.8 mg/l |
| Terphenyl | Ingestion | Rat | LD50 2,304 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|-----------------------------------------|---------|---------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Rabbit | Mild irritant |
| Hydrogenated terphenyl | Rabbit | No significant irritation |
| Terphenyl | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|-----------------------------------------|---------|---------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Rabbit | Moderate irritant |
| Hydrogenated terphenyl | Rabbit | No significant irritation |
| Terphenyl | Rabbit | No significant irritation |

Skin Sensitisation

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

Respiratory Sensitisation

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

Germ Cell Mutagenicity

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

Carcinogenicity

| Name | Route | Species | Value |
|-----------------------------------------|--------|---------|------------------------------------------------------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|-----------------------------------------|-----------|----------------------------------------|---------|---------------------|----------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | Not classified for female reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | Not classified for male reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | Not classified for development | Rabbit | NOAEL 300 mg/kg/day | during organogenesis |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | Not classified for development | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Hydrogenated terphenyl | Ingestion | Not classified for female reproduction | Rat | NOAEL 81 mg/kg/day | 2 generation |
| Hydrogenated terphenyl | Ingestion | Not classified for male reproduction | Rat | NOAEL 62 mg/kg/day | 2 generation |
| Hydrogenated terphenyl | Ingestion | Not classified for development | Rat | NOAEL 500 mg/kg/day | during organogenesis |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|-----------------------------------------|------------|----------------------------------------------------------------------------------------------------------|----------------|---------|-----------------------|-------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | liver | Not classified | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | nervous system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder | Not classified | Rat | NOAEL 1,000 mg/kg/day | 28 days |
| Hydrogenated terphenyl | Dermal | skin | Not classified | Rabbit | NOAEL 500 mg/kg/day | 3 weeks |
| Hydrogenated terphenyl | Dermal | hematopoietic system | Not classified | Rabbit | NOAEL 2,000 mg/kg/day | 3 weeks |
| Hydrogenated terphenyl | Inhalation | liver hematopoietic system eyes | Not classified | Rat | NOAEL 0.5 mg/l | 13 weeks |
| Hydrogenated terphenyl | Ingestion | hematopoietic system kidney and/or bladder liver eyes respiratory system | Not classified | Rat | NOAEL 120 mg/kg/day | 14 weeks |

Aspiration Hazard

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

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

11.2. Information on other hazards

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

SECTION 12: Ecological information

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

12.1. Toxicity

No product test data available.

| Material | CAS # | Organism | Type | Exposure | Test endpoint | Test result |
|---------------------------------------------------------|------------|------------------|-------------------------------------------------------|----------|---------------|-------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Activated sludge | Analogous Compound | 3 hours | IC50 | >100 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Rainbow trout | Estimated | 96 hours | LC50 | 2 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Water flea | Estimated | 48 hours | EC50 | 1.8 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Green algae | Experimental | 72 hours | ErC50 | >11 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Green algae | Experimental | 72 hours | NOEC | 4.2 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Water flea | Experimental | 21 days | NOEC | 0.3 mg/l |
| Hydrogenated terphenyl | 61788-32-7 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| Hydrogenated terphenyl | 61788-32-7 | Activated sludge | Experimental | 3 hours | NOEC | 103 mg/l |
| Polyphenyls, quater- and higher, partially hydrogenated | 68956-74-1 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| Terphenyl | 26140-60-3 | Water flea | Estimated | 48 hours | EC50 | 0.022 mg/l |
| Terphenyl | 26140-60-3 | Green algae | Experimental | 72 hours | EC50 | 0.102 mg/l |
| Terphenyl | 26140-60-3 | Rainbow trout | Experimental | 96 hours | LC50 | 27 mg/l |
| Terphenyl | 26140-60-3 | Fathead minnow | Experimental | 34 days | NOEC | 0.064 mg/l |
| Terphenyl | 26140-60-3 | Green algae | Experimental | 72 hours | NOEC | 0.003 mg/l |
| Terphenyl | 26140-60-3 | Water flea | Experimental | 21 days | NOEC | 0.005 mg/l |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|-----------------------------------------|-----------|-----------------------------|----------|------------|-------------|-------------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Experimental Biodegradation | 28 days | BOD | 5 %BOD/COD | OECD 301F - Manometric respirometry |

