



Safety Data Sheet

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Version number: 2.01
Supersedes date: 21/02/2025

Transportation version number:

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

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

1.1. Product identifier

3M™ Scotch-Weld™ Epoxy Adhesive DP405, Black

Product Identification Numbers

62-2814-1437-5

7100330707

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

Identified uses

Structural adhesive.

1.3. Details of the supplier of the safety data sheet

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

Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

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:

26-6751-7, 44-9499-3

TRANSPORTATION INFORMATION

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

KIT LABEL

2.1. Classification of the substance or mixture

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

CLASSIFICATION:

Acute Toxicity, Category 4 - Acute Tox. 4; H312

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

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

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

Hazardous to the Aquatic Environment (Chronic), Category 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



Contains:

N,N'-Bis(3-aminopropyl)ethylenediamine; Nitric acid, calcium salt, tetrahydrate; bis-[4-(2,3-epoxipropoxi)phenyl]propane; 3,3'-Oxybis(ethyleneoxy)bis(propylamine); 2,4,6-tris(dimethylaminomethyl)phenol

HAZARD STATEMENTS:

H312 Harmful in contact with skin.

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.

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.

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

Revision information:

Kit: Component document group number(s) information was modified.
Section 1: E-mail address information was modified.



Safety Data Sheet

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| | | | |
|------------------------|------------|-------------------------|------------|
| Document group: | 26-6751-7 | Version number: | 6.00 |
| Revision date: | 24/12/2025 | Supersedes date: | 21/02/2025 |

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

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

1.1. Product identifier

3M™ Scotch-Weld™ Epoxy Adhesive DP405 Black, Part B

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

Identified uses

Structural adhesive.

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone number

+44 (0)1344 858 000

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-epoxipropoxi)phenyl]propane | 1675-54-3 | 216-823-5 | 40 - 75 |

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:**

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

Response:

| | |
|---------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P333 + P313 P391 | If skin irritation or rash occurs: Get medical advice/attention. Collect spillage. |

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

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

<=125 ml Precautionary statements

| | |
|--------------------|-------------------------|
| Prevention: | |
| P280E | Wear protective gloves. |

Response:

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

Contains 25% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

None known.

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Ingredient | Identifier(s) | % | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB |
|--|---|---------|--|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | (CAS-No.) 1675-54-3 (EC-No.) 216-823-5 | 40 - 75 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 |
| Polyester resin | Trade Secret | 10 - 30 | Substance not classified as hazardous |
| Butadiene Acrylic Copolymer | Trade Secret | < 15 | Substance not classified as hazardous |
| Nepheline Syenite | (CAS-No.) 37244-96-5 | < 10 | Substance not classified as hazardous |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | (CAS-No.) 2530-83-8 (EC-No.) 219-784-2 | < 1 | Eye Dam. 1, H318 Aquatic Chronic 3, H412 |

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-epoxipropoxi)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

| <u>Substance</u> | <u>Condition</u> |
|----------------------------|--------------------|
| Aldehydes. | During combustion. |
| Carbon monoxide | During combustion. |
| Carbon dioxide. | During combustion. |
| Hydrogen Chloride | During combustion. |
| Irritant vapours or gases. | During combustion. |

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage including any incompatibilities

Store away from oxidising agents.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

Biological limit values

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

8.2. Exposure controls

8.2.1. Engineering controls

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

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Safety glasses with side shields.

Indirect vented goggles.

