

# Safety Data Sheet

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

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

#### 1.1. Product identifier

3M Scotch-Weld Urethane Adhesive EC-3532 B/A

**Product Identification Numbers** 

70-0052-1003-7 75-0002-3802-4 87-2500-0328-9 87-2500-0409-7

7100023241 7000058943 7100289125 7100319693

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

#### Identified uses

Industrial use.

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

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

**Telephone:** +44 (0)1344 858 000

E Mail: ner-productstewardship@mmm.com

Website: www.3M.com/uk

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

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

11-6417-7, 11-6419-3

## TRANSPORTATION INFORMATION

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

# KIT LABEL

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

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

#### **CLASSIFICATION:**

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**





#### **Contains:**

4,4'-methylenediphenyl diisocyanate; 2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate; Talc; 2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane; Urethane Prepolymer - N.J.T.S Reg No. 04499600-5770P; o-(p-isocyanatobenzyl)phenyl isocyanate; Polymethylene polyphenylene isocyanate

#### **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.

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

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

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

#### **Revision information:**

Section 1: E-mail address information was modified.

Section 2: <125ml Precautionary - Prevention information was modified.

Label: CLP Precautionary - Prevention information was modified.

Label: CLP Target Organ Hazard Statement information was modified.



## Safety Data Sheet

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**Document group:** 11-6417-7 **Version number:** 8.03

**Revision date:** 03/09/2024 **Supersedes date:** 25/09/2023

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

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

#### 1.1. Product identifier

3M Scotch-Weld Urethane Adhesive EC-3532 B/A Part B

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

#### **Identified uses**

Base for 2-Part Urethane Adhesive

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

**Address:** 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

**Telephone:** +44 (0)1344 858 000 **E Mail:** tox.uk@mmm.com **Website:** www.3M.com/uk

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

## **SECTION 2: Hazard identification**

## 2.1. Classification of the substance or mixture

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

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

## **CLASSIFICATION:**

This material is not classified as hazardous according to Regulation (EC) No. 1272/2008, as amended for Great Britain, on classification, labelling, and packaging of substances and mixtures.

## 2.2. Label elements

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

Not applicable

#### SUPPLEMENTAL INFORMATION:

**Supplemental Hazard Statements:** 

EUH210 Safety data sheet available on request.

EUH208 Contains 2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane. | 2-Ethylhexyl 4,4-dibutyl-

10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate. May produce an allergic

reaction.

#### 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)	0/0	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
Polyester resin	Trade Secret	30 - 60	Substance not classified as hazardous
Propane-1,2-diol, propoxylated	(CAS-No.) 25322-69-4	10 - 30	Acute Tox. 4, H302
Talc	(CAS-No.) 14807-96-6 (EC-No.) 238-877-9	10 - 30	Substance with a national occupational exposure limit
Propylidynetrimethanol, propoxylated	(CAS-No.) 25723-16-4 (EC-No.) 500-041-9	3 - 7	Substance not classified as hazardous
Zeolites	(CAS-No.) 1318-02-1 (EC-No.) 215-283-8	1 - 5	Substance with a national occupational exposure limit
4,4'-Methylenebis[2,6-diethylaniline	(CAS-No.) 13680-35-8 (EC-No.) 237-185-4	< 2.5	Aquatic Chronic 2, H411 Acute Tox. 4, H302
2-(3,4- Epoxycyclohexyl)ethyltrimethoxysilane	(CAS-No.) 3388-04-3 (EC-No.) 222-217-1	< 1	Aquatic Chronic 3, H412 Skin Sens. 1, H317
2-ethylhexanoic acid	(CAS-No.) 149-57-5 (EC-No.) 205-743-6	< 0.3	Repr. 2, H361d
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	(CAS-No.) 10584-98-2 (EC-No.) 234-186-1	< 0.22	Aquatic Acute 1, H400,M=10 Acute Tox. 3, H331 Acute Tox. 3, H311 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317

## 3M Scotch-Weld Urethane Adhesive EC-3532 B/A Part B

Muta. 2, H341 Repr. 1B, H360FD
STOT SE 1, H370
STOT RE 1, H372

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.

#### Eve contact

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

#### If swallowed

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

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

## 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**

SubstanceConditionCarbon monoxideDuring combustion.Carbon dioxide.During combustion.

### 5.3. Advice for fire-fighters

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

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

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

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation

to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment.

#### 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. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

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

Store away from oxidising agents.

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

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

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

## 8.1 Control parameters

#### Occupational exposure limits

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

Ingredient	CAS Nbr	Agency	Limit type	<b>Additional comments</b>
Tin, organic compounds, except cyhexatin	10584-98-2	UK HSC	TWA(as Sn):0.1 mg/m3;STEL(as Sn):0.2 mg/m3	SKIN
Aluminium oxides	1318-02-1	UK HSC	TWA(as respirable dust):4 mg/m3;TWA(as inhalable	
Talc	14807-96-6	UK HSC	dust):10 mg/m3 TWA(as respirable dust):1 mg/m³	

UK HSC: UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

#### **Biological limit values**

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

#### 8.2. Exposure controls

#### **8.2.1.** Engineering controls

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

## 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

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

Safety glasses with side shields.

