



Safety Data Sheet

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| | | | |
|---------------------------------------|------------|-------------------------|------------|
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| Revision date: | 28/01/2025 | Supersedes date: | 22/06/2011 |
| Transportation version number: | | | |

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™ Scotchcast™ 2131 Resin Kits with CC-3 Cleaning Pads

Product Identification Numbers

KE-2351-1477-1

7000092584

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

Identified uses

Electrical

1.3. Details of the supplier of the safety data sheet

Address: 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.
Telephone: +353 1 280 3555
E Mail: tox.uk@mmm.com

Website: www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

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:

28-7666-2, 28-7650-6, 11-4628-1

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 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318
Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334
Skin Sensitization, Category 1 - Skin Sens. 1; H317
Carcinogenicity, Category 2 - Carc. 2; H351
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335
Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

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) | GHS08 (Health Hazard) |

Pictograms



Contains:

1,1,3-tris(3-tert-butyl-4-hydroxy-6-methylphenyl)butane; methylenediphenyl diisocyanate; 1,1'-Methylenebis[isocyanatobenzene], homopolymer; (R)-p-mentha-1,8-diene; 1,1'-Phenyliminodipropan-2-ol; 4,4'-methylenediphenyl diisocyanate; Polyoxyalkylenes.

HAZARD STATEMENTS:

| | |
|------|--|
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction. |
| H351 | Suspected of causing cancer. |
| H335 | May cause respiratory irritation. |

| | |
|------|--|
| H373 | May cause damage to organs through prolonged or repeated exposure: respiratory system. |
|------|--|

| | |
|------|--|
| H412 | Harmful to aquatic life with long lasting effects. |
|------|--|

PRECAUTIONARY STATEMENTS

Prevention:

| | |
|-------|---|
| P261A | Avoid breathing vapours. |
| P280B | Wear protective gloves and eye/face protection. |

Response:

| | |
|--------------------|--|
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| 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. |
| P342 + P311 | If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician. |

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

Information required per Regulation (EU) 2020/1149 as regards diisocyanates:

As from 24 August 2023 adequate training is required before industrial or professional use. Further information can be found at feica.eu/Puinfo

Revision information:

Label: CLP Percent Unknown - Kit information was added.
Label: CLP Ingredients - kit components information was added.
Company Telephone information was added.
Section 1: Emergency telephone information was modified.
Section 1: Product identification numbers information was added.
Section 1: Product name information was modified.
Section 01: SAP Material Numbers information was added.
Section 2: Additional label requirements phrase information was deleted.
Section 02: CLP Physical and Health Hazard Statements information was added.
Section 2: H phrase reference information was added.
Label: CLP Classification information was added.
Label: CLP Environmental Hazard Statements information was added.
Label: CLP Precautionary - Prevention information was added.
Label: CLP Precautionary - Response information was added.
Label: CLP Target Organ Hazard Statement information was added.
Label: Graphic information was added.
Label: Signal Word information was added.
Section 02: Regulation (EU) 2020/1149 Statement information was added.
Remark (phrase) information was deleted.
Section 2: Risk phrase information information was deleted.
Safety phrase information was deleted.
Section 2: Symbol information was deleted.



Safety Data Sheet

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| | | | |
|------------------------|------------|-------------------------|------------|
| Document group: | 28-7650-6 | Version number: | 13.00 |
| Revision date: | 24/04/2025 | Supersedes date: | 07/02/2023 |

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

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

1.1. Product identifier

3M™ Scotchcast™ Flame-Retardant Compound 2131 (Part A)

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

Identified uses

Electrical

1.3. Details of the supplier of the safety data sheet

| | |
|-------------------|---|
| Address: | 3M Ireland Limited, 70 SIR JOHN ROGERSON'S QUAY, D02R296 DUBLIN 2 |
| Telephone: | +353 1 280 3555 |
| E Mail: | ner-productstewardship@mmm.com |
| Website: | www.3M.com |

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

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
Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334
Skin Sensitization, Category 1 - Skin Sens. 1; H317
Carcinogenicity, Category 2 - Carc. 2; H351
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335

For full text of H phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER.

Symbols

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

Pictograms



Ingredients:

| Ingredient | CAS Nbr | EC No. | % by Wt |
|---|-------------|-----------|---------|
| Polyoxyalkylenes | 154517-54-1 | | 35 - 45 |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | 202-966-0 | 15 - 40 |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | 39310-05-9 | | 10 - 30 |
| methylenediphenyl diisocyanate | 26447-40-5 | 247-714-0 | 1 - 5 |

HAZARD STATEMENTS:

| | |
|------|--|
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction. |
| H351 | Suspected of causing cancer. |
| H335 | May cause respiratory irritation. |
| H373 | May cause damage to organs through prolonged or repeated exposure: respiratory system. |

PRECAUTIONARY STATEMENTS

Prevention:

| | |
|-------|--|
| P261A | Avoid breathing vapours. |
| P280K | Wear protective gloves and respiratory protection. |

Response:

| | |
|--------------------|--|
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P342 + P311 | If experiencing respiratory symptoms: 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

| | |
|------|--|
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction. |
| H351 | Suspected of causing cancer. |

<=125 ml Precautionary statements

Prevention:

P261A Avoid breathing vapours.
P280K Wear protective gloves and respiratory protection.

Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

Contains 45% of components with unknown hazards to the aquatic environment.

Information required per Regulation (EU) 2020/1149 as regards diisocyanates:

As from 24 August 2023 adequate training is required before industrial or professional use. Further information can be found at feica.eu/Puinfo

2.3. Other hazards

Persons previously sensitised to isocyanates may develop a cross-sensitisation reaction to other isocyanates.
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] |
|---|---|---------|---|
| Polyoxyalkylenes | (CAS-No.) 154517-54-1 | 35 - 45 | Resp. Sens. 1, H334 Skin Sens. 1, H317 |
| 4,4'-methylenediphenyl diisocyanate | (CAS-No.) 101-68-8 (EC-No.) 202-966-0 | 15 - 40 | Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373 Nota 2,C |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | (CAS-No.) 39310-05-9 | 10 - 30 | Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373 |
| Diundecyl phthalate | (CAS-No.) 3648-20-2 (EC-No.) 222-884-9 | < 15 | Aquatic Chronic 3, H412 |

| | | | |
|--------------------------------|---|-------|---|
| methylenediphenyl diisocyanate | (CAS-No.) 26447-40-5 (EC-No.) 247-714-0 | 1 - 5 | Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373 Nota 2,C |
| triethyl phosphate | (CAS-No.) 78-40-0 (EC-No.) 201-114-5 (REACH-No.) 01-2119492852-28 | < 1.2 | Acute Tox. 4, H302 Eye Irrit. 2, H319 |

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 |
|---|--|---|
| methylenediphenyl diisocyanate | (CAS-No.) 26447-40-5 (EC-No.) 247-714-0 | (C >= 5%) Skin Irrit. 2, H315 (C >= 5%) Eye Irrit. 2, H319 (C >= 0.1%) Resp. Sens. 1, H334 (C >= 5%) STOT SE 3, H335 |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | (CAS-No.) 39310-05-9 | (C >= 5%) Skin Irrit. 2, H315 (C >= 5%) Eye Irrit. 2, H319 (C >= 0.1%) Resp. Sens. 1, H334 (C >= 5%) STOT SE 3, H335 |
| 4,4'-methylenediphenyl diisocyanate | (CAS-No.) 101-68-8 (EC-No.) 202-966-0 | (C >= 5%) Skin Irrit. 2, H315 (C >= 5%) Eye Irrit. 2, H319 (C >= 0.1%) Resp. Sens. 1, H334 (C >= 5%) STOT SE 3, H335 |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

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

Skin contact

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

Eye contact

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

If swallowed

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

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

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

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). 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). Target organ effects. See Section 11 for additional details.