Applicable Norms/Standards

Use eye protection conforming to EN 16321

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 |
|------------------|----------------|-------------------|
| Butyl rubber. | 0.35 | > 8 hours |
| Nitrile rubber. | 0.125 | > 8 hours |
| Polymer laminate | 0.062 | > 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 (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

Respiratory protection

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

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

Half facepiece or full facepiece supplied-air respirator

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

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--|
| Physical state | Liquid. |
| Specific Physical Form: | Paste |
| Colour | Black |
| Odor | Mild Epoxy |
| Odour threshold | <i>No data available.</i> |
| Melting point/freezing point | <i>Not applicable.</i> |
| Boiling point/boiling range | >=121.1 °C |
| Flammability | Not applicable. |
| Flammable Limits(LEL) | <i>No data available.</i> |
| Flammable Limits(UEL) | <i>No data available.</i> |
| Flash point | >=121.1 °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 | 50,000 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 | 1.2 g/ml |
| Relative density | 1.2 [Ref Std:WATER=1] |

| | |
|---------------------------------|---------------------------|
| Relative Vapour Density | <i>No data available.</i> |
| Particle Characteristics | <i>Not applicable.</i> |

9.2. Other information

9.2.2 Other safety characteristics

| | |
|--------------------------------------|---------------------------|
| EU Volatile Organic Compounds | <i>No data available.</i> |
| Evaporation rate | <i>Nil</i> |
| Molecular weight | <i>No data available.</i> |

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Strong 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

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

Skin contact

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

Eye contact

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

Ingestion

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

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 |
| Butadiene Acrylic Copolymer | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Butadiene Acrylic Copolymer | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Nepheline Syenite | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Nepheline Syenite | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | Dermal | Rabbit | LD50 4,000 mg/kg |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 5.3 mg/l |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | Ingestion | Rat | LD50 7,010 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|----------------------------|---------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Rabbit | Mild irritant |
| Butadiene Acrylic Copolymer | Professional judge ment | Minimal irritation |
| Nepheline Syenite | Professional judge ment | No significant irritation |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | Rabbit | Mild irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|----------------------------|-------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Rabbit | Moderate irritant |
| Butadiene Acrylic Copolymer | Professional judge ment | Mild irritant |
| Nepheline Syenite | Professional judge ment | Mild irritant |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | Rabbit | Corrosive |

Skin Sensitisation

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

| | | |
|--|------------------|----------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Human and animal | Sensitising |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | Guinea pig | Not classified |

Respiratory Sensitisation

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

Germ Cell Mutagenicity

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

Carcinogenicity

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

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

| Name | Route | Value | Species | Test result | Exposure Duration |
|--|-----------|--|---------|-----------------------|----------------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for female reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for male reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal | Not classified for development | Rabbit | NOAEL 300 mg/kg/day | during organogenesis |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for development | Rat | NOAEL 750 mg/kg/day | 2 generation |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | Ingestion | Not classified for female reproduction | Rat | NOAEL 1,000 mg/kg/day | 1 generation |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,000 mg/kg/day | 1 generation |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | Ingestion | Not classified for development | Rat | NOAEL 3,000 mg/kg/day | during organogenesis |

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

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---|------------|------------------------|--|------------------------|---------------------|-------------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|--|-----------|---|----------------|---------|-----------------------|-------------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal | liver | Not classified | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal | nervous system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder | Not classified | Rat | NOAEL 1,000 mg/kg/day | 28 days |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | Ingestion | heart endocrine system bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system kidney and/or bladder respiratory system | Not classified | Rat | NOAEL 1,000 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 |
|---|-----------|------------------|--------------------|----------|---------------|-------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Activated sludge | Analogous Compound | 3 hours | IC50 | >100 mg/l |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Rainbow trout | Estimated | 96 hours | LC50 | 2 mg/l |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Water flea | Estimated | 48 hours | EC50 | 1.8 mg/l |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Green algae | Experimental | 72 hours | ErC50 | >11 mg/l |
| bis-[4-(2,3-epoxipropoxi)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 |
| Butadiene Acrylic Copolymer | Trade Secret | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| Nepheline Syenite | 37244-96-5 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | Common Carp | Experimental | 96 hours | LC50 | 55 mg/l |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | Green algae | Experimental | 96 hours | ErC50 | 350 mg/l |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | Invertebrate | Experimental | 48 hours | LC50 | 324 mg/l |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | Green algae | Experimental | 96 hours | NOEC | 130 mg/l |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | Water flea | Experimental | 21 days | NOEC | 100 mg/l |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | Activated sludge | Experimental | 3 hours | EC50 | >100 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 |
| 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 |
| Butadiene Acrylic Copolymer | Trade Secret | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Nepheline Syenite | 37244-96-5 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | Experimental Biodegradation | 28 days | Dissolv. Organic Carbon Deplet | 37 %removal of DOC | EC C.4.A. DOC Die-Away Test |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | Experimental Hydrolysis | | Hydrolytic half-life (pH 7) | 6.5 hours (t 1/2) | OECD 111 Hydrolysis func of pH |

