

Safety Data Sheet

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

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

1.1. Product identifier

3M Scotch-Weld 3524 Low Density Void Filler Antimony Free

Product Identification Numbers

FS-9100-3960-1 FS-9100-3961-9

7000080057 7000080058

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

Identified uses

Structural adhesive.

1.3. Details of the supplier of the safety data sheet

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

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

1.4. Emergency telephone number

+44 (0)1344 858 000

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:

10-9736-9, 10-9737-7

TRANSPORTATION INFORMATION

FS-9100-3960-1

Component 1

ADR/RID: UN3263, CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., LIMITED QUANTITY, (TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL), 8, III, (E), ADR Classification Code: C8.

3M Scotch-Weld 3524 Low Density Void Filler Antimony Free

IMDG-CODE: UN3263, CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., (TRIS(2,4,6-

DIMETHYLAMINOMONOMETHYL)PHENOL), 8., III, IMDG-Code segregation code: 18- ALKALIS, LIMITED OLIANITITY, FMG, FA GP.

QUANTITY, EMS: FA,SB.

ICAO/IATA: UN3263, CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., (TRIS(2,4,6-

DIMETHYLAMINOMONOMETHYL)PHENOL), 8., III.

Component 2

ADR/RID: UN3077, NOT RESTRICTED AS PER SPECIAL PROVISION 375, ENVIRONMENTALLY HAZARDOUS SUBSTANCE EXEMPTION, (TRICRESYL PHOSPHATE), III, --.

IMDG-CODE: UN3077, NOT RESTRICTED AS PER IMDG CODE 2.10.2.7, MARINE POLLUTANT EXCEPTION, (TRICRESYL PHOSPHATE), III, IMDG-Code segregation code: NONE, EMS: --.

ICAO/IATA: UN3077, NOT RESTRICTED AS PER SPECIAL PROVISION A197, ENVIRONMENTALLY

HAZARDOUS SUBSTANCE EXCEPTION, (TRICRESYL PHOSPHATE), III.

FS-9100-3961-9

Component 1

ADR/RID: UN3263, CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., (TRIS(2,4,6-

DIMETHYLAMINOMONOMETHYL)PHENOL), 8, III, (E), ENVIRONMENTALLY HAZARDOUS, ADR Classification Code: C8

IMDG-CODE: UN3263, CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., (TRIS(2,4,6-

DIMETHYLAMINOMONOMETHYL)PHENOL), (TRICRESYL PHOSPHATE), 8., III, IMDG-Code segregation code: 18-ALKALIS, Marine Pollutant, (TRICRESYL PHOSPHATE), EMS: FA,SB.

ICAO/IATA: UN3263, CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., (TRIS(2,4,6-

DIMETHYLAMINOMONOMETHYL)PHENOL), 8., III.

Component 2

ADR/RID: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (TRICRESYL

PHOSPHATE), 9, III, (-), ENVIRONMENTALLY HAZARDOUS, ADR Classification Code: M7.

IMDG-CODE: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (TRICRESYL

PHOSPHATE), 9, III, IMDG-Code segregation code: NONE, Marine Pollutant, (TRICRESYL PHOSPHATE), EMS: FA,SF.

ICAO/IATA: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (TRICRESYL

PHOSPHATE), 9, III, fish and tree marking may be required (> 5kg/l).

KIT LABEL

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

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

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

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

Reproductive Toxicity, Category 2 - Repr. 2; H361

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

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER.

Symbols:

3M Scotch-Weld 3524 Low Density Void Filler Antimony Free

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

Pictograms



Contains:

Triethylenetetramine; Tris(methylphenyl) phosphate; 2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine; Tris(2,4,6-dimethylaminomonomethyl)phenol

HAZARD STATEMENTS:

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H361f Suspected of damaging fertility.

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P260A Do not breathe vapours.

P280D Wear protective gloves, protective clothing, and eye/face protection.

Response:

P303 + P361 + P353A IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or

shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.

Disposal:

P501 Dispose of contents/container in accordance with applicable local/regional/national/international

regulations.

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

Revision information:

Label: CLP Ingredients - kit components information was modified.



Safety Data Sheet

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 Document group:
 10-9736-9
 Version number:
 20.01

 Revision date:
 05/09/2019
 Supersedes date:
 21/05/2019

Transportation version number: 1.00 (02/09/2011)

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

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

1.1. Product identifier

3M Scotch-Weld™ Low Density Void Filler 3524 B/A AF 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 CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318 Skin Corrosion/ Irritation, Category 1C - Skin Corr. 1C; H314 Skin Sensitization, Category 1A - Skin Sens. 1A; H317 Reproductive Toxicity, Category 2 - Repr. 2; H361 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

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER.

Symbols:

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





Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	68082-29-1	500-191-5	15 - 40
Tris(methylphenyl) phosphate	1330-78-5	809-930-9	10 - 20
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	202-013-9	3 - 7
Triethylenetetramine	112-24-3	203-950-6	< 5

HAZARD STATEMENTS:

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H361f Suspected of damaging fertility.

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P260A Do not breathe vapours.

P280D Wear protective gloves, protective clothing, and eye/face protection.

Response:

P303 + P361 + P353A IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or

shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.

Disposal:

P501 Dispose of contents/container in accordance with applicable local/regional/national/international

regulations.

5% of the mixture consists of components of unknown acute oral toxicity.

5% of the mixture consists of components of unknown acute dermal toxicity.