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

Not applicable

SECTION 5: Fire-fighting measures**5.1. Extinguishing media**

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

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products**Substance**

Carbon monoxide
Carbon dioxide.
Hydrogen cyanide.
Oxides of nitrogen.

Condition

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. 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. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. 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 container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. 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. 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 use in a confined area with minimal air exchange. 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.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Protect from sunlight. Store away from heat. Store away from strong bases. Store away from areas where product may come into contact with food or pharmaceuticals. Store in a dry place.

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 |
|-------------------------------------|------------|--------------|--|---|
| CAS NO SEQ911373 | 101-68-8 | Ireland OELs | TWA(8 hours):0.02 mg/m ³ ;STEL(15 minutes):0.07 mg/m ³ | as NCO |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | Ireland OELs | TWA(as NCO)(8 hours):0.005 ppm;TWA(8 hours):0.005 ppm | as NCO, Respiratory/Dermal Sensitizer |
| CAS NO SEQ911373 | 26447-40-5 | Ireland OELs | TWA(8 hours):0.02 mg/m ³ ;STEL(15 minutes):0.07 mg/m ³ | as NCO |
| CAS NO SEQ911373 | 39310-05-9 | Ireland OELs | TWA(8 hours):0.02 mg/m ³ ;STEL(15 minutes):0.07 mg/m ³ | as NCO |

Ireland OELs : Ireland. OELs
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

Biological limit values

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

Recommended monitoring procedures: Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure

Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Safety glasses with side shields.

Indirect vented goggles.

Applicable Norms/Standards

Use eye protection conforming to EN 166

Skin/hand protection

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

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

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

Applicable Norms/Standards

Use gloves tested to EN 374

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

Respiratory protection

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

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

Half facepiece or full facepiece supplied-air respirator

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

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-------------------------------------|--------------------|
| Physical state | Liquid. |
| Colour | Light Straw |
| Odor | Pungent Petroleum |
| Odour threshold | No data available. |
| Melting point/freezing point | Not applicable. |
| Boiling point/boiling range | ≥148.9 °C |

| | |
|---|--|
| Flammability | Not applicable. |
| Flammable Limits(LEL) | <i>No data available.</i> |
| Flammable Limits(UEL) | <i>No data available.</i> |
| Flash point | $\geq 148.9^{\circ}\text{C}$ [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 | 741 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 | <i>No data available.</i> |
| Relative density | 1.08 [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

| | |
|--------------------------------------|---------------------------|
| Average particle size | <i>No data available.</i> |
| Bulk density | <i>No data available.</i> |
| EU Volatile Organic Compounds | <i>No data available.</i> |
| Evaporation rate | <i>No data available.</i> |
| Molecular weight | <i>No data available.</i> |
| Softening point | <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 may occur.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Strong bases.

Alcohols.

Water

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 EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from internal hazard assessments.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Signs and Symptoms of Exposure

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

Inhalation

Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest. May cause additional health effects (see below).

Skin contact

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

Eye contact

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

Ingestion

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

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure.

Additional information:

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

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 |
| Polyoxyalkylenes | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Polyoxyalkylenes | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| 4,4'-methylenediphenyl diisocyanate | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| 4,4'-methylenediphenyl diisocyanate | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.368 mg/l |
| 4,4'-methylenediphenyl diisocyanate | Ingestion | Rat | LD50 31,600 mg/kg |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.368 mg/l |

3M™ Scotchcast™ Flame-Retardant Compound 2131 (Part A)

| | | | |
|---|--------------------------------|------------|---------------------|
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | Ingestion | Rat | LD50 31,600 mg/kg |
| Diundecyl phthalate | Dermal | Rabbit | LD50 > 7,900 mg/kg |
| Diundecyl phthalate | Ingestion | Rat | LD50 > 15,000 mg/kg |
| methylenediphenyl diisocyanate | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| methylenediphenyl diisocyanate | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.368 mg/l |
| methylenediphenyl diisocyanate | Ingestion | Rat | LD50 31,600 mg/kg |
| triethyl phosphate | Dermal | Guinea pig | LD50 > 21,400 mg/kg |
| triethyl phosphate | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 8.8 mg/l |
| triethyl phosphate | Ingestion | Rat | LD50 1,131 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|-------------------------|---------------------------|
| 4,4'-methylenediphenyl diisocyanate | official classification | Irritant |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | official classification | Irritant |
| methylenediphenyl diisocyanate | official classification | Irritant |
| triethyl phosphate | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---|-------------------------|-----------------|
| 4,4'-methylenediphenyl diisocyanate | official classification | Severe irritant |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | official classification | Severe irritant |
| methylenediphenyl diisocyanate | official classification | Severe irritant |
| triethyl phosphate | Rabbit | Severe irritant |

Skin Sensitisation

| Name | Species | Value |
|---|---------|----------------|
| 4,4'-methylenediphenyl diisocyanate | Mouse | Sensitising |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | Mouse | Sensitising |
| methylenediphenyl diisocyanate | Mouse | Sensitising |
| triethyl phosphate | Mouse | Not classified |

Respiratory Sensitisation

| Name | Species | Value |
|---|---------|-------------|
| 4,4'-methylenediphenyl diisocyanate | Human | Sensitising |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | Human | Sensitising |
| methylenediphenyl diisocyanate | Human | Sensitising |

Germ Cell Mutagenicity

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

3M™ Scotchcast™ Flame-Retardant Compound 2131 (Part A)

| | | |
|---|----------|--|
| 4,4'-methylenediphenyl diisocyanate | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| methylenediphenyl diisocyanate | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|---|------------|---------|--|
| 4,4'-methylenediphenyl diisocyanate | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| methylenediphenyl diisocyanate | Inhalation | Rat | 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 |
|---|------------|--------------------------------|---------|---------------------|----------------------|
| 4,4'-methylenediphenyl diisocyanate | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesis |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesis |
| methylenediphenyl diisocyanate | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesis |

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

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---|------------|------------------------|--|-------------------------|---------------------|-------------------|
| 4,4'-methylenediphenyl diisocyanate | Inhalation | respiratory irritation | May cause respiratory irritation | official classification | NOAEL Not available | |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | Inhalation | respiratory irritation | May cause respiratory irritation | official classification | NOAEL Not available | |
| methylenediphenyl diisocyanate | Inhalation | respiratory irritation | May cause respiratory irritation | official classification | NOAEL Not available | |
| triethyl phosphate | 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 |
|---|------------|--------------------|--|---------|---------------------|-------------------|
| 4,4'-methylenediphenyl diisocyanate | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| methylenediphenyl diisocyanate | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 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 EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

| Material | CAS # | Organism | Type | Exposure | Test endpoint | Test result |
|---|-------------|------------------|---|------------|---------------|---------------------------|
| Polyoxyalkylenes | 154517-54-1 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | Activated sludge | Estimated | 3 hours | EC50 | >100 mg/l |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | Green algae | Estimated | 72 hours | EC50 | >1,640 mg/l |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | Water flea | Estimated | 24 hours | EC50 | >1,000 mg/l |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | Zebra Fish | Estimated | 96 hours | LC50 | >1,000 mg/l |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | Green algae | Estimated | 72 hours | NOEC | 1,640 mg/l |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | Water flea | Estimated | 21 days | NOEC | 10 mg/l |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | 39310-05-9 | Water flea | Analogous Compound | 24 hours | EC50 | >100 mg/l |
| Diundecyl phthalate | 3648-20-2 | Fathead minnow | Experimental | 96 hours | LC50 | >100 mg/l |
| Diundecyl phthalate | 3648-20-2 | Water flea | Experimental | 21 days | NOEC | 0.35 mg/l |
| methylenediphenyl diisocyanate | 26447-40-5 | Green algae | Analogous Compound | 72 hours | EC50 | >1,640 mg/l |
| methylenediphenyl diisocyanate | 26447-40-5 | Water flea | Analogous Compound | 24 hours | EC50 | >1,000 mg/l |
| methylenediphenyl diisocyanate | 26447-40-5 | Zebra Fish | Analogous Compound | 96 hours | LC50 | >1,000 mg/l |
| methylenediphenyl diisocyanate | 26447-40-5 | Green algae | Analogous Compound | 72 hours | NOEC | 1,640 mg/l |
| methylenediphenyl diisocyanate | 26447-40-5 | Water flea | Analogous Compound | 21 days | NOEC | 10 mg/l |
| methylenediphenyl diisocyanate | 26447-40-5 | Activated sludge | Analogous Compound | 3 hours | EC50 | >100 mg/l |
| methylenediphenyl diisocyanate | 26447-40-5 | Lettuce | Analogous Compound | 17 days | NOEC | 1,000 mg/kg (Dry Weight) |
| methylenediphenyl diisocyanate | 26447-40-5 | Redworm | Analogous Compound | 14 days | LC50 | >1,000 mg/kg (Dry Weight) |
| triethyl phosphate | 78-40-0 | Activated sludge | Experimental | 5 hours | EC50 | 5,000 mg/l |
| triethyl phosphate | 78-40-0 | Bacteria | Experimental | 30 minutes | EC10 | 2,985 mg/l |
| triethyl phosphate | 78-40-0 | Fathead minnow | Experimental | 96 hours | LC50 | >100 mg/l |
| triethyl phosphate | 78-40-0 | Green algae | Experimental | 72 hours | EbC50 | 900 mg/l |

