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™ EC-9323 B/A

Product Identification Numbers
FS-9100-5468-3  FS-9100-5470-9  UU-0015-2370-1

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:

07-4015-9, 07-4016-7

TRANSPORTATION INFORMATION

FS-9100-5468-3,  UU-0015-2370-1

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 .

FS-9100-5470-9

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 .

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

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:
P260A Do not breathe vapours.
P280D Wear protective gloves, protective clothing, and eye/face protection.
P273 Avoid release to the environment.

Response:
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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.

Disposal:
P501 Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

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:
P260A Do not breathe vapours.
P280D Wear protective gloves, protective clothing, and eye/face protection.

Response:
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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.

SUPPLEMENTAL INFORMATION

Supplemental Hazard Statements:
EUH205 Contains epoxy constituents. May produce an allergic reaction.

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

Revision information:

Section 2: Additional label requirements phrase information was deleted.
Section 2: H phrase reference information was added.
Label: CLP Classification information was added.
Label: Graphic Text information was deleted.
Label: Graphic information was deleted.
Label: Signal Word information was modified.
Section 2: Label remarks information was deleted.
Section 2: Risk phrase information was deleted.
Safety phrase information was deleted.
Safety Data Sheet

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Document group: 07-4015-9
Version number: 15.00
Revision date: 27/04/2016
Supersedes date: 14/10/2014
Transportation version number: 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:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Nbr</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,3'-Oxybis(ethyleneoxy)bis(propylamine)</td>
<td>4246-51-9</td>
<td>60 - 100</td>
</tr>
</tbody>
</table>

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:
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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.

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

2.3. Other hazards
May cause chemical gastrointestinal burns.

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Nbr</th>
<th>EU Inventory</th>
<th>% by Wt</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,3’-Oxybis(ethyleneoxy)bis(propylamine)</td>
<td>4246-51-9</td>
<td>224-207-2</td>
<td>60 - 100</td>
<td>Skin Sens. 1, H317 (Vendor) Skin Corr. 1B, H314 (Self Classified)</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>202-013-9</td>
<td>7 - 13</td>
<td>Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319 (CLP)</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>112945-52-5</td>
<td></td>
<td>5 - 10</td>
<td></td>
</tr>
<tr>
<td>Bis[(dimethylamino)methyl]phenol</td>
<td>71074-89-0</td>
<td>275-162-0</td>
<td>1 - 5</td>
<td>Acute Tox. 4, H302; Skin Corr. 1B, H314 (Self Classified)</td>
</tr>
</tbody>
</table>

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.

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide.</td>
<td>During combustion.</td>
</tr>
</tbody>
</table>
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

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.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Nbr</th>
<th>Agency</th>
<th>Limit type</th>
<th>Additional comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon dioxide</td>
<td>112945-52-5 UK HSC</td>
<td>TWA(as inhalable dust):6 mg/m3; TWA(as respirable dust):2.4 mg/m3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
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.

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:

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness (mm)</th>
<th>Breakthrough Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoroelastomer</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Nitrile rubber</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

If this product is used in a manner that presents a higher potential for exposure (e.g., spraying, high splash potential etc.), then use of 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Specific Physical Form:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>Paste</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appearance/Odour</th>
<th>Odour threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red thick paste. Amine odour</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pH</th>
<th>Boiling point/boiling range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
<td>&gt;=100 °C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Melting point</th>
<th>Flammability (solid, gas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explosive properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not classified</td>
</tr>
</tbody>
</table>
Oxidising properties: Not classified
Flash point: \( \geq 100 \, ^\circ\text{C} \) [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.
Decomposition temperature: No data available.
Viscosity: 10 - 25 Pa-s [\( @ 23 \, ^\circ\text{C} \)]
Density: 1.04 - 1.08 g/ml

9.2. Other information
Percent volatile: 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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>None known.</td>
<td></td>
</tr>
</tbody>
</table>

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
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