Applicable Norms/Standards

Use eye protection conforming to EN 166

#### Skin/hand protection

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

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

Applicable Norms/Standards
Use gloves tested to EN 374

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

#### Respiratory protection

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

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

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

Applicable Norms/Standards

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

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

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

Physical state	Liquid.
Specific Physical Form:	Paste
Colour	Off-White
Odor	Moderate Polyester

Odour threshold	No data available.	
Melting point/freezing point	No data available.	
Boiling point/boiling range	>=179 °C	
Flammability	Not applicable.	
Flammable Limits(LEL)	Not applicable.	
Flammable Limits(UEL)	Not applicable.	
Flash point	>=178.9 °C [Test Method:Closed Cup]	
Autoignition temperature	No data available.	
Decomposition temperature	No data available.	
рН	substance/mixture is non-soluble (in water)	
Kinematic Viscosity	19,084 mm <sup>2</sup> /sec	
Water solubility	Nil	
Solubility- non-water	No data available.	
Partition coefficient: n-octanol/water	No data available.	
Vapour pressure	Not applicable.	
Density	1.31 g/ml	
Relative density	1.31 [ <i>Ref Std:</i> WATER=1]	
Relative Vapour Density	Not applicable.	
Particle Characteristics	Not applicable.	

#### 9.2. Other information

## 9.2.2 Other safety characteristics

EU Volatile Organic CompoundsNo data available.Evaporation rateNot applicable.Molecular weightNo data available.

Percent volatile 0.9 %

# **SECTION 10: Stability and reactivity**

#### **10.1 Reactivity**

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

## 10.2 Chemical stability

Stable.

## 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

## 10.4 Conditions to avoid

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

## 10.5 Incompatible materials

Strong oxidising agents.

## 10.6 Hazardous decomposition products

**Substance** Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

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

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

#### Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Skin contact

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

May be harmful if swallowed.

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

#### **Additional Health Effects:**

#### Reproductive/Developmental Toxicity:

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

#### **Toxicological Data**

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

## **Acute Toxicity**

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
Polyester resin	Ingestion	Rat	LD50 > 15,000 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
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg
Propylidynetrimethanol, propoxylated	Dermal	Rat	LD50 > 2,000 mg/kg
Propylidynetrimethanol, propoxylated	Ingestion	Rat	LD50 > 2,500 mg/kg
Zeolites	Dermal	Rabbit	LD50 > 2,000 mg/kg
Zeolites	Inhalation-	Rat	LC50 > 4.57 mg/l
	Dust/Mist		
	(4 hours)		
Zeolites	Ingestion	Rat	LD50 > 5,000 mg/kg

4,4'-Methylenebis[2,6-diethylaniline	Dermal	Rat	LD50 > 2,000 mg/kg
4,4'-Methylenebis[2,6-diethylaniline	Ingestion	Rat	LD50 1,736 mg/kg
2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane	Dermal	Rabbit	LD50 6,700 mg/kg
2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane	Inhalation- Vapour (4	Rat	LC50 > 7 mg/l
	hours)		
2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane	Ingestion	Rat	LD50 13,100 mg/kg
2-ethylhexanoic acid	Dermal	Rat	LD50 > 2,000 mg/kg
2-ethylhexanoic acid	Inhalation-	Rat	LC50 > 3.54  mg/l
	Dust/Mist		
	(4 hours)		
2-ethylhexanoic acid	Ingestion	Rat	LD50 2,043 mg/kg
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-	Dermal	Rat	LD50 777 mg/kg
stannatetradecanoate			
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-	Inhalation-	Rat	LC50 0.94 mg/l
stannatetradecanoate	Dust/Mist		
	(4 hours)		
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-	Ingestion	Rat	LD50 396 mg/kg
stannatetradecanoate			

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Propane-1,2-diol, propoxylated	Not	No significant irritation
	available	
Talc	Rabbit	No significant irritation
Propylidynetrimethanol, propoxylated	Rabbit	No significant irritation
Zeolites	Rabbit	No significant irritation
4,4'-Methylenebis[2,6-diethylaniline	Rabbit	No significant irritation
2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane	Rabbit	Minimal irritation
2-ethylhexanoic acid	Rabbit	Mild irritant
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	Rat	Irritant

**Serious Eye Damage/Irritation** 

Name	Species	Value
Propane-1,2-diol, propoxylated	Not	Mild irritant
	available	
Talc	Rabbit	No significant irritation
Propylidynetrimethanol, propoxylated	Rabbit	Mild irritant
Zeolites	Rabbit	Mild irritant
4,4'-Methylenebis[2,6-diethylaniline	In vitro	No significant irritation
	data	
2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane	Rabbit	No significant irritation
2-ethylhexanoic acid	Rabbit	Mild irritant
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	Rabbit	Severe irritant

#### **Skin Sensitisation**

Name	Species	Value
Propane-1,2-diol, propoxylated	Human and animal	Not classified
4,4'-Methylenebis[2,6-diethylaniline	Mouse	Not classified
2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane	similar compoun ds	Sensitising
2-ethylhexanoic acid	Guinea pig	Not classified
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	Guinea pig	Sensitising

**Respiratory Sensitisation** 

Name	Species	Value
Talc	Human	Not classified

**Germ Cell Mutagenicity** 

Name	Route	Value
Propane-1,2-diol, propoxylated	In Vitro	Not mutagenic
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
4,4'-Methylenebis[2,6-diethylaniline	In Vitro	Not mutagenic
2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane	In Vitro	Some positive data exist, but the data are not sufficient for classification
2-ethylhexanoic acid	In Vitro	Not mutagenic
2-ethylhexanoic acid	In vivo	Not mutagenic
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	In vivo	Mutagenic