3M™ SCOTCH-WELD™ Epoxy Structural Adhesive EC-7210 (Part B)

| | | | | | | |
|---------------------------------------------------------|------------|--------------------------------------|---------|--------------------------------|----------------------------------|-----------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Experimental Hydrolysis | | Hydrolytic half-life (pH 7) | 117 hours (t 1/2) | OECD 111 Hydrolysis func of pH |
| Hydrogenated terphenyl | 61788-32-7 | Experimental Biodegradation | 35 days | CO2 evolution | 1 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| Hydrogenated terphenyl | 61788-32-7 | Experimental Photolysis | | Photolytic half-life(in water) | 86 days (t 1/2) | |
| Hydrogenated terphenyl | 61788-32-7 | Experimental Soil Metabolism Aerobic | | Half-life (t 1/2) | 202 days (t 1/2) | |
| Polyphenyls, quater- and higher, partially hydrogenated | 68956-74-1 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Terphenyl | 26140-60-3 | Experimental Biodegradation | 14 days | BOD | 0.5 %BOD/ThOD | OECD 301C - MITI test (I) |

12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|---------------------------------------------------------|------------|-------------------------------------------------------|----------|------------------------|-------------|------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Experimental Bioconcentration | | Log Kow | 3.242 | OECD 117 log Kow HPLC method |
| Hydrogenated terphenyl | 61788-32-7 | Analogous Compound BCF - Fish | 42 days | Bioaccumulation factor | 5200 | similar to OECD 305 |
| Hydrogenated terphenyl | 61788-32-7 | Experimental Bioconcentration | | Log Kow | >5.3 | OECD 117 log Kow HPLC method |
| Polyphenyls, quater- and higher, partially hydrogenated | 68956-74-1 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Terphenyl | 26140-60-3 | Estimated BCF - Fish | 60 days | Bioaccumulation factor | 2300 | OECD305-Bioconcentration |

12.4. Mobility in soil

| Material | Cas No. | Test type | Study Type | Test result | Protocol |
|-----------------------------------------|------------|-------------------------------|------------|-------------|--------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Modeled Mobility in Soil | Koc | 450 l/kg | Episuite™ |
| Hydrogenated terphenyl | 61788-32-7 | Experimental Mobility in Soil | Koc | ≥8400 l/kg | OECD 121 Estim. of Koc by HPLC |

12.5. Results of the PBT and vPvB assessment

| Ingredient | CAS Nbr | PBT/vPvB status |
|------------------------|------------|------------------------------|
| Hydrogenated terphenyl | 61788-32-7 | Meets UK REACH vPvB criteria |

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
20 01 27* Paint, inks, adhesives and resins containing 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 shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(TERPHENYL) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(TERPHENYL) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(TERPHENYL) |
| 14.3 Transport hazard class(es) | 9 | 9 | 9 |
| 14.4 Packing group | III | III | III |
| 14.5 Environmental hazards | Environmentally Hazardous | Not applicable | Marine Pollutant |
| 14.6 Special precautions for user | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. |
| 14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code | No data available. | No data available. | No data available. |
| Control Temperature | No data available. | No data available. | No data available. |
| Emergency Temperature | No data available. | No data available. | No data available. |
| ADR Classification Code | M6 | Not applicable. | Not applicable. |
| IMDG Segregation 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**

| <u>Ingredient</u> | <u>CAS Nbr</u> | <u>Classification</u> | <u>Regulation</u> |
|-----------------------------------------|----------------|-------------------------|---------------------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Gr. 3: Not classifiable | International Agency for Research on Cancer |

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.

| | |
|-----------------------------------------|-----------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 |
|-----------------------------------------|-----------|

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:

| <u>Ingredient</u> | <u>CAS Nbr</u> |
|------------------------|----------------|
| Hydrogenated terphenyl | 61788-32-7 |

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 Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

| 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. |
| 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:

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 12: PBT/vPvB table row information was added.
GB Section 15: Authorisation status under REACH: SVHC Authorisation ingredient information 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 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: PNEC table row information was deleted.
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 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.