Notes on labelling

H360 applies to CAS 13701-59-2 when present above 11.00%.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
Glass, oxide, chemicals	65997-17-3	266-046-0		15 - 40	Substance with a Community level exposure limit in the workplace
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	68082-29-1	500-191-5		15 - 40	Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1A, H317
Tris(methylphenyl) phosphate	1330-78-5	809-930-9	01- 2119531335- 46	10 - 20	Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=1 Repr. 2, H361f
Barium diboron tetraoxide	13701-59-2	237-222-4		7 - 10	Acute Tox. 4, H302; Repr. 1B, H360FD; Aquatic Chronic 3, H412
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]	84852-53-9	284-366-9	01- 2119474877- 18	3 - 7	Substance not classified as hazardous
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	202-013-9	01- 2119560597- 27	3 - 7	Acute Tox. 4, H302 Skin Corr. 1C, H314; Eye Dam. 1, H318
Triethylenetetramine	112-24-3	203-950-6		< 5	Acute Tox. 3, H311; Skin Corr. 1B, H314; Skin Sens. 1A, H317; Aquatic Chronic 3, H412
Aluminium hydroxide	21645-51-2	244-492-7	01- 2119529246- 39	1 - 5	Substance with a Community level exposure limit in the workplace

Note: Any entry in the EC# column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance.

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

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

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

Skin contact

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

Eye contact

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

rinsing. Immediately get medical attention.

If swallowed

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

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

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 dry chemical extinguisher to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Amine compounds. Carbon monoxide. Carbon dioxide.

Condition

During combustion.
During combustion.
During combustion.

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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 heat. 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
Barium, soluable compounds	13701-59-2	UK HSC	TWA(as Ba):0.5 mg/m3	
DUST, INERT OR NUISANCE	21645-51-2	UK HSC	TWA(as inhalable dust):10 mg/m³;TWA(as respirable dust):4 mg/m³	
Glass, oxide, chemicals	65997-17-3	UK HSC	TWA(as fiber):5 mg/m3(1 fibers/ml)	
Glass, oxide, chemicals	65997-17-3	Manufacturer determined	TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m3;TWA(as non-fibrous, respirable)(8 hours):3 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.

Derived no effect level (DNEL)

Ingredient	Degradation Product	Population	Human exposure pattern	DNEL
Tris(methylphenyl) phosphate		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	3.33 mg/kg bw/d
Tris(methylphenyl) phosphate		Worker	Dermal, Short-term exposure, Local effects	16 mg/cm2
Tris(methylphenyl) phosphate		Worker	Dermal, Short-term exposure, Systemic effects	74 mg/kg bw/d
Tris(methylphenyl) phosphate		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	0.47 mg/m ³
Tris(methylphenyl) phosphate		Worker	Inhalation, Short-term exposure, Systemic effects	1.11 mg/m³

Predicted no effect concentrations (PNEC)

i i cuicteu no ciicet concenti	ations (TAEC)		
Ingredient	Degradation Product	Compartment	PNEC
Tris(methylphenyl)		Agricultural soil	0.409 mg/kg d.w.

phosphate		
Tris(methylphenyl)	Freshwater	0.001 mg/l
phosphate		
Tris(methylphenyl)	Freshwater sediments	2.05 mg/kg d.w.
phosphate		
Tris(methylphenyl)	Intermittent releases to water	0.00146 mg/l
phosphate		
Tris(methylphenyl)	Marine water	0.0001 mg/l
phosphate		
Tris(methylphenyl)	Marine water sediments	0.205 mg/kg d.w.
phosphate		
Tris(methylphenyl)	Sewage Treatment Plant	10 mg/l
phosphate		

Recommended monitoring procedures: Information on recommended monitoring procedures can be obtained from UK HSC

8.2. Exposure controls

In addition, refer to the annex for more information.

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. Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Full face shield.

Indirect vented goggles.

Applicable Norms/Standards

Use eye/face protection conforming to EN 166

Skin/hand protection

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

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

MaterialThickness (mm)Breakthrough TimeButyl rubber.No data availableNo data availableNeoprene.No data availableNo data availableNitrile rubber.No data availableNo 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 – Butyl rubber Neoprene apron.

Apron – Nitrile

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

8.2.3. Environmental exposure controls

Refer to Annex

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical stateSolid.ColourOff-White

Specific Physical Form: Paste **Odor** Amine

Odour thresholdNo data available.pHNo data available.Boiling point/boiling rangeNot applicable.

Melting point

Melting point

No data available.

Flammability (solid, gas)

Explosive properties

Not classified

Oxidising properties

Not classified

Not classified

Flash point 150 °C [Test Method: Closed Cup]

Autoignition temperature

Flammable Limits(LEL)

Flammable Limits(UEL)

Vapour pressure

No data available.

Not applicable.

Not applicable.

Not applicable.

Relative density 0.45 [Ref Std: WATER=1]

Water solubilityNo data available.Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Evaporation rateNot applicable.Vapour densityNot applicable.Decomposition temperatureNo data available.ViscosityNo data available.

Density 0.45 g/ml

9.2. Other information

EU Volatile Organic Compounds *No data available.*

Percent volatile <=1 %

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

None known

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

11.1 Information on Toxicological effects

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.