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall product</td>
<td>Dermal</td>
<td>No data available; calculated ATE 2,000 - 5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Overall product</td>
<td>Ingestion</td>
<td>No data available; calculated ATE 2,000 - 5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>3,3’-Oxybis(ethyleneoxy)bis(propylamine)</td>
<td>Dermal</td>
<td>Rabbit</td>
<td>LD50 2,500 mg/kg</td>
</tr>
<tr>
<td>3,3’-Oxybis(ethyleneoxy)bis(propylamine)</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 3,160 mg/kg</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>Dermal</td>
<td>Rat</td>
<td>LD50 1,280 mg/kg</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 1,000 mg/kg</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>Dermal</td>
<td>Rabbit</td>
<td>LD50 &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>Ingestion (4 hours)</td>
<td>Rat</td>
<td>LC50 &gt; 0.691 mg/l</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 &gt; 5,110 mg/kg</td>
</tr>
<tr>
<td>Bis[(dimethylamino)methyl]phenol</td>
<td>Ingestion</td>
<td>LD50 estimated to be 300 - 2,000 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,3’-Oxybis(ethyleneoxy)bis(propylamine)</td>
<td>Rabbit</td>
<td>Corrosive</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>Rabbit</td>
<td>Corrosive</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>Bis[(dimethylamino)methyl]phenol</td>
<td>similar compounds</td>
<td>Corrosive</td>
</tr>
</tbody>
</table>

### Serious Eye Damage/Irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,3’-Oxybis(ethyleneoxy)bis(propylamine)</td>
<td>similar health hazards</td>
<td>Corrosive</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>Rabbit</td>
<td>Corrosive</td>
</tr>
<tr>
<td>Name</td>
<td>Species</td>
<td>Value</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>Bis(dimethylamino)methyl)phenol</td>
<td>similar compounds</td>
<td>Corrosive</td>
</tr>
</tbody>
</table>

### Skin Sensitisation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>Guinea pig</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>Human and animal</td>
<td>Not sensitising</td>
</tr>
</tbody>
</table>

### Respiratory Sensitisation

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

### Germ Cell Mutagenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>In Vitro</td>
<td>Not mutagenic</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>In Vitro</td>
<td>Not mutagenic</td>
</tr>
</tbody>
</table>

### Carcinogenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>Not specified</td>
<td>Mouse</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
</tbody>
</table>

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Value</th>
<th>Species</th>
<th>Test result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>Ingestion</td>
<td>Not toxic to female reproduction</td>
<td>Rat</td>
<td>NOAEL 509 mg/kg/day</td>
<td>1 generation</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>Ingestion</td>
<td>Not toxic to male reproduction</td>
<td>Rat</td>
<td>NOAEL 497 mg/kg/day</td>
<td>1 generation</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>Ingestion</td>
<td>Not toxic to development</td>
<td>Rat</td>
<td>NOAEL 1,350 mg/kg/day</td>
<td>during organogenesis</td>
</tr>
</tbody>
</table>

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Target Organ(s)</th>
<th>Value</th>
<th>Species</th>
<th>Test result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,3'-Oxybis(ethyleneoxy)bis(propylamine)</td>
<td>Inhalation</td>
<td>respiratory irritation</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td>NOAEL</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>Inhalation</td>
<td>respiratory irritation</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td>NOAEL</td>
<td>Not available</td>
<td></td>
</tr>
</tbody>
</table>

#### Specific Target Organ Toxicity - repeated exposure

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Target Organ(s)</th>
<th>Value</th>
<th>Species</th>
<th>Test result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>Dermal</td>
<td>skin</td>
<td>liver</td>
<td>nervous system</td>
<td>Rat</td>
<td>NOAEL 125 mg/kg/day</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>Dermal</td>
<td>auditory system</td>
<td>hematopoietic system</td>
<td>eyes</td>
<td>Rat</td>
<td>NOAEL 125 mg/kg/day</td>
</tr>
</tbody>
</table>
Synthetic amorphous silica, fumed, crystalline-free | Inhalation respiratory system | All data are negative | 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.