Carcinogenicity

Name	Route	Species	Value
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification

## Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis
4,4'-Methylenebis[2,6-diethylaniline	Ingestion	Not classified for development	Rat	NOAEL 15 mg/kg/day	during gestation
2-(3,4- Epoxycyclohexyl)ethyltrimethoxysilane	Ingestion	Not classified for development	Rabbit	NOAEL 0.27 mg/kg/day	during organogenesis
2-ethylhexanoic acid	Ingestion	Not classified for female reproduction	Rat	NOAEL 800 mg/kg/day	2 generation
2-ethylhexanoic acid	Ingestion	Not classified for male reproduction	Rat	NOAEL 800 mg/kg/day	2 generation
2-ethylhexanoic acid	Ingestion	Toxic to development	Rat	NOAEL 100 mg/kg/day	during gestation
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	Ingestion	Toxic to female reproduction	similar compoun ds	NOAEL Not available	premating into lactation
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	Ingestion	Toxic to development	similar compoun ds	NOAEL Not available	during gestation

## Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
2-ethylhexanoic acid	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
2-Ethylhexyl 4,4-dibutyl- 10-ethyl-7-oxo-8-oxa-3,5- dithia-4- stannatetradecanoate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

2-Ethylhexyl 4,4-dibutyl-	Ingestion	immune system	Causes damage to organs	similar	NOAEL Not	
10-ethyl-7-oxo-8-oxa-3,5-		-		compoun	available	
dithia-4-				ds		
stannatetradecanoate						

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration	
Talc	Inhalation	pneumoconiosis	Repeated and prolonged exposure to large amounts of talc dust can cause lung injury	Human	NOAEL Not available	occupational exposure	
Talc	Inhalation	pulmonary fibrosis   respiratory system	Not classified	Rat	NOAEL 18 mg/m³	113 weeks	
4,4'-Methylenebis[2,6-diethylaniline	Ingestion	liver   heart   endocrine system   hematopoietic system   immune system   nervous system   kidney and/or bladder	Not classified	Rat	NOAEL 50 mg/kg/day	90 days	
2-ethylhexanoic acid	Ingestion	hematopoietic system   liver   kidney and/or bladder   heart   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   immune system   muscles   nervous system   eyes   respiratory system   vascular system	Not classified	Rat	NOAEL 917 mg/kg/day	13 weeks	
2-Ethylhexyl 4,4-dibutyl- 10-ethyl-7-oxo-8-oxa-3,5- dithia-4- stannatetradecanoate	Ingestion	immune system	Causes damage to organs through prolonged or repeated exposure	similar compoun ds	NOAEL Not available	28 days	
2-Ethylhexyl 4,4-dibutyl- 10-ethyl-7-oxo-8-oxa-3,5- dithia-4- stannatetradecanoate	Ingestion	liver	Causes damage to organs through prolonged or repeated exposure	similar compoun ds	NOAEL Not available	2 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	Туре	Exposure	Test endpoint	Test result
Polyester resin	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Propane-1,2-diol, propoxylated	25322-69-4	Green algae	Analogous Compound	72 hours	ErC50	>100 mg/l
Propane-1,2-diol, propoxylated	25322-69-4	Water flea	Analogous Compound	48 hours	EC50	105.8 mg/l
Propane-1,2-diol, propoxylated	25322-69-4	Zebra Fish	Analogous Compound	96 hours	LC50	>100 mg/l
Propane-1,2-diol, propoxylated	25322-69-4	Green algae	Analogous Compound	72 hours	NOEC	100 mg/l
Propane-1,2-diol, propoxylated	25322-69-4	Water flea	Analogous Compound	21 days	NOEC	>=10 mg/l
Propane-1,2-diol, propoxylated	25322-69-4	Activated sludge	Analogous Compound	3 hours	EC50	>1,000 mg/l
Talc	14807-96-6	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Propylidynetrimeth anol, propoxylated	25723-16-4	Activated sludge	Experimental	3 hours	EC10	>10,000 mg/l
Propylidynetrimeth anol, propoxylated	25723-16-4	Green algae	Experimental	72 hours	EC50	>100 mg/l
Propylidynetrimeth anol, propoxylated	25723-16-4	Water flea	Experimental	48 hours	EC50	>100 mg/l
	25723-16-4	Zebra Fish	Experimental	96 hours	LC50	>100 mg/l
Propylidynetrimeth anol, propoxylated	25723-16-4	Green algae	Experimental	72 hours	NOEC	100 mg/l
	25723-16-4	Water flea	Experimental	21 days	NOEC	8.5 mg/l
Zeolites	1318-02-1	African clawed frog	Analogous Compound	96 hours	LC50	1,800 mg/l
Zeolites	1318-02-1	Fathead minnow	Analogous Compound	96 hours	LC50	>680 mg/l
Zeolites	1318-02-1	Green algae	Analogous Compound	72 hours	EC50	130 mg/l
Zeolites	1318-02-1	Sediment organism	Analogous Compound	22 days	EC50	364.9 mg/l
Zeolites	1318-02-1	Water flea	Analogous Compound	48 hours	EC50	>100 mg/l
Zeolites	1318-02-1	Fathead minnow	Analogous Compound	30 days	NOEC	86.7 mg/l
Zeolites	1318-02-1	Green algae	Analogous Compound	72 hours	NOEC	18 mg/l
Zeolites	1318-02-1	Water flea	Analogous Compound	21 days	NOEC	32 mg/l
Zeolites	1318-02-1	Bacteria	Experimental	16 hours	EC50	950 mg/l
Zeolites	1318-02-1	Radish	Experimental	23 days	EC50	4,000 mg/kg (Dry Weight)
4,4'- Methylenebis[2,6- diethylaniline	13680-35-8	Green algae	Endpoint not reached	72 hours	EC50	>100 mg/l
4,4'- Methylenebis[2,6- diethylaniline	13680-35-8	Activated sludge	Experimental	3 hours	NOEC	1,000 mg/l
4,4'- Methylenebis[2,6- diethylaniline	13680-35-8	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
4,4'- Methylenebis[2,6- diethylaniline	13680-35-8	Zebra Fish	Experimental	96 hours	LC50	1.32 mg/l
4,4'- Methylenebis[2,6- diethylaniline	13680-35-8	Green algae	Experimental	72 hours	NOEC	0.19 mg/l