Skin contact

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

Eve 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:

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 ATE2,000 - 5,000 mg/kg
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Dermal	Rat	LD50 > 2,000 mg/kg
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Ingestion	Rat	LD50 > 5,000 mg/kg
Glass, oxide, chemicals	Dermal		LD50 estimated to be > 5,000 mg/kg
Glass, oxide, chemicals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Tris(methylphenyl) phosphate	Dermal	Rabbit	LD50 3,700 mg/kg
Tris(methylphenyl) phosphate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 5.2 mg/l
Tris(methylphenyl) phosphate	Ingestion	Rat	LD50 15,750 mg/kg
Barium diboron tetraoxide	Dermal	Rabbit	LD50 > 2,000 mg/kg
Barium diboron tetraoxide	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 3.54 mg/l
Barium diboron tetraoxide	Ingestion	Rat	LD50 530 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
Triethylenetetramine	Dermal	Rabbit	LD50 550 mg/kg
Triethylenetetramine	Ingestion	Rat	LD50 2,500 mg/kg
Aluminium hydroxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminium hydroxide	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	In vitro data	Irritant
Glass, oxide, chemicals	Professio nal judgemen t	No significant irritation
Tris(methylphenyl) phosphate	Rabbit	No significant irritation
Barium diboron tetraoxide	Rabbit	No significant irritation
2,4,6-Tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
Triethylenetetramine	Rabbit	Corrosive
Aluminium hydroxide	Rabbit	No significant irritation

Serious Eve Damage/Irritation

Scribus Eye Damage/Hittation				
Name	Species	Value		
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil	Rabbit	Corrosive		
fatty acids and triethylenetetramine				

Glass, oxide, chemicals	Professio	No significant irritation
	nal	
	judgemen	
	t	
Tris(methylphenyl) phosphate	Rabbit	No significant irritation
Barium diboron tetraoxide	Rabbit	No significant irritation
2,4,6-Tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
Triethylenetetramine	Rabbit	Corrosive
Aluminium hydroxide	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Mouse	Sensitising
Tris(methylphenyl) phosphate	Professio nal judgemen	Not classified
Barium diboron tetraoxide	Guinea pig	Not classified
2,4,6-Tris(dimethylaminomethyl)phenol	Guinea pig	Not classified
Triethylenetetramine	Guinea pig	Sensitising
Aluminium hydroxide	Guinea pig	Not classified

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Germ Cen Mutagementy		
Name	Route	Value
Glass, oxide, chemicals	In Vitro	Some positive data exist, but the data are not sufficient for classification
Tris(methylphenyl) phosphate	In Vitro	Not mutagenic
Tris(methylphenyl) phosphate	In vivo	Not mutagenic
Barium diboron tetraoxide	In Vitro	Not mutagenic
Barium diboron tetraoxide	In vivo	Not mutagenic
2,4,6-Tris(dimethylaminomethyl)phenol	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Glass, oxide, chemicals	Inhalation	Multiple	Some positive data exist, but the data are not
		animal	sufficient for classification
		species	
Tris(methylphenyl) phosphate	Ingestion	Multiple	Not carcinogenic
		animal	
		species	
Aluminium hydroxide	Not	Multiple	Not carcinogenic
	specified.	animal	
		species	

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Tris(methylphenyl) phosphate	Ingestion	Not classified for development	Rat	NOAEL 400 mg/kg/day	during gestation
Tris(methylphenyl) phosphate	Ingestion	Toxic to female reproduction	Multiple animal species	NOAEL Not available	premating into lactation

Tris(methylphenyl) phosphate	Ingestion	Toxic to male reproduction	Multiple	NOAEL Not	premating
			animal	available	into lactation
			species		
Barium diboron tetraoxide	Ingestion	Toxic to female reproduction	Rat	NOAEL 800	90 days
				mg/kg/day	
Barium diboron tetraoxide	Ingestion	Toxic to development	Rabbit	NOAEL 20	during
	_	_		mg/kg/day	organogenesis
Barium diboron tetraoxide	Ingestion	Toxic to male reproduction	Rat	NOAEL 350	90 days
	_	_		mg/kg/day	
Aluminium hydroxide	Ingestion	Not classified for development	Rat	NOAEL 768	during
				mg/kg/day	organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Tris(methylphenyl) phosphate	Ingestion	peripheral nervous system	Not classified	Chicken	NOAEL 2,000 mg/kg	
Barium diboron tetraoxide	Ingestion	nervous system	Not classified	Rat	NOAEL 200 mg/kg	
2,4,6- Tris(dimethylaminomethyl) phenol	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
Glass, oxide, chemicals	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
Tris(methylphenyl) phosphate	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 230 mg/kg/day	13 weeks
Tris(methylphenyl) phosphate	Ingestion	endocrine system liver heart skin gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system immune system nervous system respiratory system	Not classified	Rat	NOAEL 750 mg/kg/day	13 weeks
Barium diboron tetraoxide	Ingestion	hematopoietic system liver heart skin endocrine system bone, teeth, nails, and/or hair immune system muscles nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	Rat	NOAEL 700 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

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.

SECTION 12: Ecological information

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

12.1. Toxicity

No product test data available.