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Nbr</th>
<th>Organism</th>
<th>Type</th>
<th>Exposure</th>
<th>Test endpoint</th>
<th>Test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,3'-Oxybis(ethylenoxy)bis(propyamine)</td>
<td>4246-51-9</td>
<td>Golden Orfe</td>
<td>Experimental</td>
<td>96 hours</td>
<td>LC50</td>
<td>220 mg/l</td>
</tr>
<tr>
<td>3,3'-Oxybis(ethylenoxy)bis(propyamine)</td>
<td>4246-51-9</td>
<td>Algae</td>
<td>Experimental</td>
<td>72 hours</td>
<td>EC50</td>
<td>69 mg/l</td>
</tr>
<tr>
<td>3,3'-Oxybis(ethylenoxy)bis(propyamine)</td>
<td>4246-51-9</td>
<td>Crustacea</td>
<td>Experimental</td>
<td>48 hours</td>
<td>EC50</td>
<td>220 mg/l</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>Grass Shrimp</td>
<td>Laboratory</td>
<td>96 hours</td>
<td>LC50</td>
<td>718 mg/l</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>Common Carp</td>
<td>Laboratory</td>
<td>96 hours</td>
<td>LC50</td>
<td>175 mg/l</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>112945-52-5</td>
<td>Zebra Fish</td>
<td>Analogous Compound</td>
<td>96 hours</td>
<td>LC50</td>
<td>5,000 mg/l</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>112945-52-5</td>
<td>Green algae</td>
<td>Analogous Compound</td>
<td>72 hours</td>
<td>EC50</td>
<td>440 mg/l</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>112945-52-5</td>
<td>Water flea</td>
<td>Analogous Compound</td>
<td>48 hours</td>
<td>EC50</td>
<td>7,600 mg/l</td>
</tr>
<tr>
<td>Bis(dimethyla</td>
<td>71074-89-0</td>
<td>Data not</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Nbr</th>
<th>Test type</th>
<th>Duration</th>
<th>Study Type</th>
<th>Test result</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>Calculated Photolysis</td>
<td></td>
<td>Photolytic half-life (in air)</td>
<td>1.53 hours (t_{1/2})</td>
<td>Other methods</td>
</tr>
<tr>
<td>Bis[(dimethylamino)methyl]phenol</td>
<td>71074-89-0</td>
<td>Data not available or insufficient for classification</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>112945-52-5</td>
<td>Data not available or insufficient for classification</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>Laboratory Biodegradation</td>
<td>28 days</td>
<td>BOD</td>
<td>4 % weight</td>
<td>OECD 301D - Closed bottle test</td>
</tr>
<tr>
<td>3,3’-Oxybis(ethylenedioxy)bis(propylamine)</td>
<td>4246-51-9</td>
<td>Estimated Biodegradation</td>
<td>28 days</td>
<td>BOD</td>
<td>12.6 % weight</td>
<td>OECD 301C - MITI test (I)</td>
</tr>
</tbody>
</table>

### 12.3 : Bioaccumulative potential

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Nbr</th>
<th>Test type</th>
<th>Duration</th>
<th>Study Type</th>
<th>Test result</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bis[(dimethylamino)methyl]phenol</td>
<td>71074-89-0</td>
<td>Data not available or insufficient for classification</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Synthetic amorphous silica, fumed, crystalline-free</td>
<td>112945-52-5</td>
<td>Data not available or insufficient for classification</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3,3’-Oxybis(ethylenedioxy)bis(propylamine)</td>
<td>4246-51-9</td>
<td>Estimated Bioconcentration</td>
<td></td>
<td>Log Kow</td>
<td>-1.46</td>
<td>Other methods</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>Laboratory Bioconcentration</td>
<td></td>
<td>Log Kow</td>
<td>-0.66</td>
<td>Other methods</td>
</tr>
</tbody>
</table>

### 12.4. Mobility in soil

Please contact manufacturer for more details

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

No information available at this time, contact manufacturer for more details
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 polymerised) 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; 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
Not applicable

SECTION 16: Other information

List of relevant H statements

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

Revision information:
Safety Data Sheet

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Document group: 07-4016-7  Version number: 17.00
Revision date: 27/04/2016  Supersedes date: 01/12/2015
Transportation version number: 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:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Nbr</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>25068-38-6</td>
<td>60 - 90</td>
</tr>
</tbody>
</table>

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.

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.

<=125 ml Precautionary statements

Prevention:
P280E Wear protective gloves.

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.
2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Nbr</th>
<th>EU Inventory</th>
<th>% by Wt</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>25068-38-6</td>
<td>NLP 500-033-5</td>
<td>60 - 90</td>
<td>Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 2, H411 (CLP)</td>
</tr>
<tr>
<td>Acrylic copolymer</td>
<td>Trade Secret</td>
<td></td>
<td>10 - 30</td>
<td></td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>471-34-1</td>
<td>207-439-9</td>
<td>5 - 10</td>
<td></td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>67762-90-7</td>
<td></td>
<td>1 - 5</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldehydes.</td>
<td>During combustion.</td>
</tr>
</tbody>
</table>
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

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.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Nbr</th>
<th>Agency</th>
<th>Limit type</th>
<th>Additional comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone</td>
<td>471-34-1</td>
<td>UK HSC</td>
<td>TWA(as inhalable dust):10 mg/m3; TWA(as respirable dust):4 mg/m3; TWA(Inhalable):10 mg/m3; TWA(respirable):4 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Silicon dioxide</td>
<td>67762-90-7</td>
<td>UK HSC</td>
<td>TWA(as inhalable dust):6</td>
<td></td>
</tr>
</tbody>
</table>
mg/m³; TWA (as respirable dust): 2.4 mg/m³

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

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

**8.2. Exposure controls**

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

**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:

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness (mm)</th>
<th>Breakthrough Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymer laminate</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

If this product is used in a manner that presents a higher potential for exposure (e.g., spraying, high splash potential etc.), then use of 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. 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.