2-(3,4- Epoxycyclohexyl)e thyltrimethoxysilan	3388-04-3	Activated sludge	Estimated	30 minutes	IC50	>100 mg/l
2-(3,4- Epoxycyclohexyl)e thyltrimethoxysilan	3388-04-3	Green algae	Estimated	72 hours	EC50	280 mg/l
2-(3,4- Epoxycyclohexyl)e thyltrimethoxysilan	3388-04-3	Rainbow trout	Estimated	96 hours	LC50	180 mg/l
2-(3,4- Epoxycyclohexyl)e thyltrimethoxysilan	3388-04-3	Water flea	Estimated	48 hours	EC50	20 mg/l
2-(3,4- Epoxycyclohexyl)e thyltrimethoxysilan	3388-04-3	Green algae	Estimated	72 hours	NOEC	1 mg/l
2-ethylhexanoic acid	149-57-5	Activated sludge	Experimental	30 minutes	EC20	650 mg/l
2-ethylhexanoic acid	149-57-5	Bacteria	Experimental	17 hours	EC50	112.1 mg/l
2-ethylhexanoic acid	149-57-5	Green algae	Experimental	72 hours	ErC50	44.4 mg/l
2-ethylhexanoic acid	149-57-5	Medaka	Experimental	96 hours	LC50	>100 mg/l
2-ethylhexanoic acid	149-57-5	Water flea	Experimental	48 hours	EC50	85.4 mg/l
2-ethylhexanoic acid	149-57-5	Green algae	Experimental	96 hours	ErC10	27.9 mg/l
2-ethylhexanoic acid	149-57-5	Water flea	Experimental	21 days	NOEC	25 mg/l
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoat e	10584-98-2	Activated sludge	Experimental	3 hours	EC50	>100 mg/l
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoat	10584-98-2	Green algae	Experimental	72 hours	EC50	0.56 mg/l
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoat e	10584-98-2	Water flea	Experimental	48 hours	EC50	0.035 mg/l
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoat e	10584-98-2	Green algae	Experimental	72 hours	NOEC	0.19 mg/l
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoat	10584-98-2	Water flea	Experimental	21 days	NOEC	0.098 mg/l

# 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Polyester resin	Trade Secret	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Propane-1,2-diol, propoxylated	25322-69-4	Experimental Biodegradation	28 days	BOD	93.6 %BOD/ThOD	OECD 301F - Manometric respirometry
Talc	14807-96-6	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Propylidynetrimeth anol, propoxylated	25723-16-4	Experimental Biodegradation	28 days	BOD	84 %BOD/ThOD	
Zeolites	1318-02-1	Analogous Compound Hydrolysis		Hydrolytic half-life	60 days (t 1/2)	
4,4'- Methylenebis[2,6- diethylaniline	13680-35-8	Experimental Biodegradation	28 days	BOD	4.18 %BOD/ThOD	OECD 301C - MITI test (I)
2-(3,4- Epoxycyclohexyl)e thyltrimethoxysilan	3388-04-3	Estimated Biodegradation	28 days	BOD	28 %BOD/ThOD	OECD 301D - Closed bottle test
2-(3,4- Epoxycyclohexyl)e thyltrimethoxysilan	3388-04-3	Estimated Hydrolysis		Hydrolytic half-life	6.5 hours (t 1/2)	
2-ethylhexanoic acid	149-57-5	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	99 %removal of DOC	OECD 301E - Modif. OECD Screen
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoat	10584-98-2	Experimental Biodegradation	28 days	BOD	22- 48 %BOD/ThOD	
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoat e	10584-98-2	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	10-12 hours (t 1/2)	

# 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Polyester resin	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Propane-1,2-diol, propoxylated	25322-69-4	Experimental Bioconcentration		Log Kow	≤1.13	EC A.8 Partition Coefficient
Talc	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Propylidynetrimeth anol, propoxylated	25723-16-4	Experimental Bioconcentration		Log Kow	1.8	
Zeolites	1318-02-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
4,4'- Methylenebis[2,6- diethylaniline	13680-35-8	Modeled Bioconcentration		Bioaccumulation factor	2300	Catalogic™
4,4'- Methylenebis[2,6- diethylaniline	13680-35-8	Experimental Bioconcentration		Log Kow	4.4	EC A.8 Partition Coefficient
2-(3,4- Epoxycyclohexyl)e thyltrimethoxysilan e	3388-04-3	Estimated Bioconcentration		Bioaccumulation factor	2.3	
2-ethylhexanoic acid	149-57-5	Experimental Bioconcentration		Log Kow	2.7	similar to OECD 107