Material	CAS#	Organism	Туре	Exposure	Test endpoint	Test result
Fatty acids, C18-	68082-29-1	Green algae	Experimental	72 hours	EC50	4.34 mg/l
unsaturated, dimers,						
oligomeric reaction						
products with tall-oil						
fatty acids and						
triethylenetetramine						
Fatty acids, C18-	68082-29-1	Water flea	Experimental	48 hours	EC50	7.07 mg/l
unsaturated, dimers,			F			
oligomeric reaction						
products with tall-oil						
fatty acids and						
triethylenetetramine						
Fatty acids, C18-	68082-29-1	Zebra Fish	Experimental	96 hours	LC50	7.07 mg/l
unsaturated, dimers,	000002 29 1	Zeora i isii	Емренинении) o nours	Leso	7.07 mg/1
oligomeric reaction						
products with tall-oil						
fatty acids and						
triethylenetetramine						
Fatty acids, C18-	68082-29-1	Green algae	Experimental	72 hours	NOEC	0.5 mg/l
unsaturated, dimers,	08082-29-1	Giccii aigac	Experimental	/2 Hours	NOEC	0.5 mg/1
oligomeric reaction						
products with tall-oil						
fatty acids and						
triethylenetetramine						
	(5007.17.2	C 1	Б	72.1	ECCO	> 1.000 //
Glass, oxide, chemicals	65997-17-3	Green algae	Experimental	72 hours	EC50	>1,000 mg/l
Glass, oxide, chemicals	65997-17-3	Water flea	Experimental	72 hours	EC50	>1,000 mg/l
Glass, oxide, chemicals	65997-17-3	Zebra Fish	Experimental	96 hours	LC50	>1,000 mg/l
Glass, oxide, chemicals	65997-17-3	Green algae	Experimental	72 hours	NOEC	>=1,000 mg/l
Glass, oxide, ellellifeats	03/9/ 1/ 3	Green argue	Ехрегинения	72 Hours	Nobe	1,000 mg/1
Barium diboron	13701-59-2	Green Algae	Experimental	72 hours	EC50	7.8 mg/l
tetraoxide						
Barium diboron	13701-59-2	Rainbow trout	Experimental	96 hours	LC50	62 mg/l
tetraoxide			1			
Barium diboron	13701-59-2	Water flea	Experimental	48 hours	EC50	20.3 mg/l
tetraoxide			F			3
Barium diboron	13701-59-2	Green Algae	Experimental	72 hours	NOEC	1.1 mg/l
tetraoxide				7 - 220 4220	1.0-0	
1,1'-(Ethane-1,2-	84852-53-9	Green algae	Experimental	96 hours	EC50	>100 mg/l
diyl)bis[pentabromoben		Green argue	Experimental) o nours	Leso	100 mg/1
zene]						
1.1'-(Ethane-1.2-	84852-53-9	Rainbow trout	Experimental	96 hours	No tox obs at lmt	>100 mg/l
diyl)bis[pentabromoben		Kambow trout	Experimental	90 Hours	of water sol	- 100 mg/1
zene]					of water sor	
1,1'-(Ethane-1,2-	84852-53-9	Water flea	Exmanimants!	10 hours	No toy obs at least	>100 mg/l
		w ater flea	Experimental	48 hours	No tox obs at lmt	/100 mg/1
diyl)bis[pentabromoben		1			of water sol	
zene]	04052 52 0	C A1	F : (1	061	NT (1 (1)	> 100 //
1,1'-(Ethane-1,2-	84852-53-9	Green Algae	Experimental	96 hours	No tox obs at lmt	>100 mg/l
diyl)bis[pentabromoben	<u> </u>				of water sol	

zene]						
2,4,6- Tris(dimethylaminomet hyl)phenol	90-72-2	Common Carp	Experimental	96 hours	LC50	175 mg/l
	90-72-2	Grass Shrimp	Experimental	96 hours	LC50	718 mg/l
2,4,6- Tris(dimethylaminomet hyl)phenol	90-72-2	Green algae	Experimental	72 hours	EC50	84 mg/l
2,4,6- Tris(dimethylaminomet hyl)phenol	90-72-2	Green algae	Experimental	72 hours	NOEC	6.25 mg/l
Aluminium hydroxide	21645-51-2	Fish other	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Aluminium hydroxide	21645-51-2	Green Algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Aluminium hydroxide	21645-51-2	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Aluminium hydroxide	21645-51-2	Green Algae	Experimental	72 hours	No tox obs at lmt of water sol	100 mg/l
Triethylenetetramine	112-24-3	Green Algae	Experimental	72 hours	EC50	27.4 mg/l
Triethylenetetramine	112-24-3	Guppy	Experimental	96 hours	LC50	570 mg/l
Triethylenetetramine	112-24-3	Water flea	Experimental	48 hours	EC50	37.4 mg/l
Triethylenetetramine	112-24-3	Green Algae	Experimental	72 hours	NOEC	0.468 mg/l
Triethylenetetramine	112-24-3	Water flea	Experimental	21 days	NOEC	2.86 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Fatty acids, C18- unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	68082-29-1	Estimated Biodegradation	28 days	% CO2 produced	≤8 % weight	OECD 301B - Modified sturm or CO2
Glass, oxide, chemicals	65997-17-3	Data not availbl- insufficient			N/A	
Barium diboron tetraoxide	13701-59-2	Data not availbl- insufficient			N/A	
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene	84852-53-9	Experimental Biodegradation	28 days	BOD	0 % BOD/ThBOD	OECD 301C - MITI test (I)
2,4,6- Tris(dimethylaminomethyl) phenol	90-72-2	Experimental Biodegradation	28 days	BOD	4 % weight	OECD 301D - Closed bottle test
Aluminium hydroxide	21645-51-2	Data not availbl- insufficient			N/A	
Triethylenetetramine	112-24-3	Experimental Biodegradation	20 days	BOD	0 % BOD/ThBOD	OECD 301D - Closed bottle test

