

Safety Data Sheet

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Revision date:	08/11/2024	Supersedes date:	07/12/2023	
Transportation version number:				

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

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

1.1. Product identifier

3M Scotch-Weld EC-3524 Void Filling Compound

Product Identification Numbers 62-3524-6701-3

700000862

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

Identified uses

Product

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 000E Mail:tox.uk@mmm.com

Website: www.3M.com/uk

1.4. Emergency telephone number +44 (0)1344 858 000

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

10-4960-0, 10-4959-2

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
Skin Sensitization, Category 1 - Skin Sens. 1; H317
Carcinogenicity, Category 2 - Carc. 2; H351
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336
Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400
Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

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:

triphenyl phosphite; antimony trioxide; bis-[4-(2,3-epoxipropoxi)phenyl]propane; 2,2-Bis(bromomethyl)propane-1,3-diol, oligomeric reaction products with 1-chloro-2,3-epoxypropane; Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyloxy)]dipropan-1-amine ; 2,4,6-tris(dimethylaminomethyl)phenol

HAZARD STATEMENTS:

H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:	
P261A	Avoid breathing vapours.
P273	Avoid release to the environment.
P280B	Wear protective gloves and eye/face protection.
P280I	Wear protective gloves, eye/face protection, and respiratory 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.	
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.	

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

Revision information:

Kit: Component document group number(s) information was modified. Section 1: Product use information information was modified. Label: CLP Precautionary - Prevention information was modified.



Safety Data Sheet

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Document group:	10-4959-2	Version number:	17.00
Revision date:	08/12/2023	Supersedes date:	07/12/2023

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[™] Void Filling Compound EC-3524 B/A Blue, Part B

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

Identified uses Base of 2-Part Void Filling 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 000E Mail:tox.uk@mmm.comWebsite:www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

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

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

CLASSIFICATION:

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Skin Sensitization, Category 1 - Skin Sens. 1; H317
Carcinogenicity, Category 2 - Carc. 2; H351
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) |GHS08 (Health Hazard) |GHS09 (Environment) |

Pictograms



Ingredient	CAS Nbr	EC No.	% by Wt
bis-[4-(2,3-epoxipropoxi)phenyl]propane	1675-54-3	216-823-5	50 - 60
2,2-Bis(bromomethyl)propane-1,3-diol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	31452-80-9	500-073-3	10 - 30
antimony trioxide	1309-64-4	215-175-0	1 - 5

HAZARD STATEMENTS:

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention: P273 P280K	Avoid release to the environment. Wear protective gloves and respiratory protection.	
Response:		
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. present and easy to do. Continue rinsing.	Remove contact lenses, if
P333 + P313 P391	If skin irritation or rash occurs: Get medical advice/attention. Collect spillage.	

Contains 22% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

None known. This material does not contain any substances that are assessed to be a PBT or vPvB

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
bis-[4-(2,3-epoxipropoxi)phenyl]propane	(CAS-No.) 1675-54-3 (EC-No.) 216-823-5	50 - 60	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
2,2-Bis(bromomethyl)propane-1,3-diol, oligomeric reaction products with 1- chloro-2,3-epoxypropane	(CAS-No.) 31452-80-9 (EC-No.) 500-073-3	10 - 30	Skin Sens. 1, H317
Oxide glass chemicals	(CAS-No.) 65997-17-3 (EC-No.) 266-046-0	10 - 30	Substance with a national occupational exposure limit
antimony trioxide	(CAS-No.) 1309-64-4 (EC-No.) 215-175-0	1 - 5	Carc. 2, H351 STOT RE 2, H373 Aquatic Chronic 2, H411

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
		(C >= 5%) Skin Irrit. 2, H315 (C >= 5%) Eye Irrit. 2, H319

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

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

Skin contact

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

Eye contact

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

If swallowed

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

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

The most important symptoms and effects based on the GB CLP classification include: Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision).

4.3. Indication of any immediate medical attention and special treatment required Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for 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.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Hydrogen Bromide	During combustion.
Oxides of antimony.	During combustion.

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage including any incompatibilities

Store away from oxidising agents.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Antimony trioxide	1309-64-4	UK HSC	TWA(as Sb):0.5 mg/m3	
Glass, oxide, chemicals	65997-17-3	UK HSC	TWA(as fiber):5 mg/m3(1 fibers/ml)	
Oxide glass chemicals		Manufacturer determined	TWA(as non-fibrous, respirable)(8 hours):3 mg/m3;TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m3	
UK HSC : UK Health and Safety Commiss	sion			

UK HSC : UK Health and Safety Commissio TWA: Time-Weighted-Average STEL: Short Term Exposure Limit CEIL: Ceiling

Biological limit values

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

8.2. Exposure controls

8.2.1. Engineering controls

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

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Safety glasses with side shields. Indirect vented goggles.