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 |
| Butadiene Acrylic Copolymer | Trade Secret | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Nepheline Syenite | 37244-96-5 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | Experimental Bioconcentration | | Log Kow | 0.5 | Episuite™ |

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™ |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | Modeled Mobility in Soil | Koc | 10 l/kg | Episuite™ |

12.5. Results of the PBT and vPvB assessment

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

12.6. Other adverse effects

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

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

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

EU waste code (product as sold)

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances
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.(EPOXY RESIN) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(EPOXY RESIN) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(EPOXY RESIN) |
| 14.3 Transport hazard class(es) | 9 | 9 | 9 |
| 14.4 Packing group | III | III | III |
| 14.5 Environmental | Environmentally Hazardous | Not applicable | Marine Pollutant |

| | | | |
|--|--|--|--|
| hazards | | | |
| 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-epoxipropoxi)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.

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

Restriction status: listed in UK REACH Annex XVII

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

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of 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. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Revision information:

GB Section 02: CLP Ingredient table information was modified.

Section 1: E-mail address information was modified.

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

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

Section 6: Accidental release personal information information was modified.

Section 8: glove data value information was added.

Section 8: glove data value information was modified.

Section 08: Personal Protection - Apron Statement information was added.

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

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

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

Section 11: Specific Target Organ Toxicity - single exposure text information was deleted.

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

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

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

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

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



Safety Data Sheet

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Document group: 44-9499-3 **Version number:** 1.00
Revision date: 15/01/2025 **Supersedes date:** Initial issue.

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

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

1.1. Product identifier

3M™ Scotch-Weld™ Epoxy Adhesive DP405 Black, Part A

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

Identified uses

Structural adhesive.

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

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

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

CLASSIFICATION:

Acute Toxicity, Category 4 - Acute Tox. 4; H312
 Skin Corrosion/Irritation, Category 1B - Skin Corr. 1B; H314
 Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318
 Skin Sensitization, Category 1 - Skin Sens. 1; H317

For full text of H phrases, see Section 16.

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

DANGER.

Symbols

GHS05 (Corrosion) | GHS07 (Exclamation mark) |

Pictograms

| Ingredient | CAS Nbr | EC No. | % by Wt |
|--|------------|-----------|---------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9 | 224-207-2 | 10 - 30 |
| N,N'-Bis(3-aminopropyl)ethylenediamine | 10563-26-5 | 234-147-9 | <= 15 |
| Nitric acid, calcium salt, tetrahydrate | 13477-34-4 | 233-332-1 | 1 - 9 |
| 2,4,6-tris(dimethylaminomethyl)phenol | 90-72-2 | 202-013-9 | < 5 |

HAZARD STATEMENTS:

H312 Harmful in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.

PRECAUTIONARY STATEMENTS**Prevention:**

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

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTRE or doctor/physician.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

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

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

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

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

Response:

P303 + P361 + P353

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

P305 + P351 + P338

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

P310

Immediately call a POISON CENTRE or doctor/physician.

P333 + P313

If skin irritation or rash occurs: Get medical advice/attention.