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Fatty acids, C18-	68082-29-1	Experimental		Log Kow	≤3.55	Other methods
unsaturated, dimers,		Bioconcentration				
oligomeric reaction						
products with tall-oil fatty						
acids and						
triethylenetetramine						

Glass, oxide, chemicals	65997-17-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Barium diboron tetraoxide	13701-59-2	Experimental Bioconcentration		Log Kow	-0.70	Other methods
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzen e]	84852-53-9	Experimental Bioconcentration		Log Kow	3.55	Other methods
2,4,6- Tris(dimethylaminomethyl) phenol	90-72-2	Experimental Bioconcentration		Log Kow	-0.66	Other methods
Aluminium hydroxide	21645-51-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Triethylenetetramine	112-24-3	Experimental BCF- Carp	42 days	Bioaccumulation factor	<5.0	OECD 305E - Bioaccumulation flow- through fish test

12.4. Mobility in soil

Please contact manufacturer for more details

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

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product—that has been completely cured or polymerised may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

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

EU waste code (product as sold)

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

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

SECTION 14: Transportation information

ADR: UN3263; Corrosive solid, basic, organic, N.O.S. (TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL); 8; III; (E); C8.

IATA: UN3263; Corrosive solid, basic, organic, N.O.S. (TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL); 8;

IMDG: UN3263; Corrosive solid, basic, organic, N.O.S. (TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL); 8;

III; Marine Pollutant:TRICRESYL PHOSPHATE; EMS:FA,SB.

SECTION 15: Regulatory information

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

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

List of relevant H statements

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H360FD	May damage fertility. May damage the unborn child.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Revision information:

Formulation: Section 16: Annex information was modified.

Industrial Use of Adhesives: Section 16: Annex information was modified.

Section 1: Product use information information was modified.

CLP: Ingredient table information was modified.

Label: CLP Percent Unknown information was deleted.

Label: CLP Percent Unknown information was modified.

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

Section 8: Occupational exposure limit table information was modified.

Section 09: Color information was added.

Section 09: Odor information was added.

Sections 3 and 9: Odour, colour, grade information information was deleted.

Section 11: Acute Toxicity table information was modified.

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

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

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

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

Section 11: Skin Sensitization Table information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

Section 14: Transportation classification information was modified.

Section 15: Regulations - Inventories 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 modified.

Annex

1. Title				
Substance identification	Tris(methylphenyl) phosphate; EC No. 809-930-9; CAS Nbr 1330-78-5;			
Exposure Scenario Name	Formulation			
Lifecycle Stage	Use at industrial sites			
Contributing activities	PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing) ERC 02 -Formulation into mixture			
Processes, tasks and activities covered	Transfer of substances/mixtures into small containers e.g. tubes , bottles or small reservoirs.			
2. Operational conditions and risk mana				
Operating Conditions	Physical state:Liquid. General operating conditions: Continuous release; Duration of exposure per day at workplace [for one worker]: 8 hours/day; Indoor use with Local Exhaust Ventilation; Processing Temperature:: 20 - 26 degree Celsius;			
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Goggles - Chemical resistant; Protective clothing / Wear suitable protective clothing; Protective Gloves - Polyvinyl Chloride; Ventilated Process Enclosures; Environmental: None needed;			
Waste management measures	Do not apply industrial sludge to natural soils; Do not release directly to waterways;			
3. Prediction of exposure				
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.			

1. Title	
Substance identification	Tris(methylphenyl) phosphate;
	EC No. 809-930-9;
	CAS Nbr 1330-78-5;
Exposure Scenario Name	Industrial Use of Adhesives
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 08a -Transfer of substance or mixture (charging and discharging) at non-
	dedicated facilities
	PROC 13 -Treatment of articles by dipping and pouring
	ERC 05 -Use at industrial site leading to inclusion into/onto article
Processes, tasks and activities covered	Application of product. Transfer of substances/mixtures into small containers e.g.
	tubes, bottles or small reservoirs.
2. Operational conditions and risk mana	ngement measures
Operating Conditions	Physical state:Liquid.
	General operating conditions:

	Continuous release; Duration of exposure per day at workplace [for one worker]: 8 hours/day; Indoor use with Local Exhaust Ventilation; Processing Temperature:: 20 - 26 degree Celsius;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures:
	Human health: Goggles - Chemical resistant; Protective clothing / Wear suitable protective clothing; Protective Gloves - Polyvinyl Chloride;
	Ventilated Process Enclosures; Environmental: None needed;
	The following task-specific risk management measures apply in addition to those listed above: Task: PROC08a; Human Health;
Waste management measures	Protective Clothing - Apron; Do not apply industrial sludge to natural soils; Do not release directly to waterways;
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

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.

3M United Kingdom MSDSs are available at www.3M.com/uk



Safety Data Sheet

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Transportation version number: 1.00 (02/09/2011)

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

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

1.1. Product identifier

3M Scotch-Weld Low Density Void Filler 3524 B/A AF Part B

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

Identified uses

Base for two-part epoxy 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 CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

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

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

Reproductive Toxicity, Category 2 - Repr. 2; H361

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

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

WARNING.