Applicable Norms/Standards Use eye protection conforming to EN 166

Skin/hand protection

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

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

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

When only incidental contact is anticipated, alternative glove material(s) may be used. If contact with the glove does occur, remove immediately and replace with a set of new gloves. For incidental contact, gloves made of the following material(s) may be used:Nitrile rubber.

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

1. Information on basic physical and chemical prope	
Physical state	Liquid.
Specific Physical Form:	Paste
Colour	Blue
Odor	Characteristic Epoxy
Odour threshold	No data available.
Melting point/freezing point	Not applicable.
Boiling point/boiling range	>=93.3 °C
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	Not applicable.
Flammable Limits(UEL)	Not applicable.
Flash point	>=93.3 °C [<i>Test Method</i> :Closed Cup]
Autoignition temperature	No data available.
Decomposition temperature	No data available.
рН	substance/mixture is non-soluble (in water)
Kinematic Viscosity	185,185 mm ² /sec
Water solubility	Nil
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Vapour pressure	Not applicable.
Density	0.54 g/ml
Relative density	0.54 [<i>Ref Std</i> :WATER=1]
Relative Vapour Density	Not applicable.

9.2. Other information

9.2.2 Other safety characteristics EU Volatile Organic Compounds Evaporation rate Molecular weight Percent volatile

No data available. Not applicable. Not applicable. 0 % 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 Not determined

10.5 Incompatible materials Strong oxidising agents.

10.6 Hazardous decomposition products

Substance

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.

Condition

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. Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain. May cause additional health effects (see below).

Skin contact

Mild Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching. May cause additional health effects (see below).

Eye contact

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Dust created by cutting, grinding, sanding, or machining may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion

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

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Fibrosis: Signs/symptoms may include breathlessness, chronic dry cough, phlegm production, wheezing, and changes in lung function tests. Dermal effects: Signs/symptoms may include redness, itching, acne, or bumps on the skin.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Dermal	Rat	LD50 > 1,600 mg/kg
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Ingestion	Rat	LD50 > 1,000 mg/kg
2,2-Bis(bromomethyl)propane-1,3-diol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Dermal		LD50 estimated to be > 5,000 mg/kg
2,2-Bis(bromomethyl)propane-1,3-diol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Oxide glass chemicals	Dermal		LD50 estimated to be > 5,000 mg/kg
Oxide glass chemicals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
antimony trioxide	Dermal	Rabbit	LD50 > 6,685 mg/kg
antimony trioxide	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 2.76 mg/l
antimony trioxide	Ingestion	Rat	LD50 > 34,600 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rabbit	Mild irritant
2,2-Bis(bromomethyl)propane-1,3-diol, oligomeric reaction products with 1-	Professio	Mild irritant
chloro-2,3-epoxypropane	nal	
	judgemen	
	t	
Oxide glass chemicals	Professio	No significant irritation
	nal	
	judgemen	
	t	
antimony trioxide	Human	Minimal irritation
	and	
	animal	

Serious Eye Damage/Irritation

Name	Species	Value
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rabbit	Moderate irritant

2,2-Bis(bromomethyl)propane-1,3-diol, oligomeric reaction products with 1- chloro-2,3-epoxypropane	Professio nal judgemen t	Moderate irritant
Oxide glass chemicals	Professio nal judgemen t	No significant irritation
antimony trioxide	Rabbit	Mild irritant

Skin Sensitisation

Name	Species	Value
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Human and animal	Sensitising
2,2-Bis(bromomethyl)propane-1,3-diol, oligomeric reaction products with 1- chloro-2,3-epoxypropane	similar compoun ds	Sensitising
antimony trioxide	Human	Not classified

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
bis-[4-(2,3-epoxipropoxi)phenyl]propane	In vivo	Not mutagenic
bis-[4-(2,3-epoxipropoxi)phenyl]propane	In Vitro	Some positive data exist, but the data are not sufficient for classification
Oxide glass chemicals	In Vitro	Some positive data exist, but the data are not sufficient for classification
antimony trioxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
antimony trioxide	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Oxide glass chemicals	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
antimony trioxide	Inhalation	Multiple animal species	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

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

antimony trioxide	Inhalation	Not classified for female reproduction	Rat	LOAEL 0.25 mg/l	premating & during gestation
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Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
antimony trioxide	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
bis-[4-(2,3- epoxipropoxi)phenyl]prop ane	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
bis-[4-(2,3- epoxipropoxi)phenyl]prop ane	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
bis-[4-(2,3- epoxipropoxi)phenyl]prop ane	Ingestion	auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Oxide glass chemicals	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
antimony trioxide	Dermal	skin	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
antimony trioxide	Inhalation	pulmonary fibrosis	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.002 mg/l	1 years
antimony trioxide	Inhalation	liver	Not classified	Rat	NOAEL 0.043 mg/l	1 years
antimony trioxide	Inhalation	blood	Not classified	Rat	NOAEL 0.004 mg/l	not available
antimony trioxide	Inhalation	pneumoconiosis	Not classified	Human	LOAEL 0.01 mg/l	occupational exposure
antimony trioxide	Inhalation	heart	Not classified	Rat	NOAEL 0.02 mg/l	1 years
antimony trioxide	Ingestion	blood liver	Not classified	Rat	NOAEL 418 mg/kg/day	not available
antimony trioxide	Ingestion	heart	Not classified	Rat	NOAEL Not available	not available