**SECTION 9: Physical and chemical properties**

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

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Solid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Physical Form:</td>
<td>Paste</td>
</tr>
<tr>
<td>Appearance/Odour</td>
<td>Off-white thick paste; epoxy odour</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available.</td>
</tr>
</tbody>
</table>
pH Not applicable.
Boiling point/boiling range No data available.
Melting point No data available.
Flammability (solid, gas) Not classified
Explosive properties Not classified
Oxidising properties Not classified
Flash point 150 ºC [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 1.16 - 1.2 [Ref Std: WATER=1]
Water solubility Nil
Solubility- non-water No data available.
Partition coefficient: n-octanol/water No data available.
Evaporation rate No data available.
Vapour density No data available.
Decomposition temperature No data available.
Viscosity 1,000 - 2,000 Pa-s [@ 23 ºC ]
Density 1.16 - 1.2 g/ml

9.2. Other information
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.
Sparks and/or flames.

10.5 Incompatible materials
Amines.
Strong acids.
Strong oxidising agents.

10.6 Hazardous decomposition products
<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>None known.</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall product</td>
<td>Dermal</td>
<td>No data available; calculated ATE &gt;5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Overall product</td>
<td>Ingestion</td>
<td>No data available; calculated ATE &gt;5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>Dermal</td>
<td>Rat</td>
<td>LD50 &gt; 1,600 mg/kg</td>
</tr>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 &gt; 1,000 mg/kg</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>Dermal</td>
<td>Rat</td>
<td>LD50 &gt; 2,000 mg/kg</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>Inhalation-Dust/Mist (4 hours)</td>
<td>Rat</td>
<td>LC50 3 mg/l</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 6,450 mg/kg</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>Dermal</td>
<td>Rabbit</td>
<td>LD50 &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>Inhalation-Dust/Mist (4 hours)</td>
<td>Rat</td>
<td>LC50 &gt; 0.691 mg/l</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>Ingestion</td>
<td>Rat</td>
<td>LD50 &gt; 5,110 mg/kg</td>
</tr>
</tbody>
</table>

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>Rabbit</td>
<td>Mild irritant</td>
</tr>
<tr>
<td>Calcium Carbonate, di-Me, reaction products with silica</td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
</tbody>
</table>
### Serious Eye Damage/Irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>Rabbit</td>
<td>Moderate irritant</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
</tbody>
</table>

### Skin Sensitisation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>Human and animal</td>
<td>Sensitising</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>Human and animal</td>
<td>Not sensitising</td>
</tr>
</tbody>
</table>

### Respiratory Sensitisation

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

### Germ Cell Mutagenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route, Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>In vivo, Mouse</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>In Vitro, Not specified, Mouse</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
</tbody>
</table>

### Carcinogenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route, Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>Dermal, Mouse</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>Not specified, Mouse</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
</tbody>
</table>

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

<table>
<thead>
<tr>
<th>Name</th>
<th>Route, Species</th>
<th>Value</th>
<th>Species</th>
<th>Test result, Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>Ingestion, Rat</td>
<td>Not toxic to female reproduction</td>
<td>NOAEL 750 mg/kg/day, 2 generation</td>
<td></td>
</tr>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>Ingestion, Rat</td>
<td>Not toxic to male reproduction</td>
<td>NOAEL 750 mg/kg/day, 2 generation</td>
<td></td>
</tr>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>Dermal, Rabbit</td>
<td>Not toxic to development</td>
<td>NOAEL 300 mg/kg/day, during organogenesis</td>
<td></td>
</tr>
<tr>
<td>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>Ingestion, Rat</td>
<td>Not toxic to development</td>
<td>NOAEL 750 mg/kg/day, 2 generation</td>
<td></td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>Ingestion, Rat</td>
<td>Not toxic to development</td>
<td>NOAEL 625 mg/kg/day, premating &amp; during gestation</td>
<td></td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>Ingestion, Rat</td>
<td>Not toxic to female reproduction</td>
<td>NOAEL 509 mg/kg/day, 1 generation</td>
<td></td>
</tr>
</tbody>
</table>
Siloxanes and Silicones, di-Me, reaction products with silica
Ingestion Not toxic to male reproduction Rat NOAEL 497 mg/kg/day 1 generation