Symbols:

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

Pictograms







Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3	216-823-5	50 - 60
Tris(methylphenyl) phosphate	1330-78-5	809-930-9	7 - 13

HAZARD STATEMENTS:

H319 Causes serious eye irritation. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H361f Suspected of damaging fertility.

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P280E Wear protective gloves.

P273 Avoid release to the environment.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

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

Disposal:

P501 Dispose of contents/container in accordance with applicable local/regional/national/international

regulations.

15% of the mixture consists of components of unknown acute oral toxicity.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr		_	% by Wt	Classification
			Registration No.		
2,2'-[(1-Methylethylidene)bis(4,1-	1675-54-3	216-823-5		50 - 60	Skin Irrit. 2, H315; Eye

phenyleneoxymethylene)]bisoxirane						Irrit. 2, H319; Skin Sens. 1,
						H317
						Aquatic Chronic 2, H411
Glass, oxide, chemicals	65997-17-3	266-046-0		15 -	20	Substance with a
						Community level exposure
						limit in the workplace
1,1'-(Ethane-1,2-	84852-53-9	284-366-9	01-	10 -	20	Substance not classified as
diyl)bis[pentabromobenzene]			2119474877-			hazardous
			18			
Tris(methylphenyl) phosphate	1330-78-5	809-930-9	01-	7 -	13	Aquatic Acute 1,
			2119531335-			H400,M=1; Aquatic
			46			Chronic 1, H410,M=1
						Repr. 2, H361f

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

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

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

Skin contact

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

Eye contact

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

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

Substance Aldehydes.

Condition

During combustion.

Carbon monoxide.During combustion.Carbon dioxide.During combustion.Hydrogen ChlorideDuring combustion.

5.3. Advice for fire-fighters

When fire fighting conditions are severe and total thermal decomposition of the product is possible, wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, tunic and trousers (leggings), 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

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

IngredientCAS NbrAgencyLimit typeAdditional commentsGlass, oxide, chemicals65997-17-3Manufacturer determinedTWA(as non-fibrous, inhalable fraction)(8 hours):10

mg/m3;TWA(as non-fibrous, respirable)(8 hours):3 mg/m3

Glass, oxide, chemicals 65997-17-3 UK HSC TWA(as fiber):5 mg/m3(1 fibers/ml)

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.

Derived no effect level (DNEL)

Ingredient	Degradation Product	Population	Human exposure pattern	DNEL
Tris(methylphenyl) phosphate		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	3.33 mg/kg bw/d
Tris(methylphenyl) phosphate		Worker	Dermal, Short-term exposure, Local effects	16 mg/cm2
Tris(methylphenyl) phosphate		Worker	Dermal, Short-term exposure, Systemic effects	74 mg/kg bw/d
Tris(methylphenyl) phosphate		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	0.47 mg/m ³
Tris(methylphenyl) phosphate		Worker	Inhalation, Short-term exposure, Systemic effects	1.11 mg/m³

Predicted no effect concentrations (PNEC)

Ingredient	Degradation Product	Compartment	PNEC
Tris(methylphenyl) phosphate		Agricultural soil	0.409 mg/kg d.w.
Tris(methylphenyl) phosphate		Freshwater	0.001 mg/l
Tris(methylphenyl) phosphate		Freshwater sediments	2.05 mg/kg d.w.
Tris(methylphenyl) phosphate		Intermittent releases to water	0.00146 mg/l
Tris(methylphenyl) phosphate		Marine water	0.0001 mg/l
Tris(methylphenyl) phosphate		Marine water sediments	0.205 mg/kg d.w.
Tris(methylphenyl) phosphate		Sewage Treatment Plant	10 mg/l

Recommended monitoring procedures: Information on recommended monitoring procedures can be obtained from UK HSC

8.2. Exposure controls

In addition, refer to the annex for more information.

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.

Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining.

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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended:

MaterialThickness (mm)Breakthrough TimeButyl rubber.No data availableNo data availablePolymer laminateNo data availableNo 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 – Butyl rubber Apron - polymer laminate

Respiratory protection

Wear respiratory protection if ventilation is inadequate to prevent overexposure. 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

8.2.3. Environmental exposure controls

Refer to Annex

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Solid.
Colour Blue

Specific Physical Form: Paste Odor **Epoxy**

Odour threshold No data available. рH No data available.

200 °C Boiling point/boiling range

Melting point No data available. Flammability (solid, gas) Not classified **Explosive properties** Not classified **Oxidising properties** Not classified

150 °C [Test Method:Closed Cup] Flash point

Autoignition temperature No data available. Flammable Limits(LEL) Not applicable. Flammable Limits(UEL) Not applicable. Vapour pressure Not applicable.

Relative density 0.5 [*Ref Std*:WATER=1]

Water solubility No data available. Solubility- non-water No data available. Partition coefficient: n-octanol/water No data available. **Evaporation rate** Not applicable. Not applicable. Vapour density No data available. **Decomposition temperature** No data available. No data available.

Viscosity **Density**

9.2. Other information

EU Volatile Organic Compounds No data available. 1 % weight Percent volatile

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

None known.

10.5 Incompatible materials

Strong acids.

Strong oxidising agents.

10.6 Hazardous decomposition products

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

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation

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.

