



## Safety Data Sheet

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<b>Transportation version number:</b> 12.00 (03/07/2018)			

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™ EC-9323 B/A

#### Product Identification Numbers

FS-9100-5468-3      FS-9100-5470-9

7000080437      7000080439

#### 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:**

07-4016-7, 07-4015-9

### TRANSPORTATION INFORMATION

FS-9100-5468-3

#### Component 1

**ADR/RID:** UN3259, AMINES, SOLID, CORROSIVE, N.O.S., LIMITED QUANTITY, (3,3'-OXYBIS(ETHYLENEOXY)BIS(PROPYLAMINE)), 8., II, (E), ADR Classification Code: C8.

**IMDG-CODE:** UN3259, AMINES, SOLID, CORROSIVE, N.O.S., (3,3'-OXYBIS(ETHYLENEOXY)BIS(PROPYLAMINE)), 8., II, IMDG-Code segregation code: 18 - ALKALIS, LIMITED QUANTITY, EMS: FA, SB.

**ICAO/IATA:** UN3259, AMINES, SOLID, CORROSIVE, N.O.S., (3,3'-OXYBIS(ETHYLENEOXY)BIS(PROPYLAMINE)), 8, II.

#### Component 2

**ADR/RID:** UN3077, NOT RESTRICTED AS PER SPECIAL PROVISION 375, ENVIRONMENTALLY HAZARDOUS SUBSTANCE EXEMPTION, (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER), III, --.

**IMDG-CODE:** UN3077, NOT RESTRICTED AS PER IMDG CODE 2.10.2.7, MARINE POLLUTANT EXCEPTION, (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER), III, IMDG-Code segregation code: NONE, EMS: --.

**ICAO/IATA:** UN3077, NOT RESTRICTED AS PER SPECIAL PROVISION A197, ENVIRONMENTALLY HAZARDOUS SUBSTANCE EXEMPTION, (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER), III.

FS-9100-5470-9

#### Component 1

**ADR/RID:** UN3259, AMINES, SOLID, CORROSIVE, N.O.S., (3,3'-OXYBIS(ETHYLENEOXY)BIS(PROPYLAMINE)), 8., II, (E), ADR Classification Code: C8.

**IMDG-CODE:** UN3259, AMINES, SOLID, CORROSIVE, N.O.S., (3,3'-OXYBIS(ETHYLENEOXY)BIS(PROPYLAMINE)), 8., II, IMDG-Code segregation code: 18 - ALKALIS, EMS: FA, SB.

**ICAO/IATA:** UN3259, AMINES, SOLID, CORROSIVE, N.O.S., (3,3'-OXYBIS(ETHYLENEOXY)BIS(PROPYLAMINE)), 8, II.

#### Component 2

**ADR/RID:** UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER), 9, III, (-), ENVIRONMENTALLY HAZARDOUS, ADR Classification Code: M7.

**IMDG-CODE:** UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER), 9., III, IMDG-Code segregation code: NONE, Marine Pollutant, (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER), EMS: FA, SF.

**ICAO/IATA:** UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER), 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 1B - Skin Corr. 1B; H314

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

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

For full text of H phrases, see Section 16.

### 2.2. Label elements

#### CLP REGULATION (EC) No 1272/2008

#### SIGNAL WORD

DANGER.

**Symbols:**

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

**Pictograms**



Contains:

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane; 3,3'-Oxybis(ethyleneoxy)bis(propylamine); Tris(2,4,6-dimethylaminomonomethyl)phenol

**HAZARD STATEMENTS:**

H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
  
H411 Toxic to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS**

**Prevention:**

P260B Do not breathe dust.  
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.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

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

**<=125 ml Hazard statements**

H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.

**<=125 ml Precautionary statements**

**Prevention:**

P260B Do not breathe dust.  
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.  
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](http://www.3M.com/msds)).

**Revision information:**  
No revision information



## Safety Data Sheet

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<b>Document group:</b>	07-4015-9	<b>Version number:</b>	18.00
<b>Revision date:</b>	15/10/2018	<b>Supersedes date:</b>	05/07/2018
<b>Transportation version number:</b>	1.00 (31/03/2011)		

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™ Structural Adhesive EC-9323 B/A (Part A)

#### 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

### 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 1B - Skin Corr. 1B; H314  
Skin Sensitization, Category 1 - Skin Sens. 1; H317

For full text of H phrases, see Section 16.

#### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

##### SIGNAL WORD

DANGER.

**Symbols:**

GHS05 (Corrosion) | GHS07 (Exclamation mark) |

**Pictograms**



**Ingredients:**

Ingredient	CAS Nbr	EC No.	% by Wt
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	224-207-2	60 - 80
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	202-013-9	7 - 13

**HAZARD STATEMENTS:**

H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.

**PRECAUTIONARY STATEMENTS**

**Prevention:**

P260B Do not breathe dust.  
P280D Wear protective gloves, protective clothing, and eye/face protection.

**Response:**

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**<=125 ml Precautionary statements**

**Prevention:**

P260B Do not breathe dust.  
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**Response:**

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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.

Contains 2% of components with unknown hazards to the aquatic environment.

**3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part A)****2.3. Other hazards**

May cause chemical gastrointestinal burns.

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

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	224-207-2		60 - 80	Skin Sens. 1, H317 Skin Corr. 1B, H314
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	202-013-9	01-2119560597-27	7 - 13	Acute Tox. 4, H302 Skin Corr. 1C, H314; Eye Dam. 1, H318
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5		01-2119379499-16	5 - 10	Substance with a Community level exposure limit in the workplace
Bis[(dimethylamino)methyl]phenol	71074-89-0	275-162-0		< 5	Acute Tox. 4, H302; Skin Corr. 1B, H314

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. Do not induce vomiting. Get immediate 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**

Use a fire fighting agent suitable for the surrounding fire.

## 3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part A)

### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

### Hazardous Decomposition or By-Products

#### Substance

Carbon monoxide.

Carbon dioxide.

#### Condition

During combustion.

During combustion.

### 5.3. Advice for fire-fighters

No special protective actions for fire-fighters are anticipated.

## 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.

### 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. Sweep up. 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

Avoid breathing of dust created by cutting, sanding, grinding or machining. 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. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

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

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store away from heat. 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.

<b>Ingredient</b>	<b>CAS Nbr</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional comments</b>
Silicon dioxide	112945-52-5	UK HSC	TWA(as inhalable dust):6 mg/m <sup>3</sup> ;TWA(as respirable dust):2.4 mg/m <sup>3</sup>	



**3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part A)**

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
2,4,6-Tris(dimethylaminomethyl)phenol		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	0.31 mg/m <sup>3</sup>

**Predicted no effect concentrations (PNEC)**

Ingredient	Degradation Product	Compartment	PNEC
2,4,6-Tris(dimethylaminomethyl)phenol		Freshwater	0.084 mg/l
2,4,6-Tris(dimethylaminomethyl)phenol		Intermittent releases to water	0.84 mg/l
2,4,6-Tris(dimethylaminomethyl)phenol		Marine water	0.0084 mg/l
2,4,6-Tris(dimethylaminomethyl)phenol		Sewage Treatment Plant	0.2 mg/l

**8.2. Exposure controls**

In addition, refer to the annex for more information.

**8.2.1. Engineering controls**

Curing enclosures must be exhausted to outdoors or to a suitable emission control device. Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining. 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

## 3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part A)

substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

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

Material	Thickness (mm)	Breakthrough Time
Fluoroelastomer	No data available	No data available
Nitrile rubber.	No data available	No data available

### Applicable Norms/Standards

Use gloves tested to EN 374

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

### 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

Physical state	Solid.
Specific Physical Form:	Paste
Appearance/Odour	Red thick paste. Amine odour
Odour threshold	No data available.
pH	Not applicable.
Boiling point/boiling range	$\geq 100$ °C
Melting point	Not applicable.
Flammability (solid, gas)	Not classified
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	$\geq 100$ °C [Test Method: Closed Cup]
Autoignition temperature	No data available.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Vapour pressure	No data available.
Relative density	1.04 - 1.08 [Ref Std: WATER=1]
Water solubility	Negligible
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Evaporation rate	No data available.
Vapour density	No data available.

## 3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part A)

<b>Decomposition temperature</b>	<i>No data available.</i>
<b>Viscosity</b>	10 - 25 Pa-s [ @ 23 °C ]
<b>Density</b>	1.04 - 1.08 g/ml

### 9.2. Other information

<b>EU Volatile Organic Compounds</b>	<i>No data available.</i>
<b>Molecular weight</b>	<i>Not applicable.</i>
<b>Percent volatile</b>	0 % weight

## 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

Avoid curing large quantities of material to prevent a premature reaction (exotherm) with production of intense heat and smoke.