Prints No Data if Adverse effects information is not present 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: PBT/vPvB table row information was deleted.

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

Section 14 UN Number information was deleted.

Section 15: Authorization status under REACH: SVHC Authorization ingredient information information was deleted.

Section 15: Carcinogenicity information information was deleted.

Section 15: Chemical Safety Assessment information was deleted.

Section 15: Seveso Hazard Category Text information was added.

Section 15: Seveso Hazard Category Text information was deleted.

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.

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3M SDSs for Great Britain are available at www.3M.com/uk

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



Safety Data Sheet

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Document group: 30-9282-2
Revision date: 16/03/2023

Version number: 7.05
Supersedes date: 12/01/2023

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

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

1.1. Product identifier

3M™ SCOTCH-WELD™ EC-7210 (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.

CLASSIFICATION:

Skin Corrosion/ Irritation, Category 1C - Skin Corr. 1C; H314
Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318
Skin Sensitization, Category 1A - Skin Sens. 1A; H317
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

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

DANGER.

Symbols

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

Pictograms

| Ingredient | CAS Nbr | EC No. | % by Wt |
|-----------------------------------------------------------------------------------------------------------------------|------------|-----------|---------|
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | 72244-98-5 | 701-196-7 | 40 - 70 |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | 68082-29-1 | 500-191-5 | 10 - 30 |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | 216-823-5 | 1 - 5 |
| 2,4,6-tris(dimethylaminomethyl)phenol | 90-72-2 | 202-013-9 | 1 - 5 |
| 3,6-diazaoctanethylenediamin | 112-24-3 | 203-950-6 | < 3 |

HAZARD STATEMENTS:

| | |
|------|--------------------------------------------------|
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H411 | Toxic to aquatic life with long lasting effects. |

PRECAUTIONARY STATEMENTS**Prevention:**

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

Response:

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

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

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

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

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

Response:

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

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

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

Contains 9% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

Persons previously sensitised to amines may develop a cross-sensitisation reaction to certain other amines. Contains a substance that meets the criteria for vPvB according to Regulation (EC) No 1907/2006, Annex XIII, as amended by UK REACH Regulations SI 2019/758

SECTION 3: Composition/information on ingredients
3.1. Substances

Not applicable

3.2. Mixtures

| Ingredient | Identifier(s) | % | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB |
|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------|--------------------------------------------------------------------------------------------|
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | (CAS-No.) 72244-98-5 (EC-No.) 701-196-7 | 40 - 70 | Aquatic Chronic 3, H412 Skin Sens. 1B, H317 |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | (CAS-No.) 68082-29-1 (EC-No.) 500-191-5 | 10 - 30 | Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411 |
| Hydrogenated terphenyl | (CAS-No.) 61788-32-7 (EC-No.) 262-967-7 | 5 - 10 | Aquatic Chronic 2, H411 |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | (CAS-No.) 1675-54-3 (EC-No.) 216-823-5 | 1 - 5 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 |
| 2,4,6-tris(dimethylaminomethyl)phenol | (CAS-No.) 90-72-2 (EC-No.) 202-013-9 | 1 - 5 | Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 |
| Polyphenyls, quater- and higher, partially hydrogenated | (CAS-No.) 68956-74-1 (EC-No.) 273-316-1 | < 3 | Substance not classified as hazardous |
| 3,6-diazaoctanethylenediamin | (CAS-No.) 112-24-3 (EC-No.) 203-950-6 | < 3 | Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1A, H317 |

| | | | |
|-----------|--------------------------------------------|---------|------------------------------------------------------------|
| | | | Aquatic Chronic 3, H412 |
| Terphenyl | (CAS-No.) 26140-60-3 (EC-No.) 247-477-3 | 0.1 - 1 | Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=10 |

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

Specific Concentration Limits

| Ingredient | Identifier(s) | Specific Concentration Limits |
|-----------------------------------------|-------------------------------------------|---------------------------------------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | (CAS-No.) 1675-54-3 (EC-No.) 216-823-5 | (C >= 5%) Skin Irrit. 2, H315 (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 flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

Eye contact

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

If swallowed

Rinse mouth. 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:

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

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Condition

Aldehydes.
Carbon monoxide
Carbon dioxide.
Hydrogen Chloride
Irritant vapours or gases.
Oxides of sulphur.