Contains 60% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

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

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

Not applicable

3.2. Mixtures

| Ingredient | Identifier(s) | % | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB |
|---|--|---------|--|
| Modified Epoxy Resin | Trade Secret | 40 - 60 | Substance not classified as hazardous |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | (CAS-No.) 4246-51-9 (EC-No.) 224-207-2 | 10 - 30 | Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 |
| N,N'-Bis(3-aminopropyl)ethylenediamine | (CAS-No.) 10563-26-5 (EC-No.) 234-147-9 | <= 15 | Acute Tox. 3, H311 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 |
| Nepheline Syenite | (CAS-No.) 37244-96-5 | 1 - 10 | Substance not classified as hazardous |
| Nitric acid, calcium salt, tetrahydrate | (CAS-No.) 13477-34-4 (EC-No.) 233-332-1 | 1 - 9 | Acute Tox. 4, H302 Eye Dam. 1, H318 |
| Silane, trimethoxyoctyl-, hydrolysis products with silica | (CAS-No.) 92797-60-9 (EC-No.) 296-597-2 | 0.1 - 5 | Substance with a national occupational exposure limit |
| 2,4,6-tris(dimethylaminomethyl)phenol | (CAS-No.) 90-72-2 (EC-No.) 202-013-9 | < 5 | Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 |
| salicylic acid | (CAS-No.) 69-72-7 (EC-No.) 200-712-3 | < 2 | Acute Tox. 4, H302 Eye Dam. 1, H318 Repr. 2, H361d |

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

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

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

Skin contact

Immediately flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

Eye contact

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

If swallowed

Rinse mouth. Do not induce vomiting. Get immediate medical attention.

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

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

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

Overexposure to this product may result in methemoglobinemia. Methemoglobinemia may be clinically suspected by the presence of clinical "cyanosis" in the presence of a normal PaO₂ (as obtained by arterial blood gases). Routine pulse oximetry may be inaccurate for monitoring oxygen saturation in the presence of methemoglobinemia, and should not be used to make the diagnosis of this disorder. If the patient is symptomatic or if the methemoglobin level is >20%, specific therapy with methylene blue should be considered as part of the medical management.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Aldehydes.
Carbon monoxide
Carbon dioxide.
Irritant vapours or gases.
Oxides of nitrogen.

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

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

| Ingredient | CAS Nbr | Agency | Limit type | Additional comments |
|-----------------|------------|--------|---|---------------------|
| Silicon dioxide | 92797-60-9 | UK HSE | TWA(as respirable dust):2.4 mg/m ³ ;TWA(as inhalable dust):6 mg/m ³ | |

UK HSE : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

Biological limit values

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

8.2. Exposure controls

8.2.1. Engineering controls

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

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Full face shield.

Indirect vented goggles.

Applicable Norms/Standards

Use eye/face protection conforming to EN 166

Skin/hand protection

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

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

| Material | Thickness (mm) | Breakthrough Time |
|---------------|----------------|-------------------|
| Butyl rubber. | 0.7 | =>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 – Butyl rubber

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 | Colourless |
| Odor | Slight Amine |
| Odour threshold | <i>No data available.</i> |
| Melting point/freezing point | <i>Not applicable.</i> |
| Boiling point/boiling range | $\geq 121.1\text{ }^{\circ}\text{C}$ |
| Flammability | Not applicable. |
| Flammable Limits(LEL) | <i>No data available.</i> |
| Flammable Limits(UEL) | <i>No data available.</i> |
| Flash point | $\geq 121.1\text{ }^{\circ}\text{C}$ [<i>Test Method: Closed Cup</i>] |
| 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 | 8,200 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>Not applicable.</i> |
| Density | 1.1 g/ml |
| Relative density | 1.1 [<i>Ref Std: WATER=1</i>] |
| Relative Vapour Density | <i>Not applicable.</i> |
| Particle Characteristics | <i>Not applicable.</i> |

9.2. Other information

9.2.2 Other safety characteristics

| | |
|-------------------------------|---------------------------|
| EU Volatile Organic Compounds | <i>No data available.</i> |
| Evaporation rate | Nil |
| Molecular weight | <i>No data available.</i> |

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Strong 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

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

Skin contact

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

Eye contact

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

Ingestion

May be harmful if swallowed.

Gastrointestinal corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea; blood in the faeces and/or vomitus may also be seen. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Methemoglobinemia: Signs/symptoms may include headache, dizziness, nausea, difficulty breathing, and generalised weakness.