Heat.

Sparks and/or flames.

### 10.5 Incompatible materials

Strong oxidising agents.

### 10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

#### Skin contact

**3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part A)**

May be harmful in contact with skin. Corrosive (skin burns): Signs/symptoms may include localised redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

**Eye contact**

Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

**Ingestion**

May be harmful if swallowed.

Gastrointestinal corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea; blood in the faeces and/or vomitus may also be seen.

**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 ATE2,000 - 5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Dermal	Rabbit	LD50 2,500 mg/kg
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Ingestion	Rat	LD50 3,160 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
Synthetic amorphous silica, fumed, crystalline-free	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic amorphous silica, fumed, crystalline-free	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Rat	LD50 > 5,110 mg/kg
Bis[(dimethylamino)methyl]phenol	Ingestion		LD50 estimated to be 300 - 2,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Rabbit	Corrosive
2,4,6-Tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
Synthetic amorphous silica, fumed, crystalline-free	Rabbit	No significant irritation
Bis[(dimethylamino)methyl]phenol	similar compounds	Corrosive

**Serious Eye Damage/Irritation**

Name	Species	Value
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	similar health hazards	Corrosive
2,4,6-Tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
Synthetic amorphous silica, fumed, crystalline-free	Rabbit	No significant irritation
Bis[(dimethylamino)methyl]phenol	similar compounds	Corrosive

**Skin Sensitisation**

Name	Species	Value
2,4,6-Tris(dimethylaminomethyl)phenol	Guinea pig	Not classified
Synthetic amorphous silica, fumed, crystalline-free	Human	Not classified

**3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part A)**

	and animal	
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**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
2,4,6-Tris(dimethylaminomethyl)phenol	In Vitro	Not mutagenic
Synthetic amorphous silica, fumed, crystalline-free	In Vitro	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
Synthetic amorphous silica, fumed, crystalline-free	Not specified.	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
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

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

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		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	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
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
Synthetic amorphous silica, fumed, crystalline-free	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure

**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**

**3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part A)**

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
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	Golden Orfe	Experimental	96 hours	LC50	>1,000 mg/l
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	Green algae	Experimental	72 hours	EC50	>500 mg/l
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	Water flea	Experimental	48 hours	EC50	220 mg/l
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	Green algae	Experimental	72 hours	Effect Concentration 10%	5.4 mg/l
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	Common Carp	Experimental	96 hours	LC50	175 mg/l
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	Grass Shrimp	Experimental	96 hours	LC50	718 mg/l
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	Green algae	Experimental	72 hours	EC50	84 mg/l
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	Green algae	Experimental	72 hours	NOEC	6.25 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Green Algae	Experimental	72 hours	EC50	>100 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Water flea	Experimental	24 hours	EC50	>100 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Zebra Fish	Experimental	96 hours	LC50	>100 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Green Algae	Experimental	72 hours	NOEC	60 mg/l
Bis[(dimethylamino)methyl]phenol	71074-89-0		Data not available or insufficient for classification			

**12.2. Persistence and degradability**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	Experimental Biodegradation	25 days	CO2 evolution	-8 % weight	OECD 301B - Modified sturm or CO2
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	Experimental Biodegradation	28 days	BOD	4 % weight	OECD 301D - Closed bottle test
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Data not available or insufficient			N/A	
Bis[(dimethylamino)methyl]phenol	71074-89-0	Estimated Biodegradation	28 days	BOD	20 % weight	OECD 301C - MITI test (I)

## 3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part A)

### 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	Estimated Bioconcentration		Log Kow	-1.46	Estimated: Octanol-water partition coefficient
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	Experimental Bioconcentration		Log Kow	-0.66	Other methods
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Bis[(dimethylamino)methyl]phenol	71074-89-0	Estimated Bioconcentration		Log Kow	-2.34	Estimated: Octanol-water partition coefficient

### 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: UN3259; Amines, Solid, Corrosive, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine)); 8; II; (E); C8.

IATA: UN3259; Amines, Solid, Corrosive, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine)); 8; II.

IMDG: UN3259; Amines, Solid, Corrosive, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine)); 8; II; EMS: FA, SB.