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

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Store away from heat. 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 |
|------------------------|------------|--------|------------------------------------------|---------------------|
| Terphenyl | 26140-60-3 | UK HSC | STEL:4.8 mg/m3(0.5 ppm) | |
| Hydrogenated terphenyl | 61788-32-7 | UK HSC | TWA:19 mg/m3(2 ppm);STEL:48 mg/m3(5 ppm) | |

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:

Full face shield.

Indirect vented goggles.

Applicable Norms/Standards

Use eye/face protection conforming to EN 166

Skin/hand protection

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

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

| 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. |
| Specific Physical Form: | Paste |
| Colour | Light Yellow |
| Odor | Slight Mercaptan |
| Odour threshold | <i>No data available.</i> |
| Melting point/freezing point | <i>No data available.</i> |
| Boiling point/boiling range | > 200 °C [Details: MITS data] |
| Flammability (solid, gas) | Not applicable. |
| Flammable Limits(LEL) | <i>No data available.</i> |
| Flammable Limits(UEL) | <i>No data available.</i> |
| Flash point | > 150 °C [Test Method: Closed Cup] |
| Autoignition temperature | <i>No data available.</i> |
| Decomposition temperature | <i>No data available.</i> |
| pH | <i>substance/mixture is non-soluble (in water)</i> |
| Kinematic Viscosity | 46,296 mm ² /sec |
| Water solubility | Nil |
| Solubility- non-water | <i>No data available.</i> |
| Partition coefficient: n-octanol/water | <i>No data available.</i> |
| Vapour pressure | <i>No data available.</i> |
| Density | 1.08 - 1.13 g/ml [@ 23 °C] |
| Relative density | 1.08 - 1.13 [@ 20 °C] [Ref Std: WATER=1] |
| Relative Vapour Density | <i>No data available.</i> |

9.2. Other information

9.2.2 Other safety characteristics

| | |
|-------------------------------|---------------------------|
| EU Volatile Organic Compounds | <i>No data available.</i> |
| Evaporation rate | <i>No data available.</i> |
| Molecular weight | <i>No data available.</i> |
| Percent volatile | < 1 % weight |

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

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.

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

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

Eye contact

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

Ingestion

May be harmful if swallowed.

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

Additional information:

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

Toxicological Data

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

Acute Toxicity

| Name | Route | Species | Value |
|---------------------------------------------------------------------------------------------------------|-----------|---------|---------------------------------------------------------|
| Overall product | Dermal | | No data available; calculated ATE >5,000 mg/kg |
| Overall product | Ingestion | | No data available; calculated ATE >2,000 - =5,000 mg/kg |
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | Dermal | Rabbit | LD50 > 10,200 mg/kg |
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | Ingestion | Rat | LD50 2,600 mg/kg |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction | Dermal | Rat | LD50 > 2,000 mg/kg |