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
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Activated sludge	Analogous Compound	3 hours	IC50	>100 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Rainbow trout	Estimated	96 hours	LC50	2 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Water flea	Estimated	48 hours	EC50	1.8 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Green algae	Experimental	72 hours	ErC50	>11 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Green algae	Experimental	72 hours	NOEC	4.2 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Water flea	Experimental	21 days	NOEC	0.3 mg/l
2,2- Bis(bromomethyl)p ropane-1,3-diol, oligomeric reaction products with 1- chloro-2,3- epoxypropane		N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Oxide glass chemicals	65997-17-3	Green algae	Experimental	72 hours	EC50	>1,000 mg/l
Oxide glass chemicals	65997-17-3	Water flea	Experimental	72 hours	EC50	>1,000 mg/l
Oxide glass chemicals	65997-17-3	Zebra Fish	Experimental	96 hours	LC50	>1,000 mg/l
Oxide glass chemicals	65997-17-3	Green algae	Experimental	72 hours	NOEC	>=1,000 mg/l
antimony trioxide	1309-64-4	Green algae	Endpoint not reached	72 hours	EC50	>100 mg/l
antimony trioxide	1309-64-4	N/A	Estimated	96 hours	EC50	2.12 mg/l
antimony trioxide	1309-64-4	Fathead minnow	Estimated	96 hours	LC50	17.2 mg/l
antimony trioxide	1309-64-4	Fish	Estimated	96 hours	LC50	8.3 mg/l
antimony trioxide	1309-64-4	Activated sludge	Experimental	4 hours	NOEC	6.1 mg/l
antimony trioxide	1309-64-4	Rainbow trout	Estimated	28 days	LC10	0.188 mg/l
antimony trioxide	1309-64-4	Water flea	Estimated	21 days	NOEC	2.08 mg/l
antimony trioxide	1309-64-4	Green algae	Experimental	72	NOEC	2.53 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Experimental Biodegradation	28 days	BOD	5 %BOD/COD	OECD 301F - Manometric respirometry
bis-[4-(2,3- epoxipropoxi)phen	1675-54-3	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	117 hours (t 1/2)	OECD 111 Hydrolysis func of pH

yl]propane						
2,2-	31452-80-9	Data not availbl-	N/A	N/A	N/A	N/A
Bis(bromomethyl)p		insufficient				
ropane-1,3-diol,						
oligomeric reaction						
products with 1-						
chloro-2,3-						
epoxypropane						
Oxide glass	65997-17-3	Data not availbl-	N/A	N/A	N/A	N/A
chemicals		insufficient				
antimony trioxide	1309-64-4	Data not availbl-	N/A	N/A	N/A	N/A
		insufficient				

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
bis-[4-(2,3- epoxipropoxi)phen	1675-54-3	Experimental Bioconcentration		Log Kow	3.242	OECD 117 log Kow HPLC method
yl]propane 2,2- Bis(bromomethyl)p ropane-1,3-diol, oligomeric reaction products with 1- chloro-2,3- epoxypropane		Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Oxide glass chemicals	65997-17-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
antimony trioxide	1309-64-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
bis-[4-(2,3- epoxipropoxi)pheny l]propane		Modeled Mobility in Soil	Кос	450 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. 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 substances20 01 27*Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN3082	UN3082	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS	ENVIRONMENTALLY HAZARDOUS	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
	SUBSTANCE, LIQUID, N.O.S.(2,2-BIS(P- HYDROXYPHENYL)PROP ANE DIGLYCIDYL ETHER POLYMER; ANTIMONY TRIOXIDE)	SUBSTANCE, LIQUID, N.O.S.(2,2-BIS(P- HYDROXYPHENYL)PROP ANE DIGLYCIDYL ETHER POLYMER; ANTIMONY TRIOXIDE)	LIQUID, N.O.S.(2,2-BIS(P- HYDROXYPHENYL)PROPANE DIGLYCIDYL ETHER POLYMER; ANTIMONY TRIOXIDE)
14.3 Transport hazard class(es)	9	9	9
14.4 Packing group	III	III	III
14.5 Environmental hazards	Environmentally Hazardous	Not applicable	Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	М6	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

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

SECTION 15: Regulatory information

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

Ca	rcinogenicity <u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	Regulation
	antimony trioxide	1309-64-4	Carc. 2	The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain, UK Mandatory Classification and Labelling list
	antimony trioxide	1309-64-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
	bis-[4-(2,3-epoxipropoxi)phenyl]propane	1675-54-3	Gr. 3: Not classifiable	International Agency for Research on Cancer

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

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

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

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

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of 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 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	200	500	
environment			

Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of
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		Lower-tier requirements	Upper-tier requirements
antimony trioxide	1309-64-4	200	500

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.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Revision information:

GB Section 02: CLP Ingredient table information was modified.