Reproductive/Developmental Toxicity:

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

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 >1,000 - =2,000 mg/kg |
| Overall product | Ingestion | | No data available; calculated ATE >2,000 - =5,000 mg/kg |

| | | | |
|---|-----------|-------------------|--|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | Dermal | Rabbit | LD50 2,525 mg/kg |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | Ingestion | Rat | LD50 2,850 mg/kg |
| N,N'-Bis(3-aminopropyl)ethylenediamine | Dermal | Rabbit | LD50 estimated to be 200 - 1,000 mg/kg |
| N,N'-Bis(3-aminopropyl)ethylenediamine | Ingestion | Rat | LD50 1,140 mg/kg |
| Nitric acid, calcium salt, tetrahydrate | Ingestion | Rat | LD50 >300, <2000 mg/kg |
| Nitric acid, calcium salt, tetrahydrate | Dermal | similar compounds | LD50 > 2,000 mg/kg |
| Nepheline Syenite | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Nepheline Syenite | Ingestion | | LD50 estimated to be 2,000 - 5,000 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 |
| Silane, trimethoxyoctyl-, hydrolysis products with silica | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Silane, trimethoxyoctyl-, hydrolysis products with silica | Ingestion | Rat | LD50 > 5,340 mg/kg |
| salicylic acid | Dermal | Rat | LD50 > 2,000 mg/kg |
| salicylic acid | Ingestion | Rat | LD50 891 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|------------------------|---------------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | Rabbit | Corrosive |
| N,N'-Bis(3-aminopropyl)ethylenediamine | Rabbit | Corrosive |
| Nitric acid, calcium salt, tetrahydrate | similar compounds | No significant irritation |
| Nepheline Syenite | Professional judgement | No significant irritation |
| 2,4,6-tris(dimethylaminomethyl)phenol | Rabbit | Corrosive |
| salicylic acid | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|------------------------|---------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | Rabbit | Corrosive |
| N,N'-Bis(3-aminopropyl)ethylenediamine | Rabbit | Corrosive |
| Nitric acid, calcium salt, tetrahydrate | Rabbit | Corrosive |
| Nepheline Syenite | Professional judgement | Mild irritant |
| 2,4,6-tris(dimethylaminomethyl)phenol | Rabbit | Corrosive |
| salicylic acid | Rabbit | Corrosive |

Skin Sensitisation

| Name | Species | Value |
|--|------------------------|----------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | Professional judgement | Sensitising |
| N,N'-Bis(3-aminopropyl)ethylenediamine | Guinea pig | Sensitising |
| Nitric acid, calcium salt, tetrahydrate | similar compounds | Not classified |
| 2,4,6-tris(dimethylaminomethyl)phenol | Guinea pig | Not classified |
| salicylic acid | Mouse | Not classified |

Photosensitisation

| Name | Species | Value |
|----------------|---------|-----------------|
| salicylic acid | Mouse | Not sensitising |

Respiratory Sensitisation

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

Germ Cell Mutagenicity

| Name | Route | Value |
|--|----------|---------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | In Vitro | Not mutagenic |
| N,N'-Bis(3-aminopropyl)ethylenediamine | In Vitro | Not mutagenic |
| Nitric acid, calcium salt, tetrahydrate | In Vitro | Not mutagenic |
| 2,4,6-tris(dimethylaminomethyl)phenol | In Vitro | Not mutagenic |
| salicylic acid | In Vitro | Not mutagenic |
| salicylic acid | In vivo | Not mutagenic |