Siloxanes and Silicones, di-Me, reaction products with silica
Ingestion Not toxic to development Rat NOAEL 1,350 mg/kg/day during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Target Organ(s)</th>
<th>Value</th>
<th>Species</th>
<th>Test result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Carbonate</td>
<td>Inhalation</td>
<td>respiratory system</td>
<td>All data are negative</td>
<td>Rat</td>
<td>NOAEL 0.812 mg/l</td>
<td>90 minutes</td>
</tr>
</tbody>
</table>

Specific Target Organ Toxicity - repeated exposure

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Target Organ(s)</th>
<th>Value</th>
<th>Species</th>
<th>Test result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4’-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropene</td>
<td>Dermal</td>
<td>liver</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td>Rat</td>
<td>NOAEL 1,000 mg/kg/day</td>
<td>2 years</td>
</tr>
<tr>
<td>4,4’-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropene</td>
<td>Dermal</td>
<td>nervous system</td>
<td>All data are negative</td>
<td>Rat</td>
<td>NOAEL 1,000 mg/kg/day</td>
<td>13 weeks</td>
</tr>
<tr>
<td>4,4’-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropene</td>
<td>Ingestion</td>
<td>auditory system</td>
<td>heart</td>
<td>endocrine system</td>
<td>hematopoietic system</td>
<td>liver</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>Inhalation</td>
<td>respiratory system</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td>Human</td>
<td>NOAEL Not available</td>
<td>occupational exposure</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>Inhalation</td>
<td>respiratory system</td>
<td>silicosis</td>
<td>All data are negative</td>
<td>Human</td>
<td>NOAEL Not available</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Nbr</th>
<th>Organism</th>
<th>Type</th>
<th>Exposure</th>
<th>Test endpoint</th>
<th>Test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-Isopropylidene</td>
<td>25068-38-6</td>
<td>Ricefish</td>
<td>Experimental</td>
<td>96 hours</td>
<td>LC50</td>
<td>1.41 mg/l</td>
</tr>
</tbody>
</table>
12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Nbr</th>
<th>Test type</th>
<th>Duration</th>
<th>Study Type</th>
<th>Test result</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4’-Isopropylidene diphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>25068-38-6</td>
<td>Laboratory Hydrolysis</td>
<td>Hydrolytic half-life</td>
<td>&lt;2 days (t 1/2)</td>
<td>Other methods</td>
<td></td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>67762-90-7</td>
<td>Data not available or insufficient for classification</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>471-34-1</td>
<td>Data not available or insufficient for classification</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>4,4’-Isopropylidene diphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>25068-38-6</td>
<td>Laboratory Biodegradation</td>
<td>28 days</td>
<td>BOD</td>
<td>0 % weight</td>
<td>OECD 301C - MITI test (I)</td>
</tr>
</tbody>
</table>

12.3 : Bioaccumulative potential
### Material, CAS Nbr, Test type, Duration, Study Type, Test result, Protocol

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Nbr</th>
<th>Test type</th>
<th>Duration</th>
<th>Study Type</th>
<th>Test result</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Carbonate</td>
<td>471-34-1</td>
<td>Data not available or insufficient for classification</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>67762-90-7</td>
<td>Data not available or insufficient for classification</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4,4'-Isopropylidene diphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>25068-38-6</td>
<td>Laboratory BCF - Other</td>
<td>28 days</td>
<td>Bioaccumulation factor</td>
<td>&lt;42</td>
<td>Other methods</td>
</tr>
</tbody>
</table>

### 12.4. Mobility in soil
Please contact manufacturer for more details

### 12.5. Results of the PBT and vPvB assessment
No information available at this time, contact manufacturer for more details

### 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 polymerised) 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

ADR/IATA/IMDG: Not restricted for transport.
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
Not applicable

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:

Label: CLP Precautionary - Prevention information was modified.
Section 3: Composition/Information of ingredients table information was modified.
Section 6: Accidental release personal information information was modified.
Section 9: Property description for optional properties information was added.
Section 9: Property description for optional properties information was deleted.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

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