## SECTION 15: Regulatory information

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

**Global inventory status**

Contact 3M for more information.

**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.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

**Revision information:**

- Formulation: Section 16: Annex information was modified.
- Industrial Application of Adhesives: Section 16: Annex information was deleted.
- Industrial Use of Adhesives: Section 16: Annex information was added.
- Professional Mixing and Application: Section 16: Annex information was modified.
- CLP: Ingredient table information was modified.
- Section 3: Composition/ Information of ingredients table information was modified.
- Section 9: Property description for optional properties information was modified.
- Section 12: Component ecotoxicity information information was modified.
- Section 13: 13.1. Waste disposal note information was modified.

**Annex**

<b>1. Title</b>	
<b>Substance identification</b>	2,4,6-Tris(dimethylaminomethyl)phenol; EC No. 202-013-9; CAS Nbr 90-72-2;
<b>Exposure Scenario Name</b>	Formulation
<b>Lifecycle Stage</b>	Formulation or re-packing
<b>Contributing activities</b>	PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing) ERC 02 -Formulation into mixture
<b>Processes, tasks and activities covered</b>	Transfer of substances/mixtures into small containers e.g. tubes , bottles or small reservoirs. Transfers with dedicated controls, including loading, filling, dumping, bagging.
<b>2. Operational conditions and risk management measures</b>	
<b>Operating Conditions</b>	<b>Physical state:</b> Liquid. <b>General operating conditions:</b> Air exchange rate:: >= 3 times per hour; Indoor use; Partially open and partially closed process; Processing Temperature:: <= 40 degree Celsius;



**3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part A)**

	<p><b>Task: PROC08b;</b> Duration of exposure per day at workplace [for one worker]: 8 hours/day;</p> <p><b>Task: PROC09;</b> Duration of exposure per day at workplace [for one worker]: ≤ 4 hour(s);</p>
<b>Risk management measures</b>	<p>Under the operational conditions described above the following risk management measures apply:  <b>General risk management measures:</b>  <b>Human health:</b>                      Local exhaust ventilation;                      Protective Gloves - Chemical resistant. Refer to Section 8 of the SDS for specific glove material.;  <b>Environmental:</b>                      None needed;</p>
<b>Waste management measures</b>	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:
<b>3. Prediction of exposure</b>	
<b>Prediction of exposure</b>	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

<b>1. Title</b>	
<b>Substance identification</b>	2,4,6-Tris(dimethylaminomethyl)phenol; EC No. 202-013-9; CAS Nbr 90-72-2;
<b>Exposure Scenario Name</b>	Industrial Use of Adhesives
<b>Lifecycle Stage</b>	Use at industrial sites
<b>Contributing activities</b>	PROC 05 -Mixing or blending in batch processes PROC 08a -Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC 10 -Roller application or brushing PROC 13 -Treatment of articles by dipping and pouring ERC 05 -Use at industrial site leading to inclusion into/onto article
<b>Processes, tasks and activities covered</b>	Application of product with a roller or brush. Application of product with applicator gun. Mixing operations (open systems). Transfers without dedicated controls, including loading, filling, dumping, bagging.
<b>2. Operational conditions and risk management measures</b>	
<b>Operating Conditions</b>	<p><b>Physical state:</b>Liquid.  <b>General operating conditions:</b>                      Air exchange rate:: ≥ 3 times per hour;                      Duration of exposure per day at workplace [for one worker]: ≤ 4 hour(s);                      Indoor use;                      Processing Temperature:: ≤ 40 degree Celsius;</p> <p><b>Task: PROC05;</b>                      Duration of exposure per day at workplace [for one worker]: 8 hours/day;</p>
<b>Risk management measures</b>	<p>Under the operational conditions described above the following risk management measures apply:  <b>General risk management measures:</b>  <b>Human health:</b>                      Local exhaust ventilation;                      Protective Gloves - Chemical resistant. Refer to Section 8 of the SDS for specific glove material.;  <b>Environmental:</b>                      None needed;</p>
<b>Waste management measures</b>	Do not release to waterways or sewers;
<b>3. Prediction of exposure</b>	