GB Section 15: Carcinogenicity information information was modified.

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

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

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

3M 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:	10-4960-0	Version number:	19.00
Revision date:	07/12/2023	Supersedes date:	04/09/2023

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[™] Void Filling Compound EC-3524 B/A Blue, Part A

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:	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.

This material has been tested for skin corrosion/irritation and the test results are reflected in the assigned classification.

CLASSIFICATION:

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318 Skin Sensitization, Category 1 - Skin Sens. 1; H317 Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336 Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400 Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

For full text of H phrases, see Section 16.

2.2. Label elements

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

SIGNAL WORD

DANGER.

Symbols

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

Pictograms



Ingredient	CAS Nbr	EC No.	% by Wt
Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyloxy)]dipropan-1-amine		701-270-9	30 - 60
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	202-013-9	5 - 10
triphenyl phosphite	101-02-0	202-908-4	< 2

HAZARD STATEMENTS:

H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention: P261A P273 P280B	Avoid breathing vapours. Avoid release to the environment. Wear protective gloves and eye/face protection.	
Response: P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.	Remove contact lenses, if
P310 P333 + P313	present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician. If skin irritation or rash occurs: Get medical advice/attention.	

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1-diyloxy)]dipropan-1- amine	(EC-No.) 701-270-9	30 - 60	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1A, H317 STOT SE 3, H336 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo[12.2.1.16,9.02,13 .05,10]octadeca-7,15-diene	(CAS-No.) 13560-89-9 (EC-No.) 236-948-9	10 - 30	Substance not classified as hazardous
Oxide glass chemicals	(CAS-No.) 65997-17-3 (EC-No.) 266-046-0	10 - 30	Substance with a national occupational exposure limit
2,4,6-tris(dimethylaminomethyl)phenol	(CAS-No.) 90-72-2 (EC-No.) 202-013-9	5 - 10	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318
triphenyl phosphite	(CAS-No.) 101-02-0 (EC-No.) 202-908-4	< 2	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1 Acute Tox. 4, H302 Skin Sens. 1A, H317 STOT RE 2, H373
toluene	(CAS-No.) 108-88-3 (EC-No.) 203-625-9	< 0.5	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Aquatic Chronic 3, H412

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

Specific Concentration Limits

Ingredient	Identifier(s)	Specific Concentration Limits
		(C >= 5%) Skin Irrit. 2, H315 (C >= 5%) Eye Irrit. 2, H319

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

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

Skin contact

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

Eye contact

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:

Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

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

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Hydrogen Chloride	During combustion.

5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. 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
toluene	108-88-3	UK HSC	TWA: 191 mg/m ³ (50 ppm);	SKIN
			STEL: 384 mg/m ³ (100 ppm)	
Oxide glass chemicals	65997-17-3	Manufacturer	TWA(as non-fibrous,	
		determined	respirable)(8 hours):3	
			mg/m3;TWA(as non-fibrous,	
			inhalable fraction)(8 hours):10	
			mg/m3	
UK HSC : UK Health and Safety Commiss	ion			
TWA: Time-Weighted-Average				
STEL: Short Term Exposure Limit				
CEII · Cailing				

CEIL: Ceiling

Biological limit values

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

8.2. Exposure controls

8.2.1. Engineering controls

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

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Indirect vented goggles.

Applicable Norms/Standards Use eye/face protection conforming to EN 166

Skin/hand protection

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

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

When only incidental contact is anticipated, alternative glove material(s) may be used. If contact with the glove does occur, remove immediately and replace with a set of new gloves. For incidental contact, gloves made of the following material(s) may be used:Nitrile rubber.

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

Specific Physical Form:

Liquid. Paste Colour Odor **Odour threshold** Melting point/freezing point **Boiling point/boiling range** Flammability (solid, gas) Flammable Limits(LEL) Flammable Limits(UEL) Flash point **Autoignition temperature Decomposition temperature** pН **Kinematic Viscosity** Water solubility Solubility- non-water Partition coefficient: n-octanol/water Vapour pressure Density **Relative density Relative Vapour Density**

9.2. Other information

9.2.2 Other safety characteristics EU Volatile Organic Compounds Evaporation rate Molecular weight Percent volatile

White Characteristic Amine No data available. No data available. >=93.3 °C Not applicable. *Not applicable. Not applicable.* >=93.3 °C [Test Method:Closed Cup] No data available. No data available. substance/mixture is non-soluble (in water) 200,000 mm²/sec Nil No data available. No data available. Not applicable. 0.5 g/ml 0.5 [*Ref Std*:WATER=1] *Not applicable.*

No data available. Not applicable. Not applicable. Negligible

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 Not determined

10.5 Incompatible materials

Amines. Strong acids. Strong bases. Strong oxidising agents.