| | | | |
|-----------------------------------------------------------------------------------------------------------------------|--------------------------------|--------|---------------------|
| products with tall-oil fatty acids and triethylenetetramine | | | |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Hydrogenated terphenyl | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| Hydrogenated terphenyl | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 4.7 mg/l |
| Hydrogenated terphenyl | Ingestion | Rat | LD50 > 10,000 mg/kg |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | Rat | LD50 > 1,600 mg/kg |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | Rat | LD50 > 1,000 mg/kg |
| 2,4,6-tris(dimethylaminomethyl)phenol | Dermal | Rat | LD50 1,280 mg/kg |
| 2,4,6-tris(dimethylaminomethyl)phenol | Ingestion | Rat | LD50 1,000 mg/kg |
| 3,6-diazaoctanethylenediamin | Dermal | Rabbit | LD50 550 mg/kg |
| 3,6-diazaoctanethylenediamin | Ingestion | Rat | LD50 2,500 mg/kg |
| Terphenyl | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Terphenyl | Inhalation-Dust/Mist (4 hours) | Rat | LD50 > 3.8 mg/l |
| Terphenyl | Ingestion | Rat | LD50 2,304 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|-----------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | Rabbit | No significant irritation |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | In vitro data | Irritant |
| Hydrogenated terphenyl | Rabbit | No significant irritation |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Rabbit | Mild irritant |
| 2,4,6-tris(dimethylaminomethyl)phenol | Rabbit | Corrosive |
| 3,6-diazaoctanethylenediamin | Rabbit | Corrosive |
| Terphenyl | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|-----------------------------------------------------------------------------------------------------------------------|---------|---------------------------|
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | Rabbit | Mild irritant |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | Rabbit | Corrosive |
| Hydrogenated terphenyl | Rabbit | No significant irritation |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Rabbit | Moderate irritant |
| 2,4,6-tris(dimethylaminomethyl)phenol | Rabbit | Corrosive |
| 3,6-diazaoctanethylenediamin | Rabbit | Corrosive |
| Terphenyl | Rabbit | No significant irritation |

Skin Sensitisation

| Name | Species | Value |
|-----------------------------------------------------------------------------------------------------------------------|------------------|----------------|
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | Mouse | Sensitising |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | Mouse | Sensitising |
| Hydrogenated terphenyl | Human | Not classified |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Human and animal | Sensitising |
| 2,4,6-tris(dimethylaminomethyl)phenol | Guinea pig | Not classified |
| 3,6-diazaoctanethylenediamin | Guinea pig | Sensitising |

Respiratory Sensitisation

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

Germ Cell Mutagenicity

| Name | Route | Value |
|---------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------|
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | In Vitro | Not mutagenic |
| Hydrogenated terphenyl | In Vitro | Not mutagenic |
| Hydrogenated terphenyl | In vivo | Not mutagenic |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | In vivo | Not mutagenic |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 2,4,6-tris(dimethylaminomethyl)phenol | In Vitro | Not mutagenic |
| Terphenyl | In Vitro | Not mutagenic |
| Terphenyl | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|-----------------------------------------|--------|---------|------------------------------------------------------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |

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

| Name | Route | Value | Species | Test result | Exposure Duration |
|-----------------------------------------|-----------|----------------------------------------|---------|---------------------|----------------------|
| Hydrogenated terphenyl | Ingestion | Not classified for female reproduction | Rat | NOAEL 81 mg/kg/day | 2 generation |
| Hydrogenated terphenyl | Ingestion | Not classified for male reproduction | Rat | NOAEL 62 mg/kg/day | 2 generation |
| Hydrogenated terphenyl | Ingestion | Not classified for development | Rat | NOAEL 500 mg/kg/day | during organogenesis |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | Not classified for female reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | Not classified for male reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | Not classified for development | Rabbit | NOAEL 300 mg/kg/day | during organogenesis |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | Not classified for development | Rat | NOAEL 750 mg/kg/day | 2 generation |

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

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

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---------------------------------------------------------------------------------------------------------|-----------|----------------------|------------------------------------------------------------------------------|---------|--------------------|-------------------|
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | Ingestion | hematopoietic system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 75 mg/kg/day | 90 days |
| Reaction products of | Ingestion | liver | Some positive data exist, but the | Rat | NOAEL 250 | 90 days |