2-Ethylhexyl 4,4-	10584-98-2	Data not available	N/A	N/A	N/A	N/A
dibutyl-10-ethyl-7-		or insufficient for				
oxo-8-oxa-3,5-		classification				
dithia-4-						
stannatetradecanoat						
e						

#### 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Propane-1,2-diol, propoxylated	25322-69-4	Experimental Mobility in Soil	Koc	<17.8 l/kg	OECD 121 Estim. of Koc by HPLC
Propylidynetrimeth anol, propoxylated	25723-16-4	Experimental Mobility in Soil	Koc	<18 l/kg	OECD 121 Estim. of Koc by HPLC
4,4'- Methylenebis[2,6- diethylaniline	13680-35-8	Modeled Mobility in Soil	Koc	9,200 l/kg	ACD/Labs ChemSketch <sup>TM</sup>
2-(3,4- Epoxycyclohexyl)et hyltrimethoxysilane		Estimated Mobility in Soil	Koc	20 l/kg	Episuite <sup>TM</sup>
2-ethylhexanoic acid	149-57-5	Modeled Mobility in Soil	Koc	4 l/kg	ACD/Labs ChemSketch <sup>TM</sup>
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoat e	10584-98-2	Modeled Mobility in Soil	Koc	6,500,000 l/kg	Episuite <sup>TM</sup>

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

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

#### 12.6. Other adverse effects

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

# **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods

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

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

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

## EU waste code (product as sold)

08 04 10	Waste adhesives and sealants other than those mentioned in 08 04 09
20 01 28	Paint, inks, adhesives and resins other than those mentioned in 20 01 27

# **SECTION 14: Transportation information**

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	No data available.	No data available.	No data available.
14.2 UN proper shipping name	No data available.	No data available.	No data available.
14.3 Transport hazard class(es)	No data available.	No data available.	No data available.
14.4 Packing group	No data available.	No data available.	No data available.
14.5 Environmental hazards	No data available.	No data available.	No data available.
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	No data available.	No data available.	No data available.
IMDG Segregation Code	No data available.	No data available.	No data available.

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

# **SECTION 15: Regulatory information**

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

## Carcinogenicity

Ca1	Ingredient	CAS Nbr	Classification	Regulation
	Zeolites	1318-02-1	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 Australia

National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

#### COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

H302

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

Chemical	Identifier(s)	Annex I
2-Ethylhexyl 4,4-dibutyl-10-ethyl-7-oxo-8-oxa-3,5-	10584-98-2	Part 1
dithia-4-stannatetradecanoate		

## 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**

Harmful if swallowed.

#### List of relevant H statements

H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H360FD	May damage fertility. May damage the unborn child.
H361d	Suspected of damaging the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

#### **Revision information:**

Section 3: Composition/Information of ingredients table 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: Health Effects - Inhalation information 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:Bioccumulative potential information information was modified.

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

## 3M Scotch-Weld Urethane Adhesive EC-3532 B/A Part B

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

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

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



## Safety Data Sheet

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**Document group:** 11-6419-3 **Version number:** 9.00

**Revision date:** 29/08/2025 **Supersedes date:** 05/01/2023

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

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

#### 1.1. Product identifier

3M Scotch-Weld Urethane Adhesive EC-3532 B/A Part A

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

#### **Identified uses**

Accelerator for 2-Part Urethane Adhesive

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

**Address:** 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

**Telephone:** +44 (0)1344 858 000

E Mail: ner-productstewardship@mmm.com

Website: www.3M.com/uk

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

## **SECTION 2: Hazard identification**

## 2.1. Classification of the substance or mixture

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

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

## **CLASSIFICATION:**

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319 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
Urethane Prepolymer - N.J.T.S Reg No. 04499600-5770P	Trade Secret		30 - 60
Polymethylene polyphenylene isocyanate	9016-87-9		10 - 30
Talc	14807-96-6	238-877-9	10 - 30
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	227-534-9	1 - 5
4,4'-methylenediphenyl diisocyanate	101-68-8	202-966-0	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:** 

P260A Do not breathe 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:**

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.

40% of the mixture consists of components of unknown acute oral toxicity.

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

Information required per Regulation (EU) 2020/1149, amendment to REACH Regualtion (1907/2006) as amended for Great Britain, as regards diisocyanates:

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

#### 2.3. Other hazards

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

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

## 3.1. Substances

Not applicable

## 3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
Urethane Prepolymer - N.J.T.S Reg No. 04499600-5770P	Trade Secret	30 - 60	Substance not classified as hazardous
Polymethylene polyphenylene isocyanate	(CAS-No.) 9016-87-9	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
Talc	(CAS-No.) 14807-96-6 (EC-No.) 238-877-9	10 - 30	Substance with a national occupational exposure limit
o-(p-isocyanatobenzyl)phenyl isocyanate	(CAS-No.) 5873-54-1 (EC-No.) 227-534-9	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
4,4'-methylenediphenyl diisocyanate	(CAS-No.) 101-68-8 (EC-No.) 202-966-0	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

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
o-(p-isocyanatobenzyl)phenyl isocyanate	(CAS-No.) 5873-54-1 (EC-No.) 227-534-9	(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
Polymethylene polyphenylene isocyanate	(CAS-No.) 9016-87-9	(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

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.