10.6 Hazardous decomposition products

Substance None known. **Condition**

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

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

Signs and Symptoms of Exposure

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

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain. 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

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. Dust created by cutting, grinding, sanding, or machining may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

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:

Single exposure may cause target organ effects:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause target organ effects:

Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.

Reproductive/Developmental Toxicity:

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

Additional information:

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

Toxicological Data

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyloxy)]dipropan-1-amine	Dermal	Rat	LD50 > 2,000 mg/kg
Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1-diyloxy)]dipropan-1-amine	Ingestion	Rat	LD50 > 2,000 mg/kg
Oxide glass chemicals	Dermal		LD50 estimated to be > 5,000 mg/kg
Oxide glass chemicals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15- diene	Dermal	Rabbit	LD50 > 8,000 mg/kg
1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15- diene	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 2.25 mg/l
1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15- diene	Ingestion	Rat	LD50 > 25,000 mg/kg
2,4,6-tris(dimethylaminomethyl)phenol	Dermal	Rat	LD50 1,280 mg/kg
2,4,6-tris(dimethylaminomethyl)phenol	Ingestion	Rat	LD50 1,000 mg/kg
triphenyl phosphite	Dermal	Rabbit	LD50 > 2,000 mg/kg
triphenyl phosphite	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 1.7 mg/l
triphenyl phosphite	Ingestion	Rat	LD50 1,590 mg/kg
toluene	Dermal	Rat	LD50 12,000 mg/kg
toluene	Inhalation- Vapour (4 hours)	Rat	LC50 30 mg/l
toluene	Ingestion	Rat	LD50 5,550 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Overall product	In vitro data	Irritant
Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1-diyloxy)]dipropan-1-amine	Rat	Irritant
Oxide glass chemicals	Professio nal judgemen t	No significant irritation
1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene	Rabbit	No significant irritation
2,4,6-tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
triphenyl phosphite	Rabbit	Irritant
toluene	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1-diyloxy)]dipropan-1-amine	In vitro data	Severe irritant
Oxide glass chemicals	Professio nal judgemen t	No significant irritation
1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene	Rabbit	No significant irritation
2,4,6-tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
triphenyl phosphite	Rabbit	Moderate irritant

toluene Rabbit Moderate irritant			
Kabbit Moderate mitait	toluene	Rabbit	Moderate irritant

Skin Sensitisation

Name	Species	Value
Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1-diyloxy)]dipropan-1-amine	Guinea pig	Sensitising
1,6,7,8,9,14,15,16,17,17,18,18-	Guinea	Not classified
Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene	pig	
2,4,6-tris(dimethylaminomethyl)phenol	Guinea	Not classified
	pig	
triphenyl phosphite	Mouse	Sensitising
toluene	Guinea	Not classified
	pig	

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
Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1-diyloxy)]dipropan-1-amine	In Vitro	Not mutagenic
Oxide glass chemicals	In Vitro	Some positive data exist, but the data are not sufficient for classification
1,6,7,8,9,14,15,16,17,17,18,18-	In Vitro	Not mutagenic
Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene		
2,4,6-tris(dimethylaminomethyl)phenol	In Vitro	Not mutagenic
triphenyl phosphite	In Vitro	Not mutagenic
triphenyl phosphite	In vivo	Not mutagenic
toluene	In Vitro	Not mutagenic
toluene	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Oxide glass chemicals	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
toluene	Inhalation	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
Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1-diyloxy)]dipropan-1- amine	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1-diyloxy)]dipropan-1- amine	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	29 days
Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1-diyloxy)]dipropan-1- amine	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
1,6,7,8,9,14,15,16,17,17,18,18-	Ingestion	Not classified for female reproduction	Rat	NOAEL	premating

