



## Safety Data Sheet

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<b>Revision date:</b>	28/01/2025	<b>Supersedes date:</b>	01/09/2023
<b>Transportation version number:</b>			

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

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

#### 1.1. Product identifier

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

#### Product Identification Numbers

KE-2351-1475-5      KE-2351-1477-1      KE-2351-1479-7

7000092586      7000092582      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 United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.  
**Telephone:** +44 (0)1344 858 000  
**E Mail:** tox.uk@mmm.com

**Website:** [www.3M.com/uk](http://www.3M.com/uk)

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

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

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

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

#### 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 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

### 2.2. Label elements

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

#### SIGNAL WORD

DANGER.

#### Symbols

GHS05 (Corrosion) | GHS07 (Exclamation mark) | GHS08 (Health Hazard) | GHS09 (Environment) |

#### Pictograms



#### Contains:

4,4'-methylenediphenyl diisocyanate; Polyoxyalkylenes; 1,1,3-tris(3-tert-butyl-4-hydroxy-6-methylphenyl)butane; methylenediphenyl diisocyanate; 1,1'-Phenyliminodipropyl-2-ol; Diundecyl phthalate; 1,1'-Methylenebis[isocyanatobenzene], homopolymer; Diundecyl phthalate, branched and linear

#### 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.
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H411	Toxic to aquatic life with long lasting effects.
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#### PRECAUTIONARY STATEMENTS

#### Prevention:

P261A	Avoid breathing vapours.
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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](http://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](http://feica.eu/Puinfo)**

**Revision information:**

GB Label: CLP Ingredients - kit components information was modified.

Kit Information: CLP Target Organ Hazard Statement information was deleted.

Kit: Component document group number(s) information was modified.

Section 1: Product identification numbers information was modified.

Section 01: SAP Material Numbers information was modified.

Label: CLP Target Organ Hazard Statement information was added.



## Safety Data Sheet

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**Document group:** 11-4628-1  
**Revision date:** 16/01/2025

**Version number:** 35.02  
**Supersedes date:** 17/09/2024

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

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

#### 1.1. Product identifier

3M Cable Preparation Kit CC-3 (Bag)

#### Product Identification Numbers

80-6105-9300-8

7100018646

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

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

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

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

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

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

For full text of H phrases, see Section 16.

**2.2. Label elements**

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

**SIGNAL WORD**

WARNING.

**Symbols**

GHS07 (Exclamation mark) | GHS09 (Environment) |

**Pictograms****HAZARD STATEMENTS:**

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

H411 Toxic to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS****Prevention:**

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

**Response:**

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
P391 Collect spillage.

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

**Notes on labelling**

Updated per Regulation (EC) No. 648/2004 as amended for Great Britain on detergents.

Ingredients required per 648/2004 (not required on industrial label):  $\geq 30\%$ : 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], as amended for GB
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 (EC-No.) 227-813-5	2 - 25	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1 Nota C Asp. Tox. 1, H304

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 GB 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 <sup>2</sup> /sec
Water solubility	Nil
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
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	Not applicable.

## 9.2. Other information

### 9.2.2 Other safety characteristics

EU Volatile Organic Compounds

No data available.

Evaporation rate

No data available.

Molecular weight

No data available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

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

### 10.2 Chemical stability

Stable.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

Sparks and/or flames.

### 10.5 Incompatible materials

Strong oxidising agents.

### 10.6 Hazardous decomposition products

#### Substance

#### Condition

Carbon monoxide

Not specified.

Carbon dioxide.

Not specified.