3M™ Scotchcast™ Flame-Retardant Compound 2131 (Part A)

| | | | | | | |
|--------------------|---------|------------|--------------|----------|------|-----------|
| triethyl phosphate | 78-40-0 | Water flea | Experimental | 48 hours | EC50 | 350 mg/l |
| triethyl phosphate | 78-40-0 | Water flea | Experimental | 21 days | NOEC | 31.6 mg/l |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---|-------------|--|----------|--------------------------------|------------------------------------|--------------------------------|
| Polyoxyalkylenes | 154517-54-1 | Data not available - insufficient | N/A | N/A | N/A | N/A |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | Estimated Hydrolysis | | Hydrolytic half-life | 20 hours (t 1/2) | |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | 39310-05-9 | Hydrolysis product Biodegradation | 28 days | BOD | 0 %BOD/ThOD | OECD 301C - MITI test (I) |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | 39310-05-9 | Analogous Compound Hydrolysis | | Hydrolytic half-life (pH 7) | <2 hours (t 1/2) | |
| Diundecyl phthalate | 3648-20-2 | Experimental Biodegradation | 28 days | CO2 evolution | 76 %CO2 evolution/THC O2 evolution | similar to OECD 301B |
| methylenediphenyl diisocyanate | 26447-40-5 | Analogous Compound Biodegradation | 28 days | BOD | 0 %BOD/ThOD | OECD 301C - MITI test (I) |
| methylenediphenyl diisocyanate | 26447-40-5 | Analogous Compound Aquatic Inherent Biodegrad. | 28 days | BOD | 0 %BOD/ThOD | OECD 302C - Modified MITI (II) |
| methylenediphenyl diisocyanate | 26447-40-5 | Analogous Compound Hydrolysis | | Hydrolytic half-life (pH 7) | <2 hours (t 1/2) | |
| triethyl phosphate | 78-40-0 | Experimental Biodegradation | 28 days | Dissolv. Organic Carbon Deplet | 97 %removal of DOC | 835.3200 Zhan-Wellens |
| triethyl phosphate | 78-40-0 | Experimental Biodegradation | 28 days | BOD | 0 %BOD/ThOD | OECD 301C - MITI test (I) |
| triethyl phosphate | 78-40-0 | Experimental Hydrolysis | | Hydrolytic half-life (pH 7) | >1 years (t 1/2) | EC C.7 Hydrolysis at pH |

12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|---|-------------|---|----------|------------------------|-------------|------------------------------|
| Polyoxyalkylenes | 154517-54-1 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | Experimental BCF - Fish | 28 days | Bioaccumulation factor | 200 | OECD305-Bioconcentration |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | 39310-05-9 | Analogous Compound BCF - Fish | 28 days | Bioaccumulation factor | 200 | |
| Diundecyl phthalate | 3648-20-2 | Modeled Bioconcentration | | Bioaccumulation factor | 7.4 | Catalogic™ |
| methylenediphenyl diisocyanate | 26447-40-5 | Analogous Compound BCF - Fish | 28 days | Bioaccumulation factor | 200 | OECD305-Bioconcentration |
| methylenediphenyl diisocyanate | 26447-40-5 | Analogous Compound Bioconcentration | | Log Kow | 4.51 | OECD 117 log Kow HPLC method |
| triethyl phosphate | 78-40-0 | Experimental BCF - Fish | 42 days | Bioaccumulation factor | <1.3 | OECD305-Bioconcentration |

12.4. Mobility in soil

| Material | Cas No. | Test type | Study Type | Test result | Protocol |
|-------------------------------------|----------|----------------------------|------------|-------------|-----------|
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | Estimated Mobility in Soil | Koc | 34,000 l/kg | Episuite™ |

| | | | | | |
|--------------------------------|------------|--------------------------|-----|--------------|-----------|
| methylenediphenyl diisocyanate | 26447-40-5 | Modeled Mobility in Soil | Koc | 300,000 l/kg | Episuite™ |
| triethyl phosphate | 78-40-0 | Modeled Mobility in Soil | Koc | 30 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. Endocrine disrupting properties

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

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

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

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

EU waste code (product as sold)

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

SECTION 14: Transportation information

Not hazardous for transportation.

| | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|--|------------------------|----------------------|-------------------------|
| 14.1 UN number or ID number | No data available. | No data available. | No data available. |
| 14.2 UN proper shipping name | No data available. | No data available. | No data available. |
| 14.3 Transport hazard class(es) | No data available. | No data available. | No data available. |

| | | | |
|---|--|--|--|
| 14.4 Packing group | No data available. | No data available. | No data available. |
| 14.5 Environmental hazards | No data available. | No data available. | No data available. |
| 14.6 Special precautions for user | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. |
| 14.7 Marine Transport in bulk according to IMO instruments | 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 | No data available. | No data available. | No data available. |
| IMDG Segregation Code | No data available. | No data available. | No data available. |

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

SECTION 15: Regulatory information

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

Carcinogenicity

| <u>Ingredient</u> | <u>CAS Nbr</u> | <u>Classification</u> | <u>Regulation</u> |
|---|----------------|-------------------------|---|
| methylenediphenyl diisocyanate | 26447-40-5 | Carc. 2 | Regulation (EC) No. 1272/2008, Table 3.1 |
| methylenediphenyl diisocyanate | 26447-40-5 | Gr. 3: Not classifiable | International Agency for Research on Cancer |
| 1,1'-Methylenebis[isocyanatobenzene], homopolymer | 39310-05-9 | Carc. 2 | 3M classified according to Regulation (EC) No 1272/2008 |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | Carc. 2 | Regulation (EC) No. 1272/2008, Table 3.1 |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | 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 through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. 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> |
|--------------------------------|----------------|
| methylenediphenyl diisocyanate | 26447-40-5 |

4,4'-methylenediphenyl diisocyanate

101-68-8

Restriction status: listed in REACH Annex XVII

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

Authorization status under REACH:

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

Ingredient**CAS Nbr**

Diundecyl phthalate

3648-20-2

Authorization status: listed in REACH Annex XIV ("Authorization List")

Ingredient**CAS Nbr**

Diundecyl phthalate

3648-20-2

Authorization status: listed in the Candidate List of Substances of Very High Concern for Authorization

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. 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.

DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

Regulation (EU) No 649/2012

| Chemical | Identifier(s) | Annex I |
|---------------------|---------------|-------------------|
| Diundecyl phthalate | 3648-20-2 | Part 1 and Part 2 |

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information**List of relevant H statements**

| | |
|------|--|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure: respiratory system. |
| H412 | Harmful to aquatic life with long lasting effects. |

Revision information:

Section 1: Address information was modified.