Dodecachloropentacyclo[12.2.1.16,9.02,13. 05,10]octadeca-7,15-diene				5,000 mg/kg/day	into lactation
1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo[12.2.1.16,9.02,13. 05,10]octadeca-7,15-diene	Ingestion	Not classified for male reproduction	Rat	NOAEL 5,000 mg/kg/day	63 days
1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo[12.2.1.16,9.02,13. 05,10]octadeca-7,15-diene	Ingestion	Not classified for development	Rat	NOAEL 5,000 mg/kg/day	premating into lactation
triphenyl phosphite	Ingestion	Not classified for female reproduction	Rat	NOAEL 40 mg/kg/day	premating into lactation
triphenyl phosphite	Ingestion	Not classified for male reproduction	Rat	NOAEL 40 mg/kg/day	28 days
triphenyl phosphite	Ingestion	Not classified for development	Rat	NOAEL 40 mg/kg/day	during gestation
toluene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
toluene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.3 mg/l	1 generation
toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1- diyloxy)]dipropan-1-amine	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	Irritation Positive	
Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1- diyloxy)]dipropan-1-amine	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL Not available	
2,4,6- tris(dimethylaminomethyl) phenol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
toluene	Inhalation	immune system	Not classified	Mouse	NOAEL 0.004 mg/l	3 hours
toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Reaction products of fatty acids, C18-unsaturated, dimers and trimers with 3,3'-[oxybis(ethane-2,1- diyloxy)]dipropan-1-amine	Ingestion	heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory	Not classified	Rat	NOAEL 1,000 mg/kg/day	29 days

		system vascular system				
Oxide glass chemicals	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
1,6,7,8,9,14,15,16,17,17,1 8,18- Dodecachloropentacyclo[1 2.2.1.16,9.02,13.05,10]oct adeca-7,15-diene	Dermal	heart skin endocrine system hematopoietic system liver nervous system kidney and/or bladder	Not classified	Rabbit	NOAEL 2,000 mg/kg/day	28 days
1,6,7,8,9,14,15,16,17,17,1 8,18- Dodecachloropentacyclo[1 2.2.1.16,9.02,13.05,10]oct adeca-7,15-diene	Inhalation	liver respiratory system hematopoietic system kidney and/or bladder	Not classified	Rat	NOAEL 1.524 mg/l	28 days
1,6,7,8,9,14,15,16,17,17,1 8,18- Dodecachloropentacyclo[1 2.2.1.16,9.02,13.05,10]oct adeca-7,15-diene	Ingestion	liver heart hematopoietic system nervous system kidney and/or bladder	Not classified	Rat	NOAEL 5,870 mg/kg/day	90 days
2,4,6- tris(dimethylaminomethyl) phenol	Dermal	skin liver nervous system auditory system hematopoietic system eyes	Not classified	Rat	NOAEL 125 mg/kg/day	28 days
triphenyl phosphite	Ingestion	nervous system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 15 mg/kg/day	28 days
triphenyl phosphite	Ingestion	hematopoietic system kidney and/or bladder	Not classified	Rat	NOAEL 40 mg/kg/day	28 days
toluene	Inhalation	auditory system nervous system eyes olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
toluene	Inhalation	heart liver kidney and/or bladder	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks
toluene	Inhalation	endocrine system	Not classified	Rat	NOAEL 1.1 mg/l	4 weeks
toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not available	20 days
toluene	Inhalation	bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 1.1 mg/l	8 weeks
toluene	Inhalation	hematopoietic system vascular system	Not classified	Human	NOAEL Not available	occupational exposure
toluene	Inhalation	gastrointestinal tract	Not classified	Multiple animal species	NOAEL 11.3 mg/l	15 weeks
toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
toluene	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
toluene	Ingestion	liver kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
toluene	Ingestion	hematopoietic system	Not classified	Mouse	NOAEL 600 mg/kg/day	14 days
toluene	Ingestion	endocrine system	Not classified	Mouse	NOAEL 105 mg/kg/day	28 days
toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105 mg/kg/day	4 weeks

Aspiration Hazard

Name	Value
toluene	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	Туре	Exposure	Test endpoint	Test result
Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1- diyloxy)]dipropan- 1-amine	701-270-9	Fathead minnow	Experimental	96 hours	LL50	2.16 mg/l
Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1- diyloxy)]dipropan- 1-amine	701-270-9	Green algae	Experimental	72 hours	EL50	0.43 mg/l
Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1- diyloxy)]dipropan- 1-amine	701-270-9	Water flea	Experimental	48 hours	EL50	0.57 mg/l
Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1- diyloxy)]dipropan- 1-amine	701-270-9	Green algae	Experimental	72 hours	NOEL	0.28 mg/l
Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1- diyloxy)]dipropan- 1-amine	701-270-9	Activated sludge	Experimental	3 hours	EC50	410.3 mg/l