Carcinogenicity

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

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

| Name | Route | Value | Species | Test result | Exposure Duration |
|--|-----------|--|-------------------|-----------------------|---------------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | Ingestion | Not classified for female reproduction | Rat | NOAEL 600 mg/kg/day | pre mating into lactation |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | Ingestion | Not classified for male reproduction | Rat | NOAEL 600 mg/kg/day | 59 days |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | Ingestion | Not classified for development | Rat | NOAEL 600 mg/kg/day | pre mating into lactation |
| N,N'-Bis(3-aminopropyl)ethylenediamine | Ingestion | Not classified for male reproduction | Rat | NOAEL 100 mg/kg/day | 29 days |
| N,N'-Bis(3-aminopropyl)ethylenediamine | Ingestion | Not classified for female reproduction | Rat | NOAEL 100 mg/kg/day | pre mating into lactation |
| N,N'-Bis(3-aminopropyl)ethylenediamine | Ingestion | Not classified for development | Rat | NOAEL 100 mg/kg/day | pre mating into lactation |
| Nitric acid, calcium salt, tetrahydrate | Ingestion | Not classified for female reproduction | similar compounds | NOAEL 1,500 mg/kg/day | pre mating into lactation |
| Nitric acid, calcium salt, tetrahydrate | Ingestion | Not classified for male reproduction | similar compounds | NOAEL 1,500 mg/kg/day | 28 days |
| Nitric acid, calcium salt, tetrahydrate | Ingestion | Not classified for development | similar compounds | NOAEL 1,500 mg/kg/day | pre mating into lactation |
| 2,4,6-tris(dimethylaminomethyl)phenol | Ingestion | Not classified for male reproduction | Rat | NOAEL 150 mg/kg/day | 2 generation |
| 2,4,6-tris(dimethylaminomethyl)phenol | Ingestion | Not classified for female reproduction | Rat | NOAEL 50 mg/kg/day | 2 generation |
| 2,4,6-tris(dimethylaminomethyl)phenol | Ingestion | Not classified for development | Rabbit | NOAEL 15 mg/kg/day | during gestation |
| salicylic acid | Ingestion | Toxic to development | Rat | NOAEL 75 mg/kg/day | during organogenesis |

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

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|-------|------------|------------------------|-----------------------------------|---------|-------------|-------------------|
| 3,3'- | Inhalation | respiratory irritation | Some positive data exist, but the | similar | NOAEL Not | |

| | | | | | | |
|--|------------|------------------------|--|------------------------|---------------------|------------------------|
| Oxybis(ethyleneoxy)bis(pr opylamine) | | | data are not sufficient for classification | health hazards | available | |
| N,N'-Bis(3- aminopropyl)ethylenediam ine | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | Irritation positive | |
| Nitric acid, calcium salt, tetrahydrate | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |
| Nitric acid, calcium salt, tetrahydrate | Ingestion | methemoglobinemi a | Causes damage to organs | Human | NOAEL Not available | environmental exposure |
| 2,4,6- tris(dimethylaminomethyl) phenol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|--|-----------|--|----------------|-------------------|-----------------------|-------------------|
| 3,3'- Oxybis(ethyleneoxy)bis(pr opylamine) | Ingestion | gastrointestinal tract heart endocrine system bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory system vascular system | Not classified | Rat | NOAEL 600 mg/kg/day | 59 days |
| N,N'-Bis(3- aminopropyl)ethylenediam ine | Ingestion | endocrine system hematopoietic system heart skin gastrointestinal tract bone, teeth, nails, and/or hair liver immune system muscles nervous system eyes kidney and/or bladder respiratory system vascular system | Not classified | Rat | NOAEL 100 mg/kg/day | 29 days |
| Nitric acid, calcium salt, tetrahydrate | Ingestion | heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system eyes kidney and/or bladder respiratory system vascular system | Not classified | similar compounds | NOAEL 1,500 mg/kg/day | 28 days |
| 2,4,6- tris(dimethylaminomethyl) phenol | Dermal | skin | Not classified | Rat | NOAEL 25 mg/kg/day | 4 weeks |
| 2,4,6- tris(dimethylaminomethyl) phenol | Dermal | liver nervous system auditory system hematopoietic system eyes | Not classified | Rat | NOAEL 125 mg/kg/day | 4 weeks |
| 2,4,6- tris(dimethylaminomethyl) phenol | Ingestion | heart endocrine system hematopoietic system liver muscles nervous | Not classified | Rat | NOAEL 150 mg/kg/day | 90 days |