## SECTION 11: Toxicological information

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

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

**Great Britain.****Signs and Symptoms of Exposure**

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

**Inhalation**

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

**Skin contact**

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	Not classified	Rat	NOAEL 600 mg/kg/day	103 weeks

**3M Cable Preparation Kit CC-3 (Bag)**

		system   immune system   muscles   nervous system   respiratory system				
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**Aspiration Hazard**

Name	Value
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Aspiration hazard
(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 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,	920-901-0	Estimated	28 days	BOD	31.3 %BOD/ThOD	OECD 301F - Manometric

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C11-C13, isoalkanes, <2% aromatics		Biodegradation				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 classification	N/A	N/A	N/A	N/A
(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. Other adverse effects**

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

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

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

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)
<b>14.1 UN number</b>	Not applicable.	Not applicable.	Not applicable.
<b>14.2 UN proper shipping name</b>	Not applicable.	Not applicable.	Not applicable.
<b>14.3 Transport hazard class(es)</b>	Not applicable.	Not applicable.	Not applicable.
<b>14.4 Packing group</b>	Not applicable.	Not applicable.	Not applicable.
<b>14.5 Environmental hazards</b>	Not applicable.	Not applicable.	Not applicable.
<b>14.6 Special precautions for user</b>	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.
<b>14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code</b>	No data available.	No data available.	No data available.
<b>Control Temperature</b>	Not applicable.	Not applicable.	Not applicable.
<b>Emergency Temperature</b>	Not applicable.	Not applicable.	Not applicable.
<b>ADR Classification Code</b>	M6	Not applicable.	Not applicable.
<b>IMDG Segregation Code</b>	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

##### CAS Nbr

##### Classification

##### Regulation

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

5989-27-5

Gr. 3: Not classifiable

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.

**COMAH Regulation, SI 2015/483**

Seveso hazard categories, Annex 1, Part 1

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

Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
(R)-p-mentha-1,8-diene	5989-27-5	10	50

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

No chemicals listed

**15.2. Chemical Safety Assessment**

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

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

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.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

**Revision information:**

GB Section 02: CLP Ingredient table information was deleted.

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 SDSs for Great Britain are available at [www.3M.com/uk](http://www.3M.com/uk)**

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







## Safety Data Sheet

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**Revision date:** 02/05/2025

**Version number:** 15.00  
**Supersedes date:** 24/04/2025

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

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

#### 1.1. Product identifier

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

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

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

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

##### CLASSIFICATION:

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
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

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

### SIGNAL WORD

DANGER.

### Symbols

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

### Pictograms



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, amendment to REACH Regulation (1907/2006) as amended for Great Britain, 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](https://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], as amended for GB
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	< 15	Aquatic Chronic 3, H412

	(EC-No.) 222-884-9		
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	< 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 GB 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
Free isocyanates	101-68-8	UK HSE	TWA(as NCO):0.02 mg/m <sup>3</sup> ;STEL(as NCO):0.07 mg/m <sup>3</sup>	Respiratory Sensitizer
Free isocyanates	26447-40-5	UK HSE	TWA(as NCO):0.02 mg/m <sup>3</sup> ;STEL(as NCO):0.07 mg/m <sup>3</sup>	Respiratory Sensitizer
Free isocyanates	39310-05-9	UK HSE	TWA(as NCO):0.02 mg/m <sup>3</sup> ;STEL(as NCO):0.07 mg/m <sup>3</sup>	Respiratory Sensitizer

UK HSE : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

#### Biological limit values

Ingredient	CAS Nbr	Agency	Determinant	Biological Specimen	Sampling Time	Value	Additional comments
Free isocyanates	101-68-8	UK EH40 BMGVs	Isocyanate-derived diamine	Creatinine in urine	EPE	1 umol/mol	
Free isocyanates	26447-40-5	UK EH40 BMGVs	Isocyanate-derived diamine	Creatinine in urine	EPE	1 umol/mol	
Free isocyanates	39310-	UK EH40	Isocyanate-	Creatinine in	EPE	1 umol/mol	

05-9 BMGVs derived urine  
diamine

UK EH40 BMGVs : UK. EH40 Biological Monitoring Guidance Values (BMGVs)

EPE: At the end of the period of exposure.