1,6,7,8,9,14,15,16, 17,17,18,18-	13560-89-9	Green algae	Endpoint not reached	72 hours	EC50	>100 mg/l
Dodecachloropenta						
cyclo[12.2.1.16,9.0						
2,13.05,10]octadec						
a-7,15-diene						
1,6,7,8,9,14,15,16,	13560-89-9	Water flea	Endpoint not	48 hours	EC50	>100 mg/l
17,17,18,18-			reached			
Dodecachloropenta						
cyclo[12.2.1.16,9.0						
2,13.05,10]octadec						
a-7,15-diene	10500 00 0			0.61		
1,6,7,8,9,14,15,16,	13560-89-9	Bluegill	Experimental	96 hours	No tox obs at lmt	>100 mg/l
17,17,18,18-					of water sol	
Dodecachloropenta						
cyclo[12.2.1.16,9.0						
2,13.05,10]octadec						
a-7,15-diene			 			
1,6,7,8,9,14,15,16,	13560-89-9	Green algae	Experimental	72 hours	No tox obs at lmt	>100 mg/l
17,17,18,18-					of water sol	
Dodecachloropenta						
cyclo[12.2.1.16,9.0						
2,13.05,10]octadec						
a-7,15-diene						
1,6,7,8,9,14,15,16,	13560-89-9	Water flea	Experimental	21 days	No tox obs at lmt	>100 mg/l
17,17,18,18-				-	of water sol	-
Dodecachloropenta						
cyclo[12.2.1.16,9.0						
2,13.05,10]octadec						
a-7,15-diene						
Oxide glass	65997-17-3	Green algae	Experimental	72 hours	EC50	>1,000 mg/l
chemicals			-r-			,
Oxide glass	65997-17-3	Water flea	Experimental	72 hours	EC50	>1,000 mg/l
chemicals				. =		-,
Oxide glass	65997-17-3	Zebra Fish	Experimental	96 hours	LC50	>1,000 mg/l
chemicals			r			, <u>G</u> -
Oxide glass	65997-17-3	Green algae	Experimental	72 hours	NOEC	>=1,000 mg/l
chemicals			-r	1		,
2,4,6-	90-72-2	N/A	Experimental	96 hours	LC50	718 mg/l
tris(dimethylamino	= =		-r			
methyl)phenol						
2,4,6-	90-72-2	Common Carp	Experimental	96 hours	LC50	>100 mg/l
tris(dimethylamino			- Aperimental		1.000	100 mg/1
methyl)phenol						
2,4,6-	90-72-2	Green algae	Experimental	72 hours	EC50	46.7 mg/l
2,4,0- tris(dimethylamino	JU-12-2	Gitten aigat		12 110015		TO. / IIIg/1
methyl)phenol						
2,4,6-	00 72 2	Water flea	Experimental	48 hours	EC50	>100 mg/l
2,4,6- tris(dimethylamino	90-72-2	water nea	Experimental	40 110015	EC50	~100 mg/1
methyl)phenol	00.72.2	Croop also	Even agrices and all	72 hours	NOEC	6.44 mg/l
2,4,6-	90-72-2	Green algae	Experimental	72 hours	NOEC	6.44 mg/l
tris(dimethylamino						
methyl)phenol	101.02.0		D	70.1	FOG	
triphenyl phosphite	101-02-0	Green algae	Experimental	72 hours	EC50	>16 mg/l
				0.61	1.050	
triphenyl phosphite	101-02-0	Medaka	Experimental	96 hours	LC50	>4.3 mg/l
triphenyl phosphite	101-02-0	Water flea	Experimental	48 hours	EC50	0.45 mg/l
			<u> </u>			
triphenyl phosphite	101-02-0	Green algae	Experimental	72 hours	NOEC	16 mg/l
toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
toluene	108-88-3	Grass Shrimp	Experimental	96 hours	LC50	9.5 mg/l
		1	· ·			-
toluene	108-88-3	Green algae	Experimental	72 hours	EC50	12.5 mg/l
		*	-	•		

toluene	108-88-3	Leopard frog	Experimental	9 days	LC50	0.39 mg/l
toluene	108-88-3	Pink Salmon	Experimental	96 hours	LC50	6.41 mg/l
toluene	108-88-3	Water flea	Experimental	48 hours	EC50	3.78 mg/l
toluene	108-88-3	Coho Salmon	Experimental	40 days	NOEC	1.39 mg/l
toluene	108-88-3	Diatom	Experimental	72 hours	NOEC	10 mg/l
toluene	108-88-3	Water flea	Experimental	7 days	NOEC	0.74 mg/l
toluene	108-88-3	Activated sludge	Experimental	12 hours	IC50	292 mg/l
toluene	108-88-3	Bacteria	Experimental	16 hours	NOEC	29 mg/l
toluene	108-88-3	Bacteria	Experimental	24 hours	EC50	84 mg/l
toluene	108-88-3	Redworm	Experimental	28 days	LC50	>150 mg per kg of bodyweight
toluene	108-88-3	Soil microbes	Experimental	28 days	NOEC	<26 mg/kg (Dry Weight)