Section 1: E-mail address information was modified.

CLP: Ingredient table information was modified.

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

Section 6: Accidental release personal information information was modified.

Section 7: Conditions safe storage information was modified.

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

Section 8: Occupational exposure limit table information was modified.

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

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

Section 09: Flammability information information was added.

Section 09: Odor information was modified.

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

Section 11: Acute Toxicity table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

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

Section 11: Reproductive Toxicity Table information was modified.

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

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

Section 11: Skin Sensitization Table information was modified.

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

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

Section 12: Component ecotoxicity information information was modified.

Section 12: Mobility in soil information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12: Biocumulative potential information information was modified.

Section 15: Authorization status under REACH: Annex XIV ingredient information information was added.

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

Section 15: Carcinogenicity information information was modified.

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

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

3M Ireland MSDSs are available at www.3M.com



Safety Data Sheet

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| | | | |
|------------------------|------------|-------------------------|------------|
| Document group: | 28-7666-2 | Version number: | 12.01 |
| Revision date: | 05/10/2023 | Supersedes date: | 27/07/2023 |

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

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

1.1. Product identifier

3M Scotchcast™ Flame Retardant Resin 2131 (Part B)

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

Identified uses

Electrical

1.3. Details of the supplier of the safety data sheet

| | |
|-------------------|---|
| Address: | 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18. |
| Telephone: | +353 1 280 3555 |
| E Mail: | tox.uk@mmm.com |
| Website: | www.3M.com |

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

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:

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

Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

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) |

Pictograms**Ingredients:**

| Ingredient | CAS Nbr | EC No. | % by Wt |
|-------------------------------|-----------|-----------|---------|
| 1,1'-Phenyliminodipropan-2-ol | 3077-13-2 | 221-360-7 | 4 - 10 |

HAZARD STATEMENTS:

| | |
|------|--|
| H318 | Causes serious eye damage. |
| H412 | Harmful to aquatic life with long lasting effects. |

PRECAUTIONARY STATEMENTS**Prevention:**

| | |
|-------|---------------------------|
| P280A | Wear eye/face protection. |
|-------|---------------------------|

Response:

| | |
|--------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTRE or doctor/physician. |

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

<=125 ml Hazard statements

| | |
|------|--|
| H318 | Causes serious eye damage. |
| H412 | Harmful to aquatic life with long lasting effects. |

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

| | |
|-------|---------------------------|
| P280A | Wear eye/face protection. |
|-------|---------------------------|

Response:

| | |
|--------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTRE or doctor/physician. |

4% of the mixture consists of components of unknown acute oral toxicity.

Contains 8% 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] |
|---|--|---------|---|
| 1,3-Butadiene, homopolymer, hydroxy-terminated | (CAS-No.) 69102-90-5 | 20 - 30 | Substance not classified as hazardous |
| 1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene] | (CAS-No.) 84852-53-9 (EC-No.) 284-366-9 | 22 - 25 | Substance not classified as hazardous |
| Diundecyl phthalate, branched and linear | (CAS-No.) 85507-79-5 (EC-No.) 287-401-6 | 10 - 20 | Substance not classified as hazardous |
| Silicic acid, aluminum potassium sodium salt | (CAS-No.) 12736-96-8 (EC-No.) 235-787-1 | 1 - 10 | Substance not classified as hazardous |
| Propane-1,2-diol, propoxylated | (CAS-No.) 25322-69-4 | 5 - 10 | Acute Tox. 4, H302 |
| Diantimony pentoxide | (CAS-No.) 1314-60-9 (EC-No.) 215-237-7 | 5 - 10 | Aquatic Chronic 2, H411 |
| Castor oil | (CAS-No.) 8001-79-4 (EC-No.) 232-293-8 | 1 - 10 | Substance not classified as hazardous |
| 1,1'-Phenylinodipropyl-2-ol | (CAS-No.) 3077-13-2 (EC-No.) 221-360-7 | 4 - 10 | Eye Dam. 1, H318 |
| Oxydipropylol | (CAS-No.) 25265-71-8 (EC-No.) 246-770-3 (REACH-No.) 01-2119456811-38 | 3 - 6 | Substance not classified as hazardous |
| Carbon black | (CAS-No.) 1333-86-4 (EC-No.) 215-609-9 | <= 2 | Substance with a national occupational exposure limit |
| Silaneamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | (CAS-No.) 68909-20-6 (EC-No.) 272-697-1 | <= 1 | EUH066 STOT RE 2, H373 |
| 1,4-diazabicyclooctane | (CAS-No.) 280-57-9 (EC-No.) 205-999-9 | <= 1 | Acute Tox. 4, H302 Eye Dam. 1, H318 |

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

Wash with soap and water. If you feel unwell, get medical attention.

Eye contact

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

If swallowed

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

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

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

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

Carbon monoxide
Carbon dioxide.
Oxides of nitrogen.
Oxides of antimony.

Condition

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

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

7.2. Conditions for safe storage including any incompatibilities

Keep container tightly closed. Keep cool. Store away from heat. Store in a dry place.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

| Ingredient | CAS Nbr | Agency | Limit type | Additional comments |
|-------------------|----------------|---------------|--|----------------------------|
| Carbon black | 1333-86-4 | Ireland OELs | TWA(inhalable fraction)(8 hours):3 mg/m ³ | |
| Silicon dioxide | 68909-20-6 | Ireland OELs | TWA(Total inhalable dust)(8 hours):6 mg/m ³ ;TWA(as respirable dust)(8 hours):2.4 mg/m ³ | |

Ireland OELs : Ireland. OELs
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

Biological limit values

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

Recommended monitoring procedures:Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

8.2. Exposure controls

8.2.1. Engineering controls

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation on open containers.

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

No chemical protective gloves are required.

Respiratory protection

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

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

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

Applicable Norms/Standards

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---|
| Physical state | Liquid. |
| Colour | Black |
| Odor | Pungent Odor |
| Odour threshold | No data available. |
| Melting point/freezing point | Not applicable. |
| Boiling point/boiling range | > 143.3 °C |
| Flammability (solid, gas) | Not applicable. |
| Flammable Limits(LEL) | No data available. |
| Flammable Limits(UEL) | No data available. |
| Flash point | > 143.3 °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 | 4,264 mm ² /sec |
| Water solubility | Nil |
| Solubility- non-water | No data available. |
| Partition coefficient: n-octanol/water | No data available. |
| Vapour pressure | < 186,158.4 Pa [@ 55 °C] |
| Density | No data available. |
| Relative density | 1.29 [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
Molecular weight

No data available.
No data available.

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

None known.

10.5 Incompatible materials

None known.

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 EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from internal hazard assessments.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Signs and Symptoms of Exposure

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

Inhalation

May cause additional health effects (see below).