## **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:

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

#### *Applicable Norms/Standards*

Use gloves tested to EN 374

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

#### **Respiratory protection**

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

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

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	<i>No data available.</i>
Melting point/freezing point	<i>Not applicable.</i>
Boiling point/boiling range	$\geq 148.9$ °C
Flammability	Not applicable.
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Flash point	$\geq 148.9$ °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 <sup>2</sup> /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 material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

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

#### Signs and Symptoms of Exposure

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

#### Inhalation

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

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

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
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
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

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

methylenediphenyl diisocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
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**Aspiration Hazard**

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

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

**11.2. Information on other hazards**

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

**SECTION 12: Ecological information**

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

**12.1. Toxicity**

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
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

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

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
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/THCO2 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	101-68-8	Experimental BCF - Fish	28 days	Bioaccumulation factor	200	OECD305-Bioconcentration

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

diisocyanate						
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. Other adverse effects**

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

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

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

Dispose of 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.

	<b>Ground Transport (ADR)</b>	<b>Air Transport (IATA)</b>	<b>Marine Transport (IMDG)</b>
<b>14.1 UN number</b>	No data available.	No data available.	No data available.
<b>14.2 UN proper shipping name</b>	No data available.	No data available.	No data available.
<b>14.3 Transport hazard class(es)</b>	No data available.	No data available.	No data available.
<b>14.4 Packing group</b>	No data available.	No data available.	No data available.
<b>14.5 Environmental hazards</b>	No data available.	No data available.	No data available.
<b>14.6 Special precautions for user</b>	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.
<b>14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code</b>	No data available.	No data available.	No data available.
<b>Control Temperature</b>	No data available.	No data available.	No data available.
<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
<b>ADR Classification Code</b>	No data available.	No data available.	No data available.
<b>IMDG Segregation Code</b>	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><b>Ingredient</b></u>	<u><b>CAS Nbr</b></u>	<u><b>Classification</b></u>	<u><b>Regulation</b></u>
methylenediphenyl diisocyanate	26447-40-5	Carc. 2	The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain, UK Mandatory Classification and Labelling list International Agency for Research on Cancer 3M classified
methylenediphenyl diisocyanate	26447-40-5	Gr. 3: Not classifiable	
1,1'-Methylenebis[isocyanatobenzene],	39310-05-9	Carc. 2	

homopolymer			according to the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain
4,4'-methylenediphenyl diisocyanate	101-68-8	Carc. 2	The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain, UK
4,4'-methylenediphenyl diisocyanate	101-68-8	Gr. 3: Not classifiable	Mandatory Classification and Labelling list International Agency for Research on Cancer

#### Restrictions on the manufacture, placing on the market and use:

The following substance(s) contained in this product is/are subject to Annex XVII of regulation (EC) 1907/2006, as amended for GB, with regard to restrictions on the manufacture, placing on the market and use when present in certain dangerous conditions. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

<u>Ingredient</u>	<u>CAS Nbr</u>
methylenediphenyl diisocyanate	26447-40-5
4,4'-methylenediphenyl diisocyanate	101-68-8

Restriction status: listed in UK REACH Annex XVII

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

#### Authorisation status under UK REACH:

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

<u>Ingredient</u>	<u>CAS Nbr</u>
Diundecyl phthalate	3648-20-2

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

<u>Ingredient</u>	<u>CAS Nbr</u>
Diundecyl phthalate	3648-20-2

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

#### Global inventory status



Contact 3M for more information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

**COMAH Regulation, SI 2015/483**

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

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

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 substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

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

H302	Harmful if swallowed.
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:**

No revision information

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

**3M SDSs for Great Britain are available at [www.3M.com/uk](http://www.3M.com/uk)**

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



## Safety Data Sheet

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**Revision date:** 10/12/2025

**Version number:** 13.00  
**Supersedes date:** 05/10/2023

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

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

#### 1.1. Product identifier

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

#### Product Identification Numbers

80-6114-6841-6

7000058848

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

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

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

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

#### CLASSIFICATION:

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

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

### SIGNAL WORD

DANGER.