#### Eve 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

None inherent in this product.

#### **Hazardous Decomposition or By-Products**

Substance	<b>Condition</b>
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Hydrogen cyanide.	During combustion.
Oxides of nitrogen.	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

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. 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.

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

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

Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

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

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

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

#### 8.1 Control parameters

#### Occupational exposure limits

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Talc	14807-96-6	UK HSE	TWA(as respirable dust):1	
			mg/m³	
Free isocyanates	9016-87-9	UK HSE	TWA(as NCO):0.02	Respiratory Sensitizer
			mg/m3;STEL(as NCO):0.07	
			mg/m3	

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	9016- 87-9	UK EH40 BMGVs	Isocyanate- derived diamine	Creatinine in urine	EPE	1 umol/mol	

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:

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.

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

Material	Thickness (mm)	<b>Breakthrough Time</b>
Butyl rubber.	0.5	=>8 hours
Neoprene.	0.5	=>8 hours
Nitrile rubber.	0.35	=>8 hours

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

Applicable Norms/Standards Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

#### Respiratory protection

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

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

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

Applicable Norms/Standards

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

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

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

Physical state	Liquid.
Specific Physical Form:	Paste
Colour	Brown
Odor	Slight Urethane
Odour threshold	No data available.

Melting point/freezing point	No data available.			
Boiling point/boiling range	>=186 °C			
Flammability	Not applicable.			
Flammable Limits(LEL)	Not applicable.			
Flammable Limits(UEL)	Not applicable.			
Flash point	>=186.1 °C [Test Method:Closed Cup]			
Autoignition temperature	No data available.			
Decomposition temperature	No data available.			
pH	substance/mixture is non-soluble (in water)			
Kinematic Viscosity	17,537 mm <sup>2</sup> /sec			
Water solubility	Slight (less than 10%)			
Solubility- non-water	No data available.			
Partition coefficient: n-octanol/water	No data available.			
Vapour pressure	Not applicable.			
Density	1.34 g/ml			
Relative density	1.34 [ <i>Ref Std</i> :WATER=1]			
Relative Vapour Density	Not applicable.			
Particle Characteristics	Not applicable.			

#### 9.2. Other information

#### 9.2.2 Other safety characteristics

EU Volatile Organic CompoundsNo data available.Evaporation rateNot applicable.Molecular weightNo data available.Percent volatile0 % weight

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

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

## 10.2 Chemical stability

Stable.

#### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

#### 10.4 Conditions to avoid

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

### 10.5 Incompatible materials

Amines.

Alcohols.

Water

Strong acids.

Strong bases.

Strong oxidising agents.

## 10.6 Hazardous decomposition products

#### **Substance**

#### Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## **SECTION 11: Toxicological information**

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

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

Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Eve 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	Inhalation- Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg

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Polymethylene polyphenylene isocyanate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Polymethylene polyphenylene isocyanate	Inhalation-	Rat	LC50 0.368 mg/l
	Dust/Mist		
	(4 hours)		
Polymethylene polyphenylene isocyanate	Ingestion	Rat	LD50 31,600 mg/kg
o-(p-isocyanatobenzyl)phenyl isocyanate	Dermal	Rabbit	LD50 > 5,000 mg/kg
4,4'-methylenediphenyl diisocyanate	Dermal	Rabbit	LD50 > 5,000 mg/kg
o-(p-isocyanatobenzyl)phenyl isocyanate	Inhalation-	Rat	LC50 0.368 mg/l
	Dust/Mist		
	(4 hours)		
o-(p-isocyanatobenzyl)phenyl isocyanate	Ingestion	Rat	LD50 31,600 mg/kg
4,4'-methylenediphenyl diisocyanate	Inhalation-	Rat	LC50 0.368 mg/l
	Dust/Mist		
	(4 hours)		
4,4'-methylenediphenyl diisocyanate	Ingestion	Rat	LD50 31,600 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Talc	Rabbit	No significant irritation
Polymethylene polyphenylene isocyanate	official classificat ion	Irritant
o-(p-isocyanatobenzyl)phenyl isocyanate	official classificat ion	Irritant
4,4'-methylenediphenyl diisocyanate	official classificat ion	Irritant

**Serious Eye Damage/Irritation** 

Name	Species	Value
Talc	Rabbit	No significant irritation
Polymethylene polyphenylene isocyanate	official classificat ion	Severe irritant
o-(p-isocyanatobenzyl)phenyl isocyanate	official classificat ion	Severe irritant
4,4'-methylenediphenyl diisocyanate	official classificat ion	Severe irritant

## **Skin Sensitisation**

Name	Species	Value
Polymethylene polyphenylene isocyanate	Mouse	Sensitising
o-(p-isocyanatobenzyl)phenyl isocyanate	Mouse	Sensitising
4,4'-methylenediphenyl diisocyanate	Mouse	Sensitising