**3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part A)**

<b>Prediction of exposure</b>	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.
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<b>1. Title</b>	
<b>Substance identification</b>	2,4,6-Tris(dimethylaminomethyl)phenol; EC No. 202-013-9; CAS Nbr 90-72-2;
<b>Exposure Scenario Name</b>	Hand-mixing of preparations, e.g. plasters, resins, two-component adhesives.
<b>Lifecycle Stage</b>	Widespread use by professional workers
<b>Contributing activities</b>	PROC 10 -Roller application or brushing ERC 08c -Widespread use leading to inclusion into/onto article (indoor)
<b>Processes, tasks and activities covered</b>	Application of product.
<b>2. Operational conditions and risk management measures</b>	
<b>Operating Conditions</b>	<b>Physical state:</b> Liquid. <b>General operating conditions:</b> Duration of exposure per day at workplace [for one worker]: 8 hours/day; Indoor use; Processing Temperature:: <= 40 degree Celsius;
<b>Risk management measures</b>	Under the operational conditions described above the following risk management measures apply: <b>General risk management measures:</b> <b>Human health:</b> Local exhaust ventilation; Protective Gloves - Chemical resistant. Refer to Section 8 of the SDS for specific glove material.; <b>Environmental:</b> None needed;
<b>Waste management measures</b>	Do not release directly to waterways;
<b>3. Prediction of exposure</b>	
<b>Prediction of exposure</b>	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](http://www.3M.com/uk)**



## Safety Data Sheet

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<b>Transportation version number:</b>	1.00 (31/03/2011)		

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™ Structural Adhesive EC-9323 B/A (Part B)

#### 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

### 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  
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) |GHS09 (Environment) |

**Pictograms**



**Ingredients:**

Ingredient	CAS Nbr	EC No.	% by Wt
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	25068-38-6	500-033-5	60 - 90

**HAZARD STATEMENTS:**

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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.
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**For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:**

**<=125 ml Hazard statements**

H317	May cause an allergic skin reaction.
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**<=125 ml Precautionary statements**

**Prevention:**

P280E	Wear protective gloves.
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**Response:**

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

16% of the mixture consists of components of unknown acute oral toxicity.

Contains 16% of components with unknown hazards to the aquatic environment.

**3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part B)****2.3. Other hazards**

None known.

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

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	25068-38-6	500-033-5		60 - 90	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 2, H411
Acrylic copolymer	Trade Secret			10 - 30	Substance not classified as hazardous
Calcium Carbonate	471-34-1	207-439-9	01-2119486795-18	5 - 10	Substance with a Community level exposure limit in the workplace
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7			1 - 5	Substance with a Community level exposure limit in the workplace

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.

## 3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part B)

### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

### Hazardous Decomposition or By-Products

#### Substance

Aldehydes.  
Carbon monoxide.  
Carbon dioxide.

#### Condition

During combustion.  
During combustion.  
During combustion.

### 5.3. Advice for fire-fighters

No special protective actions for fire-fighters are anticipated.

## 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. Sweep up. 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

Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

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

Store in a well-ventilated place. Keep container tightly closed. Store away from heat. Store away from acids. 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
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## 3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part B)

Limestone	471-34-1	UK HSC	TWA(as inhalable dust):10 mg/m <sup>3</sup> ;TWA(as respirable dust):4 mg/m <sup>3</sup> ;TWA(Inhalable):10 mg/m <sup>3</sup> ;TWA(respirable):4 mg/m <sup>3</sup>
Silicon dioxide	67762-90-7	UK HSC	TWA(as inhalable dust):6 mg/m <sup>3</sup> ;TWA(as respirable dust):2.4 mg/m <sup>3</sup>

UK HSC : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

### Biological limit values

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

## 8.2. Exposure controls

### 8.2.1. Engineering controls

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

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

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

#### Applicable Norms/Standards

Use gloves tested to EN 374

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

### Respiratory protection

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.

## 3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part B)

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	Solid.
Specific Physical Form:	Paste
Appearance/Odour	Off-white thick paste; epoxy odour
Odour threshold	<i>No data available.</i>
pH	<i>Not applicable.</i>
Boiling point/boiling range	<i>No data available.</i>
Melting point	<i>No data available.</i>
Flammability (solid, gas)	Not classified
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	150 °C [ <i>Test Method:</i> Closed Cup]
Autoignition temperature	<i>No data available.</i>
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Vapour pressure	<i>No data available.</i>
Relative density	1.16 - 1.2 [ <i>Ref Std:</i> WATER=1]
Water solubility	Nil
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Evaporation rate	<i>No data available.</i>
Vapour density	<i>No data available.</i>
Decomposition temperature	<i>No data available.</i>
Viscosity	1,000 - 2,000 Pa-s [ <i>@</i> 23 °C ]
Density	1.16 - 1.2 g/ml

### 9.2. Other information

EU Volatile Organic Compounds	<i>No data available.</i>
Percent volatile	<=1 % weight

## 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

Avoid curing large quantities of material to prevent a premature reaction (exotherm) with production of intense heat and smoke.