### Symbols

GHS05 (Corrosion) |

### Pictograms



Ingredient	CAS Nbr	EC No.	% by Wt
1,1'-Phenyliminodipropyl-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 6% of components with unknown hazards to the aquatic environment.

### 2.3. Other hazards

None known.

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

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
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'-Phenyliminodipropyl-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	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
Silanamine, 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	<= 1	Acute Tox. 4, H302

(EC-No.) 205-999-9

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

## **6.2. Environmental precautions**

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

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

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

## **6.4. Reference to other sections**

Refer to Section 8 and Section 13 for more information

# **SECTION 7: Handling and storage**

## **7.1. Precautions for safe handling**

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.

<b>Ingredient</b>	<b>CAS Nbr</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional comments</b>
Carbon black	1333-86-4	UK HSE	TWA: 3.5 mg/m <sup>3</sup> ; STEL: 7 mg/m <sup>3</sup>	
Silica, amorphous, inhalable dust	68909-20-6	UK HSE	TWA(as respirable dust):2.4 mg/m <sup>3</sup> ;TWA(as inhalable dust):6 mg/m <sup>3</sup>	

UK HSE : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

**Biological limit values**

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

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

Use 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 16321

**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**

<b>Physical state</b>	Liquid.
<b>Colour</b>	Black
<b>Odor</b>	Pungent Glycol
<b>Odour threshold</b>	No data available.
<b>Melting point/freezing point</b>	Not applicable.
<b>Boiling point/boiling range</b>	> 143.3 °C
<b>Flammability</b>	Not applicable.
<b>Flammable Limits(LEL)</b>	No data available.
<b>Flammable Limits(UEL)</b>	No data available.
<b>Flash point</b>	> 143.3 °C [Test Method: Closed Cup]
<b>Autoignition temperature</b>	No data available.
<b>Decomposition temperature</b>	No data available.
<b>pH</b>	substance/mixture is non-soluble (in water)
<b>Kinematic Viscosity</b>	4,264 mm²/sec
<b>Water solubility</b>	Nil

<b>Solubility- non-water</b>	<i>No data available.</i>
<b>Partition coefficient: n-octanol/water</b>	<i>No data available.</i>
<b>Vapour pressure</b>	< 186,158.4 Pa [ @ 55 °C ]
<b>Density</b>	<i>No data available.</i>
<b>Relative density</b>	1.29 [Ref Std: WATER=1]
<b>Relative Vapour Density</b>	<i>No data available.</i>
<b>Particle Characteristics</b>	<i>Not applicable.</i>

## 9.2. Other information

### 9.2.2 Other safety characteristics

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

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

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

#### Signs and Symptoms of Exposure

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

#### Inhalation



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
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]	Dermal	Rabbit	LC50 > 2,000 mg/kg
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]	Ingestion	Rat	LD50 > 5,000 mg/kg
Diundecyl phthalate, branched and linear	Dermal	Rat	LD50 > 2,000 mg/kg
Diundecyl phthalate, branched and linear	Ingestion	similar compounds	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
Diantimony pentoxide	Ingestion	Rat	LD50 > 2,000 mg/kg
Diantimony pentoxide	Inhalation-Dust/Mist (4 hours)	similar compounds	LC50 > 5.4 mg/l
Diantimony pentoxide	Dermal	similar health hazards	LD50 estimated to be > 5,000 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