| | | | | | | |
|---------------------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------|-----------------------|----------|
| pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | | | data are not sufficient for classification | | mg/kg/day | |
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | Ingestion | endocrine system heart skin immune system nervous system eyes kidney and/or bladder respiratory system vascular system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 90 days |
| Hydrogenated terphenyl | Dermal | skin | Not classified | Rabbit | NOAEL 500 mg/kg/day | 3 weeks |
| Hydrogenated terphenyl | Dermal | hematopoietic system | Not classified | Rabbit | NOAEL 2,000 mg/kg/day | 3 weeks |
| Hydrogenated terphenyl | Inhalation | liver hematopoietic system eyes | Not classified | Rat | NOAEL 0.5 mg/l | 13 weeks |
| Hydrogenated terphenyl | Ingestion | hematopoietic system kidney and/or bladder liver eyes respiratory system | Not classified | Rat | NOAEL 120 mg/kg/day | 14 weeks |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | liver | Not classified | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | nervous system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder | Not classified | Rat | NOAEL 1,000 mg/kg/day | 28 days |
| 2,4,6-tris(dimethylaminomethyl)phenol | Dermal | skin liver nervous system auditory system hematopoietic system eyes | Not classified | Rat | NOAEL 125 mg/kg/day | 28 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 | Type | Exposure | Test endpoint | Test result |
|-----------------------------------------------------------------------------------------------------------------------|------------|------------------|--------------|----------|---------------|-------------|
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | 72244-98-5 | Activated sludge | Experimental | 3 hours | EC50 | >1,000 mg/l |
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | 72244-98-5 | Green algae | Experimental | 72 hours | EC50 | >733 mg/l |
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | 72244-98-5 | Water flea | Experimental | 48 hours | EC50 | 12 mg/l |
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | 72244-98-5 | Zebra Fish | Experimental | 96 hours | LC50 | 87 mg/l |
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | 72244-98-5 | Green algae | Experimental | 72 hours | NOEC | 338 mg/l |
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | 72244-98-5 | Water flea | Experimental | 21 days | NOEC | 3.5 mg/l |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | 68082-29-1 | Activated sludge | Experimental | 3 hours | EC10 | 130 mg/l |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | 68082-29-1 | Green algae | Experimental | 72 hours | EC50 | 4.34 mg/l |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | 68082-29-1 | Water flea | Experimental | 48 hours | EC50 | 7.07 mg/l |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | 68082-29-1 | Zebra Fish | Experimental | 96 hours | LC50 | 7.07 mg/l |

| | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------|------------|------------------|-------------------------------------------------------|----------|-------|------------|
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | 68082-29-1 | Green algae | Experimental | 72 hours | NOEC | 0.5 mg/l |
| Hydrogenated terphenyl | 61788-32-7 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| Hydrogenated terphenyl | 61788-32-7 | Activated sludge | Experimental | 3 hours | NOEC | 103 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Activated sludge | Analogous Compound | 3 hours | IC50 | >100 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Rainbow trout | Estimated | 96 hours | LC50 | 2 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Water flea | Estimated | 48 hours | EC50 | 1.8 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Green algae | Experimental | 72 hours | ErC50 | >11 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Green algae | Experimental | 72 hours | NOEC | 4.2 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Water flea | Experimental | 21 days | NOEC | 0.3 mg/l |
| 2,4,6-tris(dimethylamino methyl)phenol | 90-72-2 | N/A | Experimental | 96 hours | LC50 | 718 mg/l |
| 2,4,6-tris(dimethylamino methyl)phenol | 90-72-2 | Common Carp | Experimental | 96 hours | LC50 | >100 mg/l |
| 2,4,6-tris(dimethylamino methyl)phenol | 90-72-2 | Green algae | Experimental | 72 hours | EC50 | 46.7 mg/l |
| 2,4,6-tris(dimethylamino methyl)phenol | 90-72-2 | Water flea | Experimental | 48 hours | EC50 | >100 mg/l |
| 2,4,6-tris(dimethylamino methyl)phenol | 90-72-2 | Green algae | Experimental | 72 hours | NOEC | 6.44 mg/l |
| Polyphenyls, quater- and higher, partially hydrogenated | 68956-74-1 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| 3,6-diazaoctanethylene diamin | 112-24-3 | Green algae | Experimental | 72 hours | EC50 | 27.4 mg/l |
| 3,6-diazaoctanethylene diamin | 112-24-3 | Guppy | Experimental | 96 hours | LC50 | 570 mg/l |
| 3,6-diazaoctanethylene diamin | 112-24-3 | Water flea | Experimental | 48 hours | EC50 | 37.4 mg/l |
| 3,6-diazaoctanethylene diamin | 112-24-3 | Green algae | Experimental | 72 hours | NOEC | 0.468 mg/l |
| 3,6-diazaoctanethylene diamin | 112-24-3 | Water flea | Experimental | 21 days | NOEC | 2.86 mg/l |
| Terphenyl | 26140-60-3 | Water flea | Estimated | 48 hours | EC50 | 0.022 mg/l |