Skin contact

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

Eye contact

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 Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Toxicological Data

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

Acute Toxicity

| Name | Route | Species | Value |
|--|--------------------------------|------------------------|---|
| Overall product | Dermal | | No data available; calculated ATE >5,000 mg/kg |
| Overall product | Inhalation-Dust/Mist(4 hr) | | No data available; calculated ATE >12.5 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE >2,000 - =5,000 mg/kg |
| 1,3-Butadiene, homopolymer, hydroxy-terminated | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| 1,3-Butadiene, homopolymer, hydroxy-terminated | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Diundecyl phthalate, branched and linear | Dermal | Rat | LD50 > 2,000 mg/kg |
| Diundecyl phthalate, branched and linear | Ingestion | Rat | LD50 > 15,800 mg/kg |
| Propane-1,2-diol, propoxylated | Dermal | Rabbit | LD50 > 10,000 mg/kg |
| Propane-1,2-diol, propoxylated | Ingestion | Rat | LD50 > 1,000 mg/kg |
| 1,1'-Phenyliminodipropyl-2-ol | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| 1,1'-Phenyliminodipropyl-2-ol | Ingestion | Rat | LD50 3,800 mg/kg |
| Castor oil | Dermal | | LD50 estimated to be > 5,000 |
| Castor oil | Ingestion | | LD50 estimated to be > 5,000 |
| Oxydipropylol | Dermal | Rabbit | LD50 > 5,010 mg/kg |
| Oxydipropylol | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 2.34 mg/l |
| Oxydipropylol | Ingestion | Rat | LD50 > 14,800 mg/kg |
| Carbon black | Dermal | Rabbit | LD50 > 3,000 mg/kg |
| Carbon black | Ingestion | Rat | LD50 > 8,000 mg/kg |
| 1,4-diazabicyclooctane | Dermal | Rabbit | LD50 > 3,200 mg/kg |
| Silamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Ingestion | Rat | LD50 > 2,000 mg/kg |
| 1,4-diazabicyclooctane | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 5.05 mg/l |
| 1,4-diazabicyclooctane | Ingestion | Rat | LD50 1,870 mg/kg |
| Silamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Dermal | similar health hazards | LD50 estimated to be > 5,000 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|------------------------|---------------------------|
| Diundecyl phthalate, branched and linear | Rabbit | No significant irritation |
| Propane-1,2-diol, propoxylated | Not available | No significant irritation |
| 1,1'-Phenyliminodipropyl-2-ol | Professional judgement | Minimal irritation |
| Castor oil | Human | Minimal irritation |

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| | | |
|--|--------|---------------------------|
| Oxydipropanol | Rabbit | No significant irritation |
| Carbon black | Rabbit | No significant irritation |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Rabbit | No significant irritation |
| 1,4-diazabicyclooctane | Rabbit | Mild irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|------------------------|---------------------------|
| Diundecyl phthalate, branched and linear | Rabbit | Mild irritant |
| Propane-1,2-diol, propoxylated | Not available | Mild irritant |
| 1,1'-Phenyliminodipropyl-2-ol | Professional judgement | Corrosive |
| Castor oil | Rabbit | Mild irritant |
| Oxydipropanol | Rabbit | No significant irritation |
| Carbon black | Rabbit | No significant irritation |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Rabbit | No significant irritation |
| 1,4-diazabicyclooctane | Rabbit | Corrosive |

Skin Sensitisation

| Name | Species | Value |
|--|------------------|----------------|
| Diundecyl phthalate, branched and linear | Human | Not classified |
| Propane-1,2-diol, propoxylated | Human and animal | Not classified |
| Castor oil | Human | Not classified |
| Oxydipropanol | Guinea pig | Not classified |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Guinea pig | Not classified |

Respiratory Sensitisation

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

Germ Cell Mutagenicity

| Name | Route | Value |
|--|----------|--|
| Diundecyl phthalate, branched and linear | In Vitro | Not mutagenic |
| Propane-1,2-diol, propoxylated | In Vitro | Not mutagenic |
| Castor oil | In Vitro | Not mutagenic |
| Castor oil | In vivo | Not mutagenic |
| Oxydipropanol | In Vitro | Not mutagenic |
| Oxydipropanol | In vivo | Not mutagenic |
| Carbon black | In Vitro | Not mutagenic |
| Carbon black | In vivo | Some positive data exist, but the data are not sufficient for classification |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | In Vitro | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|---------------|------------|-------------------------|------------------|
| Oxydipropanol | Ingestion | Multiple animal species | Not carcinogenic |
| Carbon black | Dermal | Mouse | Not carcinogenic |
| Carbon black | Ingestion | Mouse | Not carcinogenic |
| Carbon black | Inhalation | Rat | Carcinogenic. |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|--|-----------|--|---------|-----------------------|----------------------|
| Diundecyl phthalate, branched and linear | Ingestion | Not classified for male reproduction | Rat | NOAEL 2,100 mg/kg/day | 21 days |
| Diundecyl phthalate, branched and linear | Ingestion | Not classified for development | Rat | NOAEL 1,000 mg/kg/day | during gestation |
| Oxydipropanol | Ingestion | Not classified for development | Rat | NOAEL 5,000 mg/kg/day | during organogenesis |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |

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

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

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|--|------------|--|--|---------|------------------------|-----------------------|
| Diundecyl phthalate, branched and linear | Ingestion | liver | Not classified | Rat | NOAEL 2,100 mg/kg/day | 21 days |
| Castor oil | Ingestion | heart hematopoietic system liver | Not classified | Rat | NOAEL 4,800 mg/kg/day | 13 weeks |
| Castor oil | Ingestion | kidney and/or bladder | Not classified | Mouse | NOAEL 13,000 mg/kg/day | 13 weeks |
| Oxydipropanol | Ingestion | respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 470 mg/kg/day | 105 weeks |
| Oxydipropanol | Ingestion | heart | Not classified | Rat | NOAEL 470 mg/kg/day | 105 weeks |
| Oxydipropanol | Ingestion | endocrine system liver | Not classified | Rat | NOAEL 3,040 mg/kg/day | 105 weeks |
| Oxydipropanol | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 115 mg/kg/day | 105 weeks |
| Oxydipropanol | Ingestion | skin bone, teeth, nails, and/or hair hematopoietic system immune system nervous system vascular system | Not classified | Rat | NOAEL 3,040 mg/kg/day | 105 weeks |
| Carbon black | Inhalation | pneumoconiosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Inhalation | respiratory system | May cause damage to organs though prolonged or repeated exposure | Rat | LOAEL 0.035 mg/l | 13 weeks |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Inhalation | hematopoietic system kidney and/or bladder | Not classified | Rat | NOAEL 0.035 mg/l | 13 weeks |

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| | | | | | | |
|--|-----------|-------|----------------|-----|-----------------------------|---------|
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Ingestion | liver | Not classified | Rat | NOAEL 1,000 mg/kg/day | 5 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 EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

| Material | CAS # | Organism | Type | Exposure | Test endpoint | Test result |
|--|------------|-------------------|---|----------|--------------------------------|-------------|
| 1,3-Butadiene, homopolymer, hydroxy-terminated | 69102-90-5 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| 1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene] | 84852-53-9 | Activated sludge | Experimental | 3 hours | NOEC | 10 mg/l |
| 1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene] | 84852-53-9 | Green algae | Experimental | 96 hours | EC50 | >100 mg/l |
| 1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene] | 84852-53-9 | Rainbow trout | Experimental | 96 hours | No tox obs at lmt of water sol | >100 mg/l |
| 1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene] | 84852-53-9 | Water flea | Experimental | 48 hours | No tox obs at lmt of water sol | >100 mg/l |
| 1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene] | 84852-53-9 | Green algae | Experimental | 96 hours | No tox obs at lmt of water sol | >100 mg/l |
| Diundecyl phthalate, branched and linear | 85507-79-5 | Green algae | Estimated | 72 hours | EC50 | >100 mg/l |
| Diundecyl phthalate, branched and linear | 85507-79-5 | Rainbow trout | Estimated | 96 hours | LC50 | >100 mg/l |
| Diundecyl phthalate, branched and linear | 85507-79-5 | Sheepshead Minnow | Estimated | 96 hours | LC50 | >100 mg/l |
| Diundecyl phthalate, branched and linear | 85507-79-5 | Green algae | Estimated | 72 hours | NOEC | 100 mg/l |
| Diundecyl phthalate, branched and linear | 85507-79-5 | Rainbow trout | Estimated | 155 days | NOEC | 100 mg/l |
| Silicic acid, aluminum potassium sodium salt | 12736-96-8 | Green algae | Estimated | 96 hours | EC50 | >100 mg/l |
| Silicic acid, aluminum potassium sodium salt | 12736-96-8 | Zebra Fish | Estimated | 96 hours | LC50 | >100 mg/l |
| Silicic acid, aluminum potassium sodium salt | 12736-96-8 | Green algae | Estimated | 72 hours | NOEC | 100 mg/l |