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Oxydipropanol	Ingestion	Rat	LD50 > 5,010 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
Silanamine, 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
Silanamine, 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
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]	Rabbit	No significant irritation
Diundecyl phthalate, branched and linear	similar compounds	No significant irritation
Propane-1,2-diol, propoxylated	Not available	No significant irritation
Diantimony pentoxide	Rabbit	No significant irritation
1,1'-Phenyliminodipropyl-2-ol	Professional judgement	Minimal irritation
Castor oil	Human	Minimal irritation
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
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]	Rabbit	No significant irritation
Diundecyl phthalate, branched and linear	similar compounds	Mild irritant
Propane-1,2-diol, propoxylated	Not available	Mild irritant
Diantimony pentoxide	similar compounds	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
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]	Guinea pig	Not classified
Diundecyl phthalate, branched and linear	similar	Not classified

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	compounds	
Propane-1,2-diol, propoxylated	Human and animal	Not classified
Diantimony pentoxide	Mouse	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
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]	In Vitro	Not mutagenic
Diundecyl phthalate, branched and linear	In Vitro	Not mutagenic
Propane-1,2-diol, propoxylated	In Vitro	Not mutagenic
Diantimony pentoxide	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
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation
Diundecyl phthalate, branched and linear	Ingestion	Not classified for development	similar compounds	NOAEL 1,000 mg/kg/day	during gestation
Diundecyl phthalate, branched and linear	Ingestion	Not classified for male reproduction	similar compounds	LOAEL 500 mg/kg/day	28 days
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
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]	Ingestion	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]	Ingestion	heart   endocrine system   immune system	Not classified	Rat	NOAEL 1,250 mg/kg/day	28 days
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]	Ingestion	hematopoietic system   nervous system   eyes   kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days
Diundecyl phthalate, branched and linear	Ingestion	liver	Not classified	similar compounds	NOAEL 2,086 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   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   gastrointestinal tract   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
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 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	African clawed frog	Analogous Compound	96 hours	LC50	1,800 mg/l
Silicic acid, aluminum potassium sodium salt	12736-96-8	Fathead minnow	Analogous Compound	96 hours	LC50	>680 mg/l
Silicic acid, aluminum potassium sodium	12736-96-8	Green algae	Analogous Compound	72 hours	ErC50	130 mg/l

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salt						
Silicic acid, aluminum potassium sodium salt	12736-96-8	Sediment organism	Analogous Compound	22 days	EC50	364.9 mg/l
Silicic acid, aluminum potassium sodium salt	12736-96-8	Water flea	Analogous Compound	48 hours	EC50	>100 mg/l
Silicic acid, aluminum potassium sodium salt	12736-96-8	Fathead minnow	Analogous Compound	30 days	NOEC	86.7 mg/l
Silicic acid, aluminum potassium sodium salt	12736-96-8	Green algae	Analogous Compound	72 hours	NOEC	18 mg/l
Silicic acid, aluminum potassium sodium salt	12736-96-8	Water flea	Analogous Compound	21 days	NOEC	32 mg/l
Silicic acid, aluminum potassium sodium salt	12736-96-8	Bacteria	Analogous Compound	16 hours	EC50	950 mg/l
Silicic acid, aluminum potassium sodium salt	12736-96-8	Radish	Analogous Compound	23 days	EC50	4,000 mg/kg (Dry Weight)
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	Zebra Fish	Analogous Compound	96 hours	LC50	>100 mg/l
Castor oil	8001-79-4	Bacteria	Analogous Compound	16 hours	NOEC	10,000 mg/l
1,1'-Phenyliminodiprop an-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