| | | | | | | |
|-----------|------------|----------------|--------------|----------|------|------------|
| Terphenyl | 26140-60-3 | Green algae | Experimental | 72 hours | EC50 | 0.102 mg/l |
| Terphenyl | 26140-60-3 | Rainbow trout | Experimental | 96 hours | LC50 | 27 mg/l |
| Terphenyl | 26140-60-3 | Fathead minnow | Experimental | 34 days | NOEC | 0.064 mg/l |
| Terphenyl | 26140-60-3 | Green algae | Experimental | 72 hours | NOEC | 0.003 mg/l |
| Terphenyl | 26140-60-3 | Water flea | Experimental | 21 days | NOEC | 0.005 mg/l |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|-----------------------------------------------------------------------------------------------------------------------|------------|--------------------------------------|----------|--------------------------------|-----------------------------------|-------------------------------------|
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | 72244-98-5 | Experimental Biodegradation | 28 days | CO2 evolution | 5 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | 68082-29-1 | Analogous Compound Biodegradation | 28 days | CO2 evolution | ≤8 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| Hydrogenated terphenyl | 61788-32-7 | Experimental Biodegradation | 35 days | CO2 evolution | 1 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| Hydrogenated terphenyl | 61788-32-7 | Experimental Photolysis | | Photolytic half-life(in water) | 86 days (t 1/2) | |
| Hydrogenated terphenyl | 61788-32-7 | Experimental Soil Metabolism Aerobic | | Half-life (t 1/2) | 202 days (t 1/2) | |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Experimental Biodegradation | 28 days | BOD | 5 %BOD/COD | OECD 301F - Manometric respirometry |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Experimental Hydrolysis | | Hydrolytic half-life (pH 7) | 117 hours (t 1/2) | OECD 111 Hydrolysis func of pH |
| 2,4,6-tris(dimethylamino methyl)phenol | 90-72-2 | Experimental Biodegradation | 28 days | BOD | 4 %BOD/ThOD | OECD 301D - Closed bottle test |
| Polyphenyls, quater- and higher, partially hydrogenated | 68956-74-1 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| 3,6-diazaoctanethylene diamin | 112-24-3 | Experimental Biodegradation | 20 days | BOD | 0 %BOD/ThOD | OECD 301D - Closed bottle test |
| Terphenyl | 26140-60-3 | Experimental Biodegradation | 14 days | BOD | 0.5 %BOD/ThOD | OECD 301C - MITI test (I) |

12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|---------------------------------------------------------------------------------------------------------|------------|-------------------------------|----------|------------|-------------|------------------------------|
| Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide | 72244-98-5 | Estimated Bioconcentration | | Log Kow | >1.2 | |
| Fatty acids, C18-unsaturated, | 68082-29-1 | Experimental Bioconcentration | | Log Kow | ≤3.55 | OECD 117 log Kow HPLC method |