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| | | | | | | |
|--|------------|-------------------------------|---|----------|-------|--------------------------------|
| Silicic acid, aluminum potassium sodium salt | 12736-96-8 | Water flea | Estimated | 21 days | NOEC | 100 mg/l |
| Diantimony pentoxide | 1314-60-9 | Fathead minnow | Estimated | 96 hours | LC50 | 19.1 mg/l |
| Diantimony pentoxide | 1314-60-9 | Fish | Estimated | 96 hours | LC50 | 9.2 mg/l |
| Diantimony pentoxide | 1314-60-9 | Green algae | Estimated | 72 hours | ErC50 | >48.6 mg/l |
| Diantimony pentoxide | 1314-60-9 | Invertebrate | Estimated | 96 hours | LC50 | 2.35 mg/l |
| Diantimony pentoxide | 1314-60-9 | Blackworm | Estimated | 28 days | NOEC | 149 mg/kg (Dry Weight) |
| Diantimony pentoxide | 1314-60-9 | Fathead minnow | Estimated | 28 days | NOEC | 1.5 mg/l |
| Diantimony pentoxide | 1314-60-9 | Green algae | Estimated | 72 hours | NOEC | 2.8 mg/l |
| Diantimony pentoxide | 1314-60-9 | Water flea | Estimated | 21 days | NOEC | 2.31 mg/l |
| Diantimony pentoxide | 1314-60-9 | Activated sludge | Estimated | 4 hours | EC50 | 36 mg/l |
| Diantimony pentoxide | 1314-60-9 | Barley | Estimated | 5 days | EC50 | 9,230 mg/kg (Dry Weight) |
| Diantimony pentoxide | 1314-60-9 | Soil microbes | Estimated | 7 days | NOEC | 3,900 mg/kg (Dry Weight) |
| Diantimony pentoxide | 1314-60-9 | Springtail | Estimated | 28 days | NOEC | 1,330 mg/kg (Dry Weight) |
| Castor oil | 8001-79-4 | Bacteria | Analogous Compound | 16 hours | NOEC | 10,000 mg/l |
| Castor oil | 8001-79-4 | Zebra Fish | Analogous Compound | 96 hours | LC50 | >100 mg/l |
| 1,1'-Phenyliminodipropyl-2-ol | 3077-13-2 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| Propane-1,2-diol, propoxylated | 25322-69-4 | Green algae | Analogous Compound | 72 hours | ErC50 | >100 mg/l |
| Propane-1,2-diol, propoxylated | 25322-69-4 | Water flea | Analogous Compound | 48 hours | EC50 | 105.8 mg/l |
| Propane-1,2-diol, propoxylated | 25322-69-4 | Zebra Fish | Analogous Compound | 96 hours | LC50 | >100 mg/l |
| Propane-1,2-diol, propoxylated | 25322-69-4 | Green algae | Analogous Compound | 72 hours | NOEC | 100 mg/l |
| Propane-1,2-diol, propoxylated | 25322-69-4 | Water flea | Analogous Compound | 21 days | NOEC | >=10 mg/l |
| Propane-1,2-diol, propoxylated | 25322-69-4 | Activated sludge | Analogous Compound | 3 hours | EC50 | >1,000 mg/l |
| Oxydipropylol | 25265-71-8 | Goldfish | Experimental | 96 hours | LC50 | >5,000 mg/l |
| Oxydipropylol | 25265-71-8 | Green algae | Experimental | 72 hours | EC50 | >100 mg/l |
| Oxydipropylol | 25265-71-8 | Water flea | Experimental | 48 hours | EC50 | >100 mg/l |
| Oxydipropylol | 25265-71-8 | Green algae | Experimental | 72 hours | NOEC | 100 mg/l |
| Oxydipropylol | 25265-71-8 | Bacteria | Experimental | 18 hours | EC10 | 1,000 mg/l |
| Oxydipropylol | 25265-71-8 | Bobwhite quail | Experimental | 14 days | LD50 | >2,000 mg per kg of bodyweight |
| Carbon black | 1333-86-4 | Activated sludge | Experimental | 3 hours | EC50 | >=100 mg/l |
| Carbon black | 1333-86-4 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | 68909-20-6 | Algae or other aquatic plants | Estimated | 72 hours | EC50 | >100 mg/l |

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| | | | | | | |
|------------------------|----------|-------------|--------------|----------|-------|-----------|
| 1,4-diazabicyclooctane | 280-57-9 | Bacteria | Experimental | 17 hours | EC50 | 356 mg/l |
| 1,4-diazabicyclooctane | 280-57-9 | Common Carp | Experimental | 96 hours | LC50 | >100 mg/l |
| 1,4-diazabicyclooctane | 280-57-9 | Green algae | Experimental | 72 hours | ErC50 | 180 mg/l |
| 1,4-diazabicyclooctane | 280-57-9 | Water flea | Experimental | 48 hours | EC50 | >100 mg/l |
| 1,4-diazabicyclooctane | 280-57-9 | Green algae | Experimental | 72 hours | ErC10 | 79 mg/l |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|--|------------|--|----------|--------------------------------|--|-------------------------------------|
| 1,3-Butadiene, homopolymer, hydroxy-terminated | 69102-90-5 | Data not available - insufficient | N/A | N/A | N/A | N/A |
| 1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene] | 84852-53-9 | Experimental Biodegradation | 28 days | BOD | 0 %BOD/ThOD | OECD 301C - MITI test (I) |
| Diundecyl phthalate, branched and linear | 85507-79-5 | Experimental Biodegradation | 28 days | CO2 evolution | 66 %CO2 evolution/THC O2 evolution (does not pass 10-day window) | OECD 301B - Modified Sturm or CO2 |
| Silicic acid, aluminum potassium sodium salt | 12736-96-8 | Data not available - insufficient | N/A | N/A | N/A | N/A |
| Diantimony pentoxide | 1314-60-9 | Data not available - insufficient | N/A | N/A | N/A | N/A |
| Castor oil | 8001-79-4 | Analogous Compound Biodegradation | 28 days | BOD | 64 %BOD/ThOD | OECD 301D - Closed bottle test |
| 1,1'-Phenyliminodipropyl-2-ol | 3077-13-2 | Modeled Biodegradation | 28 days | BOD | 6 %BOD/ThOD | Catalogic™ |
| Propane-1,2-diol, propoxylated | 25322-69-4 | Experimental Biodegradation | 28 days | BOD | 93.6 %BOD/ThOD | OECD 301F - Manometric respirometry |
| Oxydipropylol | 25265-71-8 | Experimental Biodegradation | 28 days | BOD | 84.4 %BOD/ThOD | OECD 301F - Manometric respirometry |
| Oxydipropylol | 25265-71-8 | Experimental Aquatic Inherent Biodegrad. | 42 days | Dissolv. Organic Carbon Deplet | 83.6 %removal of DOC | OECD 302A - Modified SCAS Test |
| Oxydipropylol | 25265-71-8 | Experimental Biodegradation | 64 days | Dissolv. Organic Carbon Deplet | 23.6 %removal of DOC | OECD 306(Misc)-Biodegrad. Seaw |
| Carbon black | 1333-86-4 | Data not available - insufficient | N/A | N/A | N/A | N/A |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | 68909-20-6 | Data not available - insufficient | N/A | N/A | N/A | N/A |
| 1,4-diazabicyclooctane | 280-57-9 | Experimental Biodegradation | 28 days | CO2 evolution | 7 %CO2 evolution/THC O2 evolution | OECD 301B - Modified Sturm or CO2 |

12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|--|------------|---|----------|------------------------|-------------|------------|
| 1,3-Butadiene, homopolymer, hydroxy-terminated | 69102-90-5 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| 1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene] | 84852-53-9 | Experimental Bioconcentration | | Log Kow | 3.55 | |
| Diundecyl phthalate, branched and linear | 85507-79-5 | Modeled Bioconcentration | | Bioaccumulation factor | 7.4 | Catalogic™ |