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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
Oxydipropanol	25265-71-8	Goldfish	Experimental	96 hours	LC50	>5,000 mg/l
Oxydipropanol	25265-71-8	Green algae	Experimental	72 hours	EC50	>100 mg/l
Oxydipropanol	25265-71-8	Water flea	Experimental	48 hours	EC50	>100 mg/l
Oxydipropanol	25265-71-8	Green algae	Experimental	72 hours	NOEC	100 mg/l
Oxydipropanol	25265-71-8	Bacteria	Experimental	18 hours	EC10	1,000 mg/l
Oxydipropanol	25265-71-8	Bobwhite quail	Experimental	14 days	LD50	>2,000 mg per kg of bodyweight
Carbon black	1333-86-4	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Carbon black	1333-86-4	Zebra Fish	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Carbon black	1333-86-4	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	100 mg/l
Carbon black	1333-86-4	Activated sludge	Experimental	3 hours	NOEC	>800 mg/l
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	Green algae	Experimental	72 hours	ErC50	>10,000 mg/l
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	Water flea	Experimental	24 hours	EC50	>1,000 mg/l
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	Zebra Fish	Experimental	96 hours	LC50	>10,000 mg/l
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 availbl-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/THCO2 evolution (does not pass 10-day window)	OECD 301B - Modified sturm or CO2

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Silicic acid, aluminum potassium sodium salt	12736-96-8	Analogous Compound Hydrolysis		Hydrolytic half-life	60 days (t 1/2)	
Diantimony pentoxide	1314-60-9	Data not availbl-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'-Phenyliminodiprop an-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
Oxydipropanol	25265-71-8	Experimental Biodegradation	28 days	BOD	84.4 %BOD/ThOD	OECD 301F - Manometric respirometry
Oxydipropanol	25265-71-8	Experimental Aquatic Inherent Biodegrad.	42 days	Dissolv. Organic Carbon Deplet	83.6 %removal of DOC	OECD 302A - Modified SCAS Test
Oxydipropanol	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 availbl-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 availbl-insufficient	N/A	N/A	N/A	N/A
1,4-diazabicyclooctane	280-57-9	Experimental Biodegradation	28 days	CO2 evolution	7 %CO2 evolution/THCO2 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[pentabrom obenzene]	84852-53-9	Experimental Bioconcentration		Log Kow	3.55	
Diundecyl phthalate, branched and linear	85507-79-5	Modeled Bioconcentration		Bioaccumulation factor	7.4	Catalogic™
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	Catalogic™
1,1'-Phenyliminodiprop an-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
Oxydipropanol	25265-71-8	Experimental BCF - Fish	42 days	Bioaccumulation factor	4.6	OECD305-Bioconcentration
Oxydipropanol	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	N/A	N/A	N/A	N/A



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		classification				
Silanamine, 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
Castor oil	8001-79-4	Modeled Mobility in Soil	Koc	10,000,000,000 l/kg	Episuite™
1,1'-Phenyliminodipropyl n-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. Other adverse effects**

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

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

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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.

	<b>Ground Transport (ADR)</b>	<b>Air Transport (IATA)</b>	<b>Marine Transport (IMDG)</b>
<b>14.1 UN number</b>	No data available.	No data available.	No data available.
<b>14.2 UN proper shipping name</b>	No data available.	No data available.	No data available.
<b>14.3 Transport hazard class(es)</b>	No data available.	No data available.	No data available.
<b>14.4 Packing group</b>	No data available.	No data available.	No data available.
<b>14.5 Environmental hazards</b>	No data available.	No data available.	No data available.
<b>14.6 Special precautions for user</b>	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.
<b>14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code</b>	No data available.	No data available.	No data available.
<b>Control Temperature</b>	No data available.	No data available.	No data available.
<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
<b>ADR Classification Code</b>	No data available.	No data available.	No data available.
<b>IMDG Segregation Code</b>	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>
Carbon black	1333-86-4	Grp. 2B: Possible human carc.	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.

**COMAH Regulation, SI 2015/483**

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

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

No chemicals listed

**15.2. Chemical Safety Assessment**

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

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

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 1: E-mail address information was modified.

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

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

Section 6: Accidental release personal information information was modified.

Section 7: Conditions safe storage information was modified.

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc 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: 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 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: Bioaccumulative potential information information was modified.

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

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the

product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

**3M SDSs for Great Britain are available at [www.3M.com/uk](http://www.3M.com/uk)**

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