**Respiratory Sensitisation** 

Name		Value
Talc	Human	Not classified
Polymethylene polyphenylene isocyanate	Human	Sensitising
o-(p-isocyanatobenzyl)phenyl isocyanate	Human	Sensitising
4,4'-methylenediphenyl diisocyanate	Human	Sensitising

**Germ Cell Mutagenicity** 

	Name	Route	Value
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Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
Polymethylene polyphenylene isocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
o-(p-isocyanatobenzyl)phenyl isocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
4,4'-methylenediphenyl diisocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Polymethylene polyphenylene isocyanate	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
o-(p-isocyanatobenzyl)phenyl isocyanate	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
4,4'-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
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis
Polymethylene polyphenylene isocyanate	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis
o-(p-isocyanatobenzyl)phenyl isocyanate	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis
4,4'-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
Polymethylene polyphenylene isocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	
o-(p- isocyanatobenzyl)phenyl isocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	
4,4'-methylenediphenyl diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Talc	Inhalation	pneumoconiosis	Repeated and prolonged exposure to large amounts of talc dust can cause lung injury	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis   respiratory system	Not classified	Rat	NOAEL 18 mg/m³	113 weeks
Polymethylene polyphenylene isocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
o-(p- isocyanatobenzyl)phenyl isocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
4,4'-methylenediphenyl	Inhalation	respiratory system	Causes damage to organs through	Rat	LOAEL	13 weeks

diisocyanate	prolonged or repeated exposure	0.004 mg/l	

#### **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
Urethane Prepolymer - N.J.T.S Reg No. 04499600-5770P	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Polymethylene polyphenylene isocyanate	9016-87-9	Green algae	Analogous Compound	72 hours	No tox obs at lmt of water sol	>100 mg/l
Polymethylene polyphenylene isocyanate	9016-87-9	Water flea	Analogous Compound	24 hours	No tox obs at lmt of water sol	>100 mg/l
Polymethylene polyphenylene isocyanate	9016-87-9	Green algae	Analogous Compound	72 hours	No tox obs at lmt of water sol	>100 mg/l
Polymethylene polyphenylene isocyanate	9016-87-9	Activated sludge	Analogous Compound	3 hours	EC50	>100 mg/l
Talc	14807-96-6	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Activated sludge	Analogous Compound	3 hours	EC50	>100 mg/l
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Green algae	Analogous Compound	72 hours	No tox obs at lmt of water sol	>100 mg/l
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Water flea	Analogous Compound	24 hours	No tox obs at lmt of water sol	>100 mg/l
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Zebra Fish	Analogous Compound	96 hours	No tox obs at lmt of water sol	>100 mg/l
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Activated sludge	Estimated	3 hours	EC50	>100 mg/l
o-(p- socyanatobenzyl)p nenyl isocyanate	5873-54-1	Green algae	Estimated	72 hours	EC50	>1,640 mg/l
o-(p- socyanatobenzyl)p nenyl isocyanate	5873-54-1	Water flea	Estimated	24 hours	EC50	>1,000 mg/l

o-(p-	5873-54-1	Zebra Fish	Estimated	96 hours	LC50	>1,000 mg/l
isocyanatobenzyl)p henyl isocyanate						
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Green algae	Analogous Compound	72 hours	NOEL	100 mg/l
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Green algae	Estimated	72 hours	NOEC	1,640 mg/l
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Water flea	Estimated	21 days	NOEC	10 mg/l
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Water flea	Experimental	21 days	NOEC	100 mg/l
4,4'- methylenediphenyl diisocyanate	101-68-8	Activated sludge	Analogous Compound	3 hours	EC50	>100 mg/l
4,4'- methylenediphenyl diisocyanate	101-68-8	Green algae	Analogous Compound	72 hours	No tox obs at lmt of water sol	>100 mg/l
4,4'- methylenediphenyl diisocyanate	101-68-8	Water flea	Analogous Compound	24 hours	No tox obs at lmt of water sol	>100 mg/l
4,4'- methylenediphenyl diisocyanate	101-68-8	Zebra Fish	Analogous Compound	96 hours	No tox obs at lmt of water sol	>100 mg/l
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	Analogous Compound	72 hours	NOEL	100 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
4,4'- methylenediphenyl diisocyanate	101-68-8	Water flea	Experimental	21 days	NOEC	100 mg/l

# 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Urethane Prepolymer - N.J.T.S Reg No. 04499600-5770P	Trade Secret	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Polymethylene polyphenylene isocyanate	9016-87-9	Analogous Compound Aquatic Inherent Biodegrad.	28 days	BOD	0 %BOD/ThOD	OECD 302C - Modified MITI (II)
Polymethylene polyphenylene isocyanate	9016-87-9	Analogous Compound Hydrolysis		Hydrolytic half-life	20 hours (t 1/2)	
Talc	14807-96-6	Data not availbl-	N/A	N/A	N/A	N/A

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		insufficient				
o-(p-	5873-54-1	Estimated		Hydrolytic half-life	20 hours (t 1/2)	
isocyanatobenzyl)p		Hydrolysis				
henyl isocyanate						
o-(p-	5873-54-1	Data not availbl-	N/A	N/A	N/A	N/A
isocyanatobenzyl)p		insufficient				
henyl isocyanate						
4,4'-	101-68-8	Estimated		Hydrolytic half-life	20 hours (t 1/2)	
methylenediphenyl		Hydrolysis				
diisocyanate						
4,4'-	101-68-8	Data not availbl-	N/A	N/A	N/A	N/A
methylenediphenyl		insufficient				
diisocyanate						