| | | | | | | |
|-----------------------------------------------------------------------------------------|------------|-------------------------------------------------------|---------|------------------------|-------|--------------------------------|
| dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | | | | | | |
| Hydrogenated terphenyl | 61788-32-7 | Analogous Compound BCF - Fish | 42 days | Bioaccumulation factor | 5200 | similar to OECD 305 |
| Hydrogenated terphenyl | 61788-32-7 | Experimental Bioconcentration | | Log Kow | >5.3 | OECD 117 log Kow HPLC method |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Experimental Bioconcentration | | Log Kow | 3.242 | OECD 117 log Kow HPLC method |
| 2,4,6-tris(dimethylamino methyl)phenol | 90-72-2 | Experimental Bioconcentration | | Log Kow | -0.66 | 830.7550 Part.Coef Shake Flask |
| Polyphenyls, quater- and higher, partially hydrogenated | 68956-74-1 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| 3,6-diazaoctanethylene diamine | 112-24-3 | Experimental BCF - Fish | 42 days | Bioaccumulation factor | <5.0 | OECD305-Bioconcentration |
| Terphenyl | 26140-60-3 | Estimated BCF - Fish | 60 days | Bioaccumulation factor | 2300 | OECD305-Bioconcentration |

12.4. Mobility in soil

| Material | Cas No. | Test type | Study Type | Test result | Protocol |
|-----------------------------------------|------------|-------------------------------|------------|-------------|--------------------------------|
| Hydrogenated terphenyl | 61788-32-7 | Experimental Mobility in Soil | Koc | ≥8400 l/kg | OECD 121 Estim. of Koc by HPLC |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Modeled Mobility in Soil | Koc | 450 l/kg | Episuite™ |

12.5. Results of the PBT and vPvB assessment

| Ingredient | CAS Nbr | PBT/vPvB status |
|------------------------|------------|------------------------------|
| Hydrogenated terphenyl | 61788-32-7 | Meets UK REACH vPvB criteria |

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
20 01 27* Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

| | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| 14.1 UN number | UN3267 | UN3267 | UN3267 |
| 14.2 UN proper shipping name | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.(TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL; TRIETHYLENETETRAMINE) | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.(TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL; TRIETHYLENETETRAMINE) | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.(TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL; TRIETHYLENETETRAMINE; TERPHENYL) |
| 14.3 Transport hazard class(es) | 8 | 8 | 8 |
| 14.4 Packing group | II | III | III |
| 14.5 Environmental hazards | Environmentally Hazardous | Not applicable | Marine Pollutant |
| 14.6 Special precautions for user | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. |
| 14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code | No data available. | No data available. | No data available. |
| Control Temperature | No data available. | No data available. | No data available. |
| Emergency Temperature | No data available. | No data available. | No data available. |
| ADR Classification Code | C7 | Not applicable. | Not applicable. |
| IMDG Segregation Code | Not applicable. | Not applicable. | 18 - ALKALIS |

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

SECTION 15: Regulatory information

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

Carcinogenicity

| <u>Ingredient</u> | <u>CAS Nbr</u> | <u>Classification</u> | <u>Regulation</u> |
|-----------------------------------------|-----------------------|------------------------------|---------------------------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Gr. 3: Not classifiable | International Agency for Research on Cancer |

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.

| | |
|-----------------------------------------|-----------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 |
|-----------------------------------------|-----------|

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:

| <u>Ingredient</u> | <u>CAS Nbr</u> |
|--------------------------|-----------------------|
| Hydrogenated terphenyl | 61788-32-7 |

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 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 |
| 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

H302 Harmful if swallowed.

| | |
|------|-------------------------------------------------------|
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| 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. |
| H412 | Harmful 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 12: PBT/vPvB table row information was added.
GB Section 15: Authorisation status under REACH: SVHC Authorisation ingredient information 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 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: PNEC table row information was deleted.
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 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.
Prints No Data if Adverse effects information is not present 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: PBT/vPvB table row information was deleted.
Section 14 Marine transport in bulk according to IMO instruments – Main Heading information was deleted.
Section 14 UN Number information was deleted.
Section 15: Authorization status under REACH: SVHC Authorization ingredient information information was deleted.
Section 15: Carcinogenicity information information was deleted.
Section 15: Chemical Safety Assessment information was deleted.

Section 15: Seveso Hazard Category Text information was added.

Section 15: Seveso Hazard Category Text information was deleted.

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.

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