| | | | | | | |
|----------------|-----------|--|----------------|-----|---------------------|--------|
| | | system kidney and/or bladder respiratory system vascular system auditory system skin gastrointestinal tract bone, teeth, nails, and/or hair immune system eyes | | | | |
| salicylic acid | Ingestion | liver | Not classified | Rat | NOAEL 500 mg/kg/day | 3 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 |
|--|------------|------------------|--------------|----------|---------------|-------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9 | Bacteria | Experimental | 17 hours | EC50 | 4,000 mg/l |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9 | Golden Orfe | Experimental | 96 hours | LC50 | >1,000 mg/l |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9 | Green algae | Experimental | 72 hours | EC50 | >500 mg/l |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9 | Water flea | Experimental | 48 hours | EC50 | 218.16 mg/l |
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9 | Green algae | Experimental | 72 hours | EC10 | 5.4 mg/l |
| N,N'-Bis(3-aminopropyl)ethyle nediamine | 10563-26-5 | Activated sludge | Experimental | 3 hours | EC50 | 720 mg/l |
| N,N'-Bis(3-aminopropyl)ethyle nediamine | 10563-26-5 | Golden Orfe | Experimental | 96 hours | LC50 | 220 mg/l |
| N,N'-Bis(3-aminopropyl)ethyle nediamine | 10563-26-5 | Green algae | Experimental | 72 hours | ErC50 | >100 mg/l |
| N,N'-Bis(3-aminopropyl)ethyle nediamine | 10563-26-5 | Water flea | Experimental | 48 hours | EC50 | 42.54 mg/l |

| | | | | | | |
|---|------------|-------------------------------|---|----------|-------|---------------|
| N,N'-Bis(3-aminopropyl)ethyle nediamine | 10563-26-5 | Green algae | Experimental | 72 hours | ErC10 | 93.6 mg/l |
| N,N'-Bis(3-aminopropyl)ethyle nediamine | 10563-26-5 | Water flea | Experimental | 21 days | NOEC | 7.2 mg/l |
| Nepheline Syenite | 37244-96-5 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| Nitric acid, calcium salt, tetrahydrate | 13477-34-4 | Guppy | Estimated | 96 hours | LC50 | 1,378 mg/l |
| Nitric acid, calcium salt, tetrahydrate | 13477-34-4 | Fathead minnow | Estimated | 30 days | NOEC | 58 mg/l |
| Silane, trimethoxyoctyl-, hydrolysis products with silica | 92797-60-9 | Algae or other aquatic plants | Experimental | 72 hours | EC50 | >=10,000 mg/l |
| Silane, trimethoxyoctyl-, hydrolysis products with silica | 92797-60-9 | Water flea | Experimental | 24 hours | EL50 | >10,000 mg/l |
| Silane, trimethoxyoctyl-, hydrolysis products with silica | 92797-60-9 | Zebra Fish | Experimental | 96 hours | LC50 | >10,000 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 |
| salicylic acid | 69-72-7 | Green algae | Experimental | 72 hours | EC50 | >100 mg/l |
| salicylic acid | 69-72-7 | Medaka | Experimental | 96 hours | LC50 | >100 mg/l |
| salicylic acid | 69-72-7 | Water flea | Experimental | 48 hours | EC50 | 870 mg/l |
| salicylic acid | 69-72-7 | Water flea | Experimental | 21 days | NOEC | 10 mg/l |
| salicylic acid | 69-72-7 | Activated sludge | Experimental | 3 hours | EC50 | >3,200 |
| salicylic acid | 69-72-7 | Bacteria | Experimental | 18 hours | EC10 | 465 |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---|------------|-------------------------------|----------|-------------------------------|-----------------------------------|-----------------------------------|
| 3,3'-Oxybis(ethyleneoxybis(propylamine) | 4246-51-9 | Experimental Biodegradation | 25 days | CO2 evolution | -8 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| 3,3'-Oxybis(ethyleneoxybis(propylamine) | 4246-51-9 | Estimated Photolysis | | Photolytic half-life (in air) | 2.96 hours (t 1/2) | |
| N,N'-Bis(3-aminopropyl)ethyle nediamine | 10563-26-5 | Experimental Biodegradation | 28 days | CO2 evolution | 70 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| Nepheline Syenite | 37244-96-5 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |

| | | | | | | |
|---|------------|-------------------------------|---------|-----|----------------|--------------------------------|
| Nitric acid, calcium salt, tetrahydrate | 13477-34-4 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Silane, trimethoxyoctyl-, hydrolysis products with silica | 92797-60-9 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| 2,4,6-tris(dimethylamino methyl)phenol | 90-72-2 | Experimental Biodegradation | 28 days | BOD | 4 %BOD/ThOD | OECD 301D - Closed bottle test |
| salicylic acid | 69-72-7 | Experimental Biodegradation | 14 days | BOD | 88.1 %BOD/ThOD | OECD 301C - MITI test (I) |

12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|---|------------|---|----------|------------------------|-------------|-------------------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9 | Experimental Bioconcentration | | Log Kow | -1.25 | |
| N,N'-Bis(3-aminopropyl)ethyle nediamine | 10563-26-5 | Experimental Bioconcentration | | Log Kow | -1.55 | similar to OECD 107 |
| N,N'-Bis(3-aminopropyl)ethyle nediamine | 10563-26-5 | Analogous Compound BCF - Fish | 42 days | Bioaccumulation factor | <5 | |
| Nepheline Syenite | 37244-96-5 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Nitric acid, calcium salt, tetrahydrate | 13477-34-4 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Silane, trimethoxyoctyl-, hydrolysis products with silica | 92797-60-9 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| 2,4,6-tris(dimethylamino methyl)phenol | 90-72-2 | Experimental Bioconcentration | | Log Kow | -0.66 | 830.7550 Part.Cof Shake Flask |
| salicylic acid | 69-72-7 | Experimental Bioconcentration | | Log Kow | 2.26 | |

12.4. Mobility in soil

| Material | Cas No. | Test type | Study Type | Test result | Protocol |
|--|------------|-------------------------------|------------|----------------|----------------------|
| 3,3'-Oxybis(ethyleneoxy)bis(propylamine) | 4246-51-9 | Modeled Mobility in Soil | Koc | 1 l/kg | ACD/Labs ChemSketch™ |
| N,N'-Bis(3-aminopropyl)ethyle nediamine | 10563-26-5 | Experimental Mobility in Soil | Koc | 1600-5000 l/kg | |
| salicylic acid | 69-72-7 | Modeled Mobility in Soil | Koc | <1 l/kg | Episuite™ |

12.5. Results of the PBT and vPvB assessment

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

12.6. Other adverse effects

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

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

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

EU waste code (product as sold)

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

SECTION 14: Transportation information

| | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|--|--|--|--|
| 14.1 UN number | UN2735 | UN2735 | UN2735 |
| 14.2 UN proper shipping name | AMINES, LIQUID, CORROSIVE, N.O.S.(BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GLYCOL) | AMINES, LIQUID, CORROSIVE, N.O.S.(BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GLYCOL) | AMINES, LIQUID, CORROSIVE, N.O.S.(BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GLYCOL) |
| 14.3 Transport hazard class(es) | 8 | 8 | 8 |
| 14.4 Packing group | II | II | II |
| 14.5 Environmental hazards | Not Environmentally Hazardous | Not applicable | Not a 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 | Not applicable. | Not applicable. | 18 - ALKALIS |

| | | | |
|------|--|--|--|
| Code | | | |
|------|--|--|--|

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

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". 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 chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1
None

Seveso named dangerous substances, Annex 1, Part 2

None

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

No chemicals listed

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

List of relevant H statements

| | |
|-------|--|
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H361d | Suspected of damaging the unborn child. |

Revision information:

No revision information

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volume tracking, and potential substance registration.

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

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