3M Scotchcast™ Flame Retardant Resin 2131 (Part B)

| | | | | | | |
|---|------------|---|---------|------------------------|--------|------------------------------|
| Diundecyl phthalate, branched and linear | 85507-79-5 | Experimental Bioconcentration | | Log Kow | 10.33 | |
| Silicic acid, aluminum potassium sodium salt | 12736-96-8 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Diantimony pentoxide | 1314-60-9 | Analogous Compound BCF - Fish | 23 days | Bioaccumulation factor | <=28.6 | |
| Castor oil | 8001-79-4 | Modeled Bioconcentration | | Bioaccumulation factor | 7.4 | Catalogic™ |
| 1,1'-Phenyliminodipropyl-2-ol | 3077-13-2 | Modeled Bioconcentration | | Bioaccumulation factor | 2.8 | Catalogic™ |
| Propane-1,2-diol, propoxylated | 25322-69-4 | Experimental Bioconcentration | | Log Kow | ≤1.13 | EC A.8 Partition Coefficient |
| Oxydipropylol | 25265-71-8 | Experimental BCF - Fish | 42 days | Bioaccumulation factor | 4.6 | OECD305-Bioconcentration |
| Oxydipropylol | 25265-71-8 | Experimental Bioconcentration | | Log Kow | -0.462 | EC A.8 Partition Coefficient |
| Carbon black | 1333-86-4 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Silaneamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | 68909-20-6 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| 1,4-diazabicyclooctane | 280-57-9 | Experimental BCF - Fish | 42 days | Bioaccumulation factor | <13 | OECD305-Bioconcentration |

12.4. Mobility in soil

| Material | Cas No. | Test type | Study Type | Test result | Protocol |
|--------------------------------|------------|-------------------------------|------------|-------------|--------------------------------|
| 1,1'-Phenyliminodipropyl-2-ol | 3077-13-2 | Modeled Mobility in Soil | Koc | 150 l/kg | ACD/Labs ChemSketch™ |
| Propane-1,2-diol, propoxylated | 25322-69-4 | Experimental Mobility in Soil | Koc | <17.8 l/kg | OECD 121 Estim. of Koc by HPLC |
| Oxydipropylol | 25265-71-8 | Modeled Mobility in Soil | Koc | 1 l/kg | Episuite™ |
| 1,4-diazabicyclooctane | 280-57-9 | Modeled Mobility in Soil | Koc | 3 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. Endocrine disrupting properties

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

12.7. Other adverse effects

No information available.

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

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product that has been completely cured or polymerised may be placed in a landfill properly designed for industrial waste. 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

Not hazardous for transportation.

ADR/IMDG/IATA: Not restricted for transport.

| | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|---|--|--|--|
| 14.1 UN number or ID number | No data available. | No data available. | No data available. |
| 14.2 UN proper shipping name | No data available. | No data available. | No data available. |
| 14.3 Transport hazard class(es) | No data available. | No data available. | No data available. |
| 14.4 Packing group | No data available. | No data available. | No data available. |
| 14.5 Environmental hazards | No data available. | No data available. | No data available. |
| 14.6 Special precautions for user | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. |
| 14.7 Marine Transport in bulk according to IMO instruments | 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 | No data available. | No data available. | No data available. |

| | | | |
|------------------------------|--------------------|--------------------|--------------------|
| IMDG Segregation Code | No data available. | No data available. | No data available. |
|------------------------------|--------------------|--------------------|--------------------|

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

SECTION 15: Regulatory information

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

Carcinogenicity

Ingredient

Carbon black

CAS Nbr

1333-86-4

Classification

Grp. 2B: Possible human
carc.

Regulation

International Agency
for Research on Cancer

Global inventory status

Contact 3M for more information. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

Regulation (EU) No 649/2012

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information

List of relevant H statements

| | |
|--------|--|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| H302 | Harmful if swallowed. |
| H318 | Causes serious eye damage. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Revision information:

Section 4: First aid for skin contact information information was modified.

Section 7: Precautions safe handling information information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Carcinogenicity Table information was modified.

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

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

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Skin Sensitization Table information was modified.

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

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

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 Ireland MSDSs are available at www.3M.com



Safety Data Sheet

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| | | | |
|------------------------|------------|-------------------------|------------|
| Document group: | 11-4628-1 | Version number: | 32.02 |
| Revision date: | 16/01/2025 | Supersedes date: | 17/09/2024 |

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

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

1.1. Product identifier

3M Cable Preparation Kit CC-3 (Bag)

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

Identified uses

Electrical

1.3. Details of the supplier of the safety data sheet

Address: 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.
Telephone: +353 1 280 3555
E Mail: tox.uk@mmm.com
Website: www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

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.

The aspiration hazard classification is not required due to the product's physical form.

CLASSIFICATION:

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Skin Sensitization, Category 1 - Skin Sens. 1; H317

For full text of H phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

WARNING.

Symbols

GHS07 (Exclamation mark) |

Pictograms**Ingredients:**

| Ingredient | CAS Nbr | EC No. | % by Wt |
|------------------------|-----------|-----------|---------|
| (R)-p-mentha-1,8-diene | 5989-27-5 | 227-813-5 | 2 - 25 |

HAZARD STATEMENTS:

| | |
|------|--------------------------------------|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |

PRECAUTIONARY STATEMENTS**Prevention:**

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

Response:

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

Contains 40% of components with unknown hazards to the aquatic environment.

Notes on labelling

Updated per Regulation (EC) No. 648/2004 on detergents.

Ingredients required per 648/2004 (not required on industrial label): >= 30%: Aliphatic hydrocarbons. Contains: d-limonene.

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] |
|--|---------------------|---------|---|
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | (EC-No.) 920-901-0 | 45 - 75 | Asp. Tox. 1, H304 EUH066 |
| Cotton Pads | None | 20 - 45 | Substance not classified as hazardous |
| (R)-p-mentha-1,8-diene | (CAS-No.) 5989-27-5 | 2 - 25 | Flam. Liq. 3, H226 |

| | | | |
|--|--|--|---|
| | (EC-No.) 227-813-5 (REACH-No.) 01-2119529223-47 | | Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400,M=1 Aquatic Chronic 3, H412 Nota C |
|--|--|--|---|

Any entry in the Identifier(s) column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance.
Please see section 16 for the full text of any H statements referred to in this section

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

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

Skin contact

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

Eye contact

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

If swallowed

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

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

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

Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching).

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 flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools.

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. **Warning!** A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible using non-sparking tools. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

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

For industrial/occupational use only. Not for consumer sale or use. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limits**

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

Biological limit values

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

8.2. Exposure controls**8.2.1. Engineering controls**

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

8.2.2. Personal protective equipment (PPE)**Eye/face protection**

None required.

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 |
|--------------------------|-----------------------|--------------------------|
| Nitrile rubber. | 0.35 | =>8 hours |
| Polyvinyl alcohol (PVA). | >0.30 | =>8 hours |
| Polymer laminate | >0.30 | 4-8 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 – Nitrile
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

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 type A

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-------------------------------------|--|
| Physical state | Solid. (Lint-free cloths soaked with liquid) |
| Specific Physical Form: | Cloth pads soaked in liquid in can or bag |
| Colour | White |
| Odor | Moderate Citrus |
| Odour threshold | No data available. |
| Melting point/freezing point | No data available. |
| Boiling point/boiling range | 193.3 °C - 248.9 °C |
| Flammability | Not applicable. |
| Flammable Limits(LEL) | No data available. |
| Flammable Limits(UEL) | No data available. |
| Flash point | 62.2 °C [Test Method: Closed Cup] |
| Autoignition temperature | No data available. |
| Decomposition temperature | No data available. |
| pH | 7 |
| Kinematic Viscosity | 2 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 | < 133.3 Pa [@ 25 °C] |
| Density | 0.76 g/ml |
| Relative density | 0.76 [Ref Std: WATER=1] |
| Relative Vapour Density | > 1 [Ref Std: AIR=1] |
| Particle Characteristics | <i>Not applicable.</i> |

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds

No data available.