## 3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part B)

Sparks and/or flames.

### 10.5 Incompatible materials

Amines.

Strong acids.

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

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. 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.

#### 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 >5,000 mg/kg
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Dermal	Rat	LD50 > 1,600 mg/kg
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Ingestion	Rat	LD50 > 1,000 mg/kg

**3M Scotch-Weld™ Structural Adhesive EC-9323 B/A (Part B)**

Calcium Carbonate	Dermal	Rat	LD50 > 2,000 mg/kg
Calcium Carbonate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Calcium Carbonate	Ingestion	Rat	LD50 6,450 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Rabbit	Mild irritant
Calcium Carbonate	Rabbit	No significant irritation
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Rabbit	Moderate irritant
Calcium Carbonate	Rabbit	No significant irritation
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation

**Skin Sensitisation**

Name	Species	Value
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Human and animal	Sensitising
Siloxanes and Silicones, di-Me, reaction products with silica	Human and animal	Not classified

**Respiratory Sensitisation**

Name	Species	Value
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Human	Not classified

**Germ Cell Mutagenicity**

Name	Route	Value
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	In vivo	Not mutagenic
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	In Vitro	Some positive data exist, but the data are not sufficient for classification
Siloxanes and Silicones, di-Me, reaction products with silica	In Vitro	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Siloxanes and Silicones, di-Me, reaction products with silica	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity**

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**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
Calcium Carbonate	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	prematuring & during gestation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	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
Calcium Carbonate	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure

**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
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	25068-38-6	Water flea	Estimated	48 hours	LC50	0.95 mg/l
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	25068-38-6	Green Algae	Experimental	72 hours	EC50	>11 mg/l
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	25068-38-6	Rainbow trout	Experimental	96 hours	LC50	1.2 mg/l
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	25068-38-6	Green Algae	Experimental	72 hours	NOEC	4.2 mg/l
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	25068-38-6	Water flea	Experimental	21 days	NOEC	0.3 mg/l
Calcium Carbonate	471-34-1	Water flea	Experimental	48 hours	EC50	>100 mg/l
Calcium Carbonate	471-34-1	Rainbow trout	Experimental	96 hours	LC50	>100 mg/l
Calcium Carbonate	471-34-1	Green algae	Experimental	72 hours	EC50	>100 mg/l
Calcium Carbonate	471-34-1	Green algae	Experimental	72 hours	Effect Concentration 10%	>100 mg/l
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7		Data not available or insufficient for classification			

### 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	25068-38-6	Estimated Hydrolysis		Hydrolytic half-life	<2 days (t 1/2)	Other methods
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	25068-38-6	Experimental Biodegradation	28 days	BOD	0 % BOD/ThBOD	OECD 301C - MITI test (I)

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Calcium Carbonate	471-34-1	Data not available or insufficient			N/A	
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	Data not available or insufficient			N/A	

#### 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	25068-38-6	Experimental BCF-Carp	28 days	Bioaccumulation factor	<=42	OECD 305E - Bioaccumulation flow-through fish test
Calcium Carbonate	471-34-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	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

See Section 11.1 Information on toxicological effects

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

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

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

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

## SECTION 14: Transportation information

IMDG: UN3077; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER); 9; III; Marine Pollutant, (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER); FA,SF.

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ADR: UN3077; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER); 9; III; (E); M7.

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  
IATA: UN3077; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER); 9; III.

## SECTION 15: Regulatory information

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

#### Global inventory status

Contact 3M for more information. The components of this product are in compliance with the chemical notification requirements of TSCA.

#### 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

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

#### Revision information:

Section 9: Property description for optional properties information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: No PBT/vPvB information available warning information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12: Bioaccumulative potential information information was modified.

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

Section 14: Transportation classification information was modified.

Section 15: Chemical Safety Assessment 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.

3M United Kingdom MSDSs are available at [www.3M.com/uk](http://www.3M.com/uk)