Skin contact

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

Eye contact

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

Ingestion

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

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 >5,000 mg/kg
2,2'-[(1-Methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane	Dermal	Rat	LD50 > 1,600 mg/kg
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Ingestion	Rat	LD50 > 1,000 mg/kg
Glass, oxide, chemicals	Dermal		LD50 estimated to be > 5,000 mg/kg
Glass, oxide, chemicals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Tris(methylphenyl) phosphate	Dermal	Rabbit	LD50 3,700 mg/kg
Tris(methylphenyl) phosphate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 5.2 mg/l
Tris(methylphenyl) phosphate	Ingestion	Rat	LD50 15,750 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Rabbit	Mild irritant

Glass, oxide, chemicals	Professio	No significant irritation
	nal	
	judgemen	
	t	
Tris(methylphenyl) phosphate	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Rabbit	Moderate irritant
Glass, oxide, chemicals	Professio	No significant irritation
	nal	
	judgemen	
	t	
Tris(methylphenyl) phosphate	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Human	Sensitising
	and	
	animal	
Tris(methylphenyl) phosphate	Professio	Not classified
	nal	
	judgemen	
	t	

Respiratory Sensitisation

Name	Species	Value
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	In vivo	Not mutagenic
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
Glass, oxide, chemicals	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
Tris(methylphenyl) phosphate	In Vitro	Not mutagenic
Tris(methylphenyl) phosphate	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
2,2'-[(1-Methylethylidene)bis(4,1-	Dermal	Mouse	Some positive data exist, but the data are not
phenyleneoxymethylene)]bisoxirane			sufficient for classification
Glass, oxide, chemicals	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Tris(methylphenyl) phosphate	Ingestion	Multiple animal species	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation

2,2'-[(1-Methylethylidene)bis(4,1-	Dermal	Not classified for development	Rabbit	NOAEL 300	during
phenyleneoxymethylene)]bisoxirane				mg/kg/day	organogenesis
2,2'-[(1-Methylethylidene)bis(4,1-	Ingestion	Not classified for development	Rat	NOAEL 750	2 generation
phenyleneoxymethylene)]bisoxirane		_		mg/kg/day	
Tris(methylphenyl) phosphate	Ingestion	Not classified for development	Rat	NOAEL 400	during
		_		mg/kg/day	gestation
Tris(methylphenyl) phosphate	Ingestion	Toxic to female reproduction	Multiple	NOAEL Not	premating
		_	animal	available	into lactation
			species		
Tris(methylphenyl) phosphate	Ingestion	Toxic to male reproduction	Multiple	NOAEL Not	premating
			animal	available	into lactation
			species		

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Specific Target Organ Toxicity - single exposure							
Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration	
Tris(methylphenyl) phosphate	Ingestion	peripheral nervous system	Not classified	Chicken	NOAEL 2,000 mg/kg		

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
2,2'-[(1- Methylethylidene)bis(4,1- phenyleneoxymethylene)]b isoxirane	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
2,2'-[(1- Methylethylidene)bis(4,1- phenyleneoxymethylene)]b isoxirane	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
2,2'-[(1- Methylethylidene)bis(4,1- phenyleneoxymethylene)]b isoxirane	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
Glass, oxide, chemicals	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
Tris(methylphenyl) phosphate	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 230 mg/kg/day	13 weeks
Tris(methylphenyl) phosphate	Ingestion	endocrine system liver heart skin gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system immune system nervous system respiratory system	Not classified	Rat	NOAEL 750 mg/kg/day	13 weeks

Aspiration Hazard

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

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

SECTION 12: Ecological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient

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

12.1. Toxicity

No product test data available.

Material	CAS#	Organism	Type	Exposure	Test endpoint	Test result
2,2'-[(1- Methylethylidene)bis(4, 1- phenyleneoxymethylen e)]bisoxirane	1675-54-3	Rainbow trout	Estimated	96 hours	LC50	2 mg/l
2,2'-[(1- Methylethylidene)bis(4, 1- phenyleneoxymethylen e)]bisoxirane	1675-54-3	Water flea	Estimated	48 hours	EC50	1.8 mg/l
2,2'-[(1- Methylethylidene)bis(4, 1- phenyleneoxymethylen e)]bisoxirane	1675-54-3	Green Algae	Experimental	72 hours	EC50	>11 mg/l
2,2'-[(1- Methylethylidene)bis(4, 1- phenyleneoxymethylen e)]bisoxirane	1675-54-3	Green Algae	Experimental	72 hours	NOEC	4.2 mg/l
2,2'-[(1- Methylethylidene)bis(4, 1- phenyleneoxymethylen e) bisoxirane	1675-54-3	Water flea	Experimental	21 days	NOEC	0.3 mg/l
1,1'-(Ethane-1,2-diyl)bis[pentabromoben zene]	84852-53-9	Green algae	Experimental	96 hours	EC50	>100 mg/l
1,1'-(Ethane-1,2-diyl)bis[pentabromoben zene]	84852-53-9	Rainbow trout	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
1,1'-(Ethane-1,2-diyl)bis[pentabromoben zene]	84852-53-9	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
1,1'-(Ethane-1,2-diyl)bis[pentabromoben zene]	84852-53-9	Green Algae	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Glass, oxide, chemicals	65997-17-3	Green algae	Experimental	72 hours	EC50	>1,000 mg/l
Glass, oxide, chemicals	65997-17-3	Water flea	Experimental	72 hours	EC50	>1,000 mg/l
Glass, oxide, chemicals	65997-17-3	Zebra Fish	Experimental	96 hours	LC50	>1,000 mg/l
Glass, oxide, chemicals	65997-17-3	Green algae	Experimental	72 hours	NOEC	>=1,000 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
2,2'-[(1-	1675-54-3	Experimental		Hydrolytic half-life	117 hours (t	Other methods
Methylethylidene)bis(4,1-		Hydrolysis			1/2)	
phenyleneoxymethylene)]bi						
soxirane						
2,2'-[(1-	1675-54-3	Experimental	28 days	BOD	5 %BOD/COD	OECD 301F - Manometric
Methylethylidene)bis(4,1-		Biodegradation				respirometry
phenyleneoxymethylene)]bi						

soxirane					
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene		Experimental Biodegradation	28 days	0 % BOD/ThBOD	OECD 301C - MITI test (I)
Glass, oxide, chemicals	65997-17-3	Data not availbl- insufficient		N/A	