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1- diyloxy)]dipropan- 1-amine	701-270-9	Experimental Biodegradation	28 days	BOD	0 %BOD/ThOD	OECD 301F - Manometric respirometry
1,6,7,8,9,14,15,16, 17,17,18,18- Dodecachloropenta cyclo[12.2.1,16,9.0 2,13.05,10]octadec a-7,15-diene	13560-89-9	Experimental Biodegradation	14 days	BOD	0.6 %BOD/ThOD	OECD 301C - MITI test (I)
Oxide glass chemicals	65997-17-3	Data not availbl- insufficient	N/A	N/A	N/A	N/A
2,4,6- tris(dimethylamino methyl)phenol	90-72-2	Experimental Biodegradation	28 days	BOD	4 %BOD/ThOD	OECD 301D - Closed bottle test
triphenyl phosphite	101-02-0	Estimated Biodegradation	14 days	BOD	85 %BOD/ThOD	OECD 301C - MITI test (I)
triphenyl phosphite	101-02-0	Experimental Hydrolysis		Hydrolytic half-life	0.5 hours (t 1/2)	
toluene	108-88-3	Experimental Biodegradation	20 days	BOD	80 %BOD/ThOD	APHA Std Meth Water/Wastewater
toluene	108-88-3	Experimental Photolysis		Photolytic half-life (in air)	5.2 days (t 1/2)	

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Reaction products	701-270-9	Modeled		Bioaccumulation	42	Catalogic™
of fatty acids, C18-		Bioconcentration		factor		
unsaturated, dimers						
and trimers with						
3,3'-						
[oxybis(ethane-2,1-						
diyloxy)]dipropan-						
1-amine						

Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'- [oxybis(ethane-2,1- diyloxy)]dipropan- 1-amine	701-270-9	Modeled Bioconcentration		Log Kow	11.7	Episuite™
1,6,7,8,9,14,15,16, 17,17,18,18- Dodecachloropenta cyclo[12.2.1.16,9.0 2,13.05,10]octadec a-7,15-diene	13560-89-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Oxide glass chemicals	65997-17-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,4,6- tris(dimethylamino methyl)phenol	90-72-2	Experimental Bioconcentration		Log Kow	-0.66	830.7550 Part.Coef Shake Flask
triphenyl phosphite	101-02-0	Estimated Bioconcentration		Bioaccumulation factor	13800	
toluene	108-88-3	Experimental BCF - Other	72 hours	Bioaccumulation factor	90	
toluene	108-88-3	Experimental Bioconcentration		Log Kow	2.73	

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Reaction products of fatty acids, C18- unsaturated, dimers and trimers with 3,3'-[oxybis(ethane- 2,1- diyloxy)]dipropan-	701-270-9	Modeled Mobility in Soil	Koc	3,780,000,000 l/kg	
1-amine 1,6,7,8,9,14,15,16,1 7,17,18,18- Dodecachloropenta cyclo[12.2.1.16,9.0 2,13.05,10]octadeca -7,15-diene	13560-89-9	Modeled Mobility in Soil	Кос	48,000,000 l/kg	Episuite™
toluene	108-88-3	Experimental Mobility in Soil	Koc	37-160 l/kg	

12.5. Results of the PBT and vPvB assessment

Ingredient	CAS Nbr	PBT/vPvB status
1,6,7,8,9,14,15,16,17,17,18,18-	13560-89-9	Meets UK REACH vPvB criteria
Dodecachloropentacyclo[12.2.1.16,9.02,13]	.05,1	
0]octadeca-7,15-diene		

12.6. Other adverse effects

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

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

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

EU waste code (product as sold)

08 04 09*Waste adhesives and sealants containing organic solvents or other dangerous substances20 01 27*Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN3082	UN3082	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ALIPHATIC POLYMER DIAMINE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ALIPHATIC POLYMER DIAMINE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ALIPHATIC POLYMER DIAMINE)
14.3 Transport hazard class(es)	9	9	9
14.4 Packing group	III	III	III
14.5 Environmental hazards	Environmentally Hazardous	Not applicable	Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	M6	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

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

SECTION 15: Regulatory information

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

Carcinogenicity <u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
toluene	108-88-3	Gr. 3: Not classifiable	International Agency for Research on Cancer

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

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

Ingredient	<u>CAS Nbr</u>
toluene	108-88-3

Restriction status: listed in UK REACH Annex XVII

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

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:

Ingredient

CAS Nbr

1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,1 13560-89-9 0]octadeca-7,15-diene

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 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 new substance notification requirements of CEPA. 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
E1 Hazardous to the Aquatic	100	200
environment		

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
toluene	108-88-3	10	50
triphenyl phosphite	101-02-0	100	200

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

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Revision information:

GB Section 02: CLP Ingredient table information was modified.

Label: CLP Precautionary - Prevention information was modified.

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

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

Section 13: Standard Phrase Category Waste GHS information was modified.

Section 15: Seveso Hazard Category Text information was added.

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

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

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