Evaporation rate

No data available.

Molecular weight

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Sparks and/or flames.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

Substance

Carbon monoxide

Carbon dioxide.

Condition

Not specified.

Not specified.

SECTION 11: Toxicological information

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

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Signs and Symptoms of Exposure

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

Inhalation

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

and throat pain.

Skin contact

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

Eye contact

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

Ingestion

Physical Blockage: Signs/symptoms may include cramping, abdominal pain, and constipation. 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 | Inhalation-Vapour(4 hr) | | No data available; calculated ATE >50 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | Dermal | similar compounds | LD50 > 2,200 mg/kg |
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | Ingestion | similar compounds | LD50 > 15,000 mg/kg |
| (R)-p-mentha-1,8-diene | Inhalation-Vapour (4 hours) | Mouse | LC50 > 3.14 mg/l |
| (R)-p-mentha-1,8-diene | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| (R)-p-mentha-1,8-diene | Ingestion | Rat | LD50 4,400 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|-------------------|---------------|
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | similar compounds | Mild irritant |
| (R)-p-mentha-1,8-diene | Rabbit | Irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|-------------------|---------------------------|
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | similar compounds | No significant irritation |
| (R)-p-mentha-1,8-diene | Rabbit | Mild irritant |

Skin Sensitisation

| Name | Species | Value |
|--|-------------------|----------------|
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | similar compounds | Not classified |
| (R)-p-mentha-1,8-diene | Mouse | 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 |
|--|----------|---------------|
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | In Vitro | Not mutagenic |
| (R)-p-mentha-1,8-diene | In Vitro | Not mutagenic |
| (R)-p-mentha-1,8-diene | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|------------------------|-----------|---------|--|
| (R)-p-mentha-1,8-diene | Ingestion | Rat | 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 |
|------------------------|-----------|--|-------------------------|---------------------|------------------------------|
| (R)-p-mentha-1,8-diene | Ingestion | Not classified for female reproduction | Rat | NOAEL 750 mg/kg/day | premating & during gestation |
| (R)-p-mentha-1,8-diene | Ingestion | Not classified for development | Multiple animal species | NOAEL 591 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 |
|--|------------|------------------------|--|------------------------|---------------------|-------------------|
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |
| (R)-p-mentha-1,8-diene | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |
| (R)-p-mentha-1,8-diene | Ingestion | nervous system | Not classified | | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|------------------------|-----------|---|----------------|---------|-----------------------|-------------------|
| (R)-p-mentha-1,8-diene | Ingestion | kidney and/or bladder | Not classified | Rat | LOAEL 75 mg/kg/day | 103 weeks |
| (R)-p-mentha-1,8-diene | Ingestion | liver | Not classified | Mouse | NOAEL 1,000 mg/kg/day | 103 weeks |
| (R)-p-mentha-1,8-diene | Ingestion | heart endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system respiratory system | Not classified | Rat | NOAEL 600 mg/kg/day | 103 weeks |

Aspiration Hazard

| Name | Value |
|--|-------------------|
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | Aspiration hazard |

3M Cable Preparation Kit CC-3 (Bag)

(R)-p-mentha-1,8-diene

Aspiration hazard

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 EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

| Material | CAS # | Organism | Type | Exposure | Test endpoint | Test result |
|--|-----------|----------------|--------------|----------|---------------|-------------|
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | 920-901-0 | Green algae | Estimated | 72 hours | EL50 | >1,000 mg/l |
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | 920-901-0 | Rainbow trout | Estimated | 96 hours | LL50 | >1,000 mg/l |
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | 920-901-0 | Water flea | Estimated | 48 hours | EL50 | >1,000 mg/l |
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | 920-901-0 | Green algae | Estimated | 72 hours | NOEL | 1,000 mg/l |
| (R)-p-mentha-1,8-diene | 5989-27-5 | Fathead minnow | Experimental | 96 hours | LC50 | 0.702 mg/l |
| (R)-p-mentha-1,8-diene | 5989-27-5 | Green algae | Experimental | 72 hours | ErC50 | 0.32 mg/l |
| (R)-p-mentha-1,8-diene | 5989-27-5 | Water flea | Experimental | 48 hours | EC50 | 0.307 mg/l |
| (R)-p-mentha-1,8-diene | 5989-27-5 | Fathead minnow | Experimental | 8 days | EC10 | 0.32 mg/l |
| (R)-p-mentha-1,8-diene | 5989-27-5 | Green algae | Experimental | 72 hours | ErC10 | 0.174 mg/l |
| (R)-p-mentha-1,8-diene | 5989-27-5 | Water flea | Experimental | 21 days | NOEC | 0.153 mg/l |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|--|-----------|-----------------------------|----------|--------------------------------|-----------------------|-------------------------------------|
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | 920-901-0 | Estimated Biodegradation | 28 days | BOD | 31.3 %BOD/ThOD | OECD 301F - Manometric respirometry |
| (R)-p-mentha-1,8-diene | 5989-27-5 | Experimental Biodegradation | 14 days | BOD | 98 %BOD/ThOD | OECD 301C - MITI test (I) |
| (R)-p-mentha-1,8-diene | 5989-27-5 | Experimental Biodegradation | 14 days | Dissolv. Organic Carbon Deplet | >93.8 %removal of DOC | OECD 303A - Simulated Aerobic |

12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|--|-----------|--|----------|------------|-------------|----------|
| Hydrocarbons, C11-C13, isoalkanes, <2% aromatics | 920-901-0 | Data not available or insufficient for | N/A | N/A | N/A | N/A |

3M Cable Preparation Kit CC-3 (Bag)

| | | classification | | | | |
|------------------------|-----------|----------------------------------|--|---------------------------|------|------------|
| (R)-p-mentha-1,8-diene | 5989-27-5 | Modeled Bioconcentration | | Bioaccumulation factor | 2100 | Catalogic™ |
| (R)-p-mentha-1,8-diene | 5989-27-5 | Experimental Bioconcentration | | Log Kow | 4.57 | |

12.4. Mobility in soil

| Material | Cas No. | Test type | Study Type | Test result | Protocol |
|------------------------|-----------|-----------------------------|------------|-------------|-----------|
| (R)-p-mentha-1,8-diene | 5989-27-5 | Modeled Mobility in Soil | Koc | 9,245 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. Endocrine disrupting properties

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

12.7. Other adverse effects

No information available.

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

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

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. As a disposal alternative, utilize an acceptable permitted waste disposal facility. 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)

15 02 02* Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

SECTION 14: Transportation information

| | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|-------------------------------------|---------------------------|----------------------|----------------------------|
| 14.1 UN number or ID number | Not applicable. | Not applicable. | Not applicable. |
| 14.2 UN proper shipping name | Not applicable. | Not applicable. | Not applicable. |

| | | | |
|---|--|--|--|
| 14.3 Transport hazard class(es) | Not applicable. | Not applicable. | Not applicable. |
| 14.4 Packing group | Not applicable. | Not applicable. | Not applicable. |
| 14.5 Environmental hazards | Not applicable. | Not applicable | Not applicable. |
| 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 Marine Transport in bulk according to IMO instruments | No data available. | No data available. | No data available. |
| Control Temperature | Not applicable. | Not applicable. | Not applicable. |
| Emergency Temperature | Not applicable. | Not applicable. | Not applicable. |
| 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

Ingredient

(R)-p-mentha-1,8-diene

CAS Nbr

5989-27-5

Classification

Gr. 3: Not classifiable

Regulation

International Agency for Research on Cancer

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.

DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

Regulation (EU) No 649/2012

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information**List of relevant H statements**

| | |
|--------|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H400 | Very toxic to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects. |

Revision information:

CLP: Ingredient table information was modified.

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

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 Ireland MSDSs are available at www.3M.com