12.3: Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
2,2'-[(1- Mathylathylidana)hig(4.1	1675-54-3	Experimental Bioconcentration		Log Kow	3.242	Other methods
Methylethylidene)bis(4,1-phenyleneoxymethylene)]b		Bioconcentration				
isoxirane						
1,1'-(Ethane-1,2-diyl)bis[pentabromobenzen e]	84852-53-9	Experimental Bioconcentration		Log Kow	3.55	Other methods
Glass, oxide, chemicals	65997-17-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.4. Mobility in soil

Please contact manufacturer for more details

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

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. If no other disposal options are available, waste product—that has been completely cured or polymerised may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

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

EU waste code (product as sold)

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

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

SECTION 14: Transportation information

Exemption: For vessels containing a net quantity of 5 l or a net mass of 5 kg or less per single or inner packaging , special provision 375 (ADR), exemption per 2.10.2.7 (IMDG) or special provision A197 (IATA) may be applied, if applicable

ADR: UN3077; Environmentally hazardous substance, solid, N.O.S. (tricresyl phosphate); 9; III; (-); M7.

IATA: UN3077; Environmentally hazardous substance, solid, N.O.S. (tricresyl phosphate); 9; III.

IMDG: UN3077; Environmentally hazardous substance, solid, N.O.S. (tricresyl phosphate); 9; III; Marine Pollutant: (tricresyl phosphate); EMS:FA,SF.

SECTION 15: Regulatory information

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

Carcinogenicity

IngredientCAS NbrClassificationRegulation2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane1675-54-3Gr. 3: Not classifiableInternational Agency
for Research on Cancer

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

List of relevant H statements

11215

П313	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Carrage alries immitations

Revision information:

CLP: Ingredient table information was modified.

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

Section 8: Occupational exposure limit table information was modified.

Section 09: Color information was added.

Section 09: Odor information was added.

Sections 3 and 9: Odour, colour, grade information information was deleted.

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

Section 14: Transportation classification information was modified.

Annex

1. Title	
Substance identification	Tris(methylphenyl) phosphate; EC No. 809-930-9; CAS Nbr 1330-78-5;

Exposure Scenario Name	Formulation
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing) ERC 02 -Formulation into mixture
Processes, tasks and activities covered	Transfer of substances/mixtures into small containers e.g. tubes , bottles or small reservoirs.
2. Operational conditions and risk man	agement measures
Operating Conditions	Physical state: Liquid. General operating conditions: Continuous release; Duration of exposure per day at workplace [for one worker]: 8 hours/day; Indoor use with Local Exhaust Ventilation; Processing Temperature:: 20 - 26 degree Celsius;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Goggles - Chemical resistant; Protective clothing / Wear suitable protective clothing; Protective Gloves - Polyvinyl Chloride; Ventilated Process Enclosures; Environmental: None needed;
Waste management measures	Do not apply industrial sludge to natural soils; Do not release directly to waterways;
3. Prediction of exposure	1
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

1. Title		
Substance identification	Tris(methylphenyl) phosphate;	
	EC No. 809-930-9;	
	CAS Nbr 1330-78-5;	
Exposure Scenario Name	Industrial Use of Adhesives	
Lifecycle Stage	Use at industrial sites	
Contributing activities	PROC 08a -Transfer of substance or mixture (charging and discharging) at non-	
	dedicated facilities	
	PROC 13 -Treatment of articles by dipping and pouring	
	ERC 05 -Use at industrial site leading to inclusion into/onto article	
Processes, tasks and activities covered	Application of product. Transfer of substances/mixtures into small containers e.g.	
	tubes, bottles or small reservoirs.	
2. Operational conditions and risk management measures		
Operating Conditions	Physical state:Liquid.	
	General operating conditions:	
	Continuous release;	
	Duration of exposure per day at workplace [for one worker]: 8 hours/day;	
	Indoor use with Local Exhaust Ventilation;	
	Processing Temperature:: 20 - 26 degree Celsius;	
Risk management measures	Under the operational conditions described above the following risk management	
	measures apply:	
	General risk management measures:	
	Human health:	
	Goggles - Chemical resistant;	

	The state of the s
	Protective clothing / Wear suitable protective clothing;
	Protective Gloves - Polyvinyl Chloride;
	Ventilated Process Enclosures;
	Environmental:
	None needed;
	;
	The following task-specific risk management measures apply in addition to those
	listed above:
	Task: PROC08a;
	Human Health;
	Protective Clothing - Apron;
Waste management measures	Do not apply industrial sludge to natural soils;
	Do not release directly to waterways;
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and
_	PNECs when the identified risk management measures are adopted.

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.

3M United Kingdom MSDSs are available at www.3M.com/uk