# 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Urethane Prepolymer - N.J.T.S Reg No. 04499600-5770P	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polymethylene polyphenylene isocyanate	9016-87-9	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	200	OECD305-Bioconcentration
Polymethylene polyphenylene isocyanate	9016-87-9	Analogous Compound Bioconcentration		Log Kow	4.51	
Talc	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	200	
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Experimental BCF - Fish	28 days	Bioaccumulation factor	200	OECD305-Bioconcentration
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Experimental Bioconcentration		Log Kow	4.51	OECD 117 log Kow HPLC method
4,4'- methylenediphenyl diisocyanate	101-68-8	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	200	
4,4'- methylenediphenyl diisocyanate	101-68-8	Experimental BCF - Fish	28 days	Bioaccumulation factor	200	OECD305-Bioconcentration
4,4'- methylenediphenyl diisocyanate	101-68-8	Experimental Bioconcentration		Log Kow	4.51	OECD 117 log Kow HPLC method

# 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Modeled Mobility in Soil	Koc	300,000 l/kg	Episuite <sup>TM</sup>
o-(p- isocyanatobenzyl)p henyl isocyanate	5873-54-1	Estimated Mobility in Soil	Koc	34,000 l/kg	Episuite <sup>TM</sup>
4,4'- methylenediphenyl diisocyanate	101-68-8	Modeled Mobility in Soil	Koc	300,000 l/kg	Episuite <sup>TM</sup>
4,4'- methylenediphenyl diisocyanate	101-68-8	Estimated Mobility in Soil	Koc	34,000 l/kg	Episuite <sup>TM</sup>

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

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

#### 12.6. Other adverse effects

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

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

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

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

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

#### EU waste code (product as sold)

08 04 09\* Waste adhesives and sealants containing organic solvents or other dangerous substances

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

# **SECTION 14: Transportation information**

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	No data available.	No data available.	No data available.
14.2 UN proper shipping name	No data available.	No data available.	No data available.
14.3 Transport hazard class(es)	No data available.	No data available.	No data available.
14.4 Packing group	No data available.	No data available.	No data available.
14.5 Environmental hazards	No data available.	No data available.	No data available.
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and	No data available.	No data available.	No data available.

IBC Code			
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	No data available.	No data available.	No data available.
IMDG Segregation Code	No data available.	No data available.	No data available.

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

# **SECTION 15: Regulatory information**

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

Carcinogenicity Ingredient	CAS Nbr	Classification	Regulation
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Carc. 2	The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain, UK Mandatory Classification and Labelling list
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	Gr. 3: Not classifiable	International Agency for Research on Cancer
4,4'-methylenediphenyl diisocyanate	101-68-8	Carc. 2	The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain, UK Mandatory Classification and Labelling list
4,4'-methylenediphenyl diisocyanate	101-68-8	Gr. 3: Not classifiable	International Agency for Research on Cancer
Polymethylene polyphenylene isocyanate	9016-87-9	Carc. 2	3M classified according to the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain
Polymethylene polyphenylene isocyanate	9016-87-9	Gr. 3: Not classifiable	International Agency for Research on Cancer
Talc	14807-96-6	Grp. 2A: Probable human carc.	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>	CAS Nbr
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1
4,4'-methylenediphenyl diisocyanate	101-68-8

Restriction status: listed in UK REACH Annex XVII

Polymethylene polyphenylene isocyanate

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

Restriction

#### Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

9016-87-9

## 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

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.

#### **Revision information:**

GB Section 02: CLP Ingredient table information was added.

GB Section 02: Other hazards phrase information was added.

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

GB Section 04: Information on toxicological effects information was added.

GB Section 12: Classification Warning information was added.

GB Section 15: Carcinogenicity information information was added.

GB Section 15: Chemical Safety Assessment information was added.

GBSDS Section 14 Transport in bulk - Main Heading information was added.

GBSDS Section 14 UN Number information was added.

Section 1: E-mail address information was modified.

Section 2: <125ml Precautionary - Prevention information was modified.

CLP: Ingredient table information was deleted.

Label: CLP Percent Unknown information was deleted.

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

Section 2: Other hazards phrase information was deleted.

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

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

Section 03: SCL table information was added.

Section 03: SCL table information was deleted.

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

Section 04: Information on toxicological effects information was deleted.

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

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

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

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: Classification disclaimer information was deleted.

Section 11: GB Classification disclaimer information was added.

Section 11: GB No endocrine disruptor information available warning information was added.

Section 11: No endocrine disruptor information available warning information was deleted.

Section 11: Skin Sensitization Table information was modified.

Section 12: 12.6. Endocrine Disrupting Properties information was deleted.

Section 12: 12.6. Other adverse effects information was added.

Section 12: 12.7. Other adverse effects information was deleted.

Section 12: Classification Warning information was deleted.

Prints No Data if Adverse effects information is not present information was deleted.

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

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

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

Section 14 UN Number information was deleted.

Section 15: Carcinogenicity information information was deleted.

Section 15: Chemical Safety Assessment information was deleted.

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

#### 3M Scotch-Weld Urethane Adhesive EC-3532 B/A Part A

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

Section 16: Web address information was added.

Section 16: Web address information was deleted.

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.

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