



Safety Data Sheet

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Revision date:	01/10/2025	Supersedes date:	01/10/2025
Transportation version number:			

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

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

1.1. Product identifier

Aerospace Sealant AC-350 A-2

Product Identification Numbers

98-0404-0451-3

7100402538

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

Identified uses

Sealant

1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.
Telephone: +44 (0)1344 858 000
E Mail: ner-productstewardship@mmm.com

Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

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

44-5051-6, 30-3554-0

TRANSPORTATION INFORMATION

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

KIT LABEL

2.1. Classification of the substance or mixture

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

CLASSIFICATION:

Flammable Liquid, Category 2 - Flam. Liq. 2; H225
Acute Toxicity, Category 4 - Acute Tox. 4; H302
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Reproductive Toxicity, Category 2 - Repr. 2; H361d
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373
Aspiration Hazard, Category 1 - Asp. Tox. 1; H304
Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

2.2. Label elements

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

SIGNAL WORD

DANGER.

Symbols

GHS02 (Flame) | GHS07 (Exclamation mark) | GHS08 (Health Hazard) |

Pictograms



Contains:

4-methylpentan-2-one; toluene; cyclohexane; manganese dioxide; Disodium oxide; Titanium dioxide; heptane; bis-[4-(2,3-epoxipropoxy)phenyl]propane; Calcium carbonate; acetone; Oxidised polyethylene; Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na₂(S_x)), reduced; butanone; Formaldehyde, oligomeric reaction products with phenol

HAZARD STATEMENTS:

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H304	May be fatal if swallowed and enters airways.

H373	May cause damage to organs through prolonged or repeated exposure: nervous system sensory organs.
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H412	Harmful to aquatic life with long lasting effects.
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PRECAUTIONARY STATEMENTS

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260A	Do not breathe vapours.
P280K	Wear protective gloves and respiratory protection.

Response:

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331	Do NOT induce vomiting.

SUPPLEMENTAL INFORMATION:**Supplemental Hazard Statements:**

EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
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EUH208	Contains Formaldehyde, oligomeric reaction products with phenol. bis-[4-(2,3-epoxipropoxy)phenyl]propane. May produce an allergic reaction.
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Refer to Safety Data Sheet for component % unknown values (www.3M.com/msds).

Revision information:

No revision information



Safety Data Sheet

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Document group:	30-3554-0	Version number:	8.00
Revision date:	27/11/2025	Supersedes date:	25/11/2025

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

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

1.1. Product identifier

3M Aerospace Sealant AC-350 A-1/2, A-1, and A-2 Base

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

Identified uses

Sealant

1.3. Details of the supplier of the safety data sheet

Address:	3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.
Telephone:	+44 (0)1344 858 000
E Mail:	ner-productstewardship@mmm.com
Website:	www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

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

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

CLASSIFICATION:

Flammable Liquid, Category 2 - Flam. Liq. 2; H225
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Reproductive Toxicity, Category 2 - Repr. 2; H361d
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373
Aspiration Hazard, Category 1 - Asp. Tox. 1; H304
Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

2.2. Label elements

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

SIGNAL WORD

DANGER.

Symbols

GHS02 (Flame) | GHS07 (Exclamation mark) | GHS08 (Health Hazard) |

Pictograms



Ingredient	CAS Nbr	EC No.	% by Wt
toluene	108-88-3	203-625-9	< 15

HAZARD STATEMENTS:

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H361d	Suspected of damaging the unborn child.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure: nervous system sensory organs.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260A	Do not breathe vapours.
P280K	Wear protective gloves and respiratory protection.

Response:

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331	Do NOT induce vomiting.
P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

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

<=125 ml Hazard statements

H361d	Suspected of damaging the unborn child.
H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.

<=125 ml Precautionary statements

Prevention:

P260A Do not breathe vapours.
P280K Wear protective gloves and respiratory protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331 Do NOT induce vomiting.

SUPPLEMENTAL INFORMATION:
Supplemental Hazard Statements:

EUH208 Contains Formaldehyde, oligomeric reaction products with phenol. | bis-[4-(2,3-epoxipropoxy)phenyl]propane. May produce an allergic reaction.

Contains 67% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

None known.

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

SECTION 3: Composition/information on ingredients
3.1. Substances

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na ₂ (Sx)), reduced	(CAS-No.) 68611-50-7	50 - 60	Substance not classified as hazardous
Oxidised polyethylene	(CAS-No.) 68441-17-8	10 - 15	Substance not classified as hazardous
Calcium carbonate	(CAS-No.) 471-34-1 (EC-No.) 207-439-9	10 - 15	Substance with a national occupational exposure limit
toluene	(CAS-No.) 108-88-3 (EC-No.) 203-625-9	< 15	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Aquatic Chronic 3, H412
Titanium dioxide	(CAS-No.) 13463-67-7 (EC-No.) 236-675-5	5 - 10	Substance with a national occupational exposure limit
butanone	(CAS-No.) 78-93-3 (EC-No.) 201-159-0	< 5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

			EUH066
Formaldehyde, oligomeric reaction products with phenol	(CAS-No.) 9003-35-4 (EC-No.) 500-005-2	< 1	Skin Sens. 1, H317
bis-[4-(2,3-epoxipropoxy)phenyl]propane	(CAS-No.) 1675-54-3 (EC-No.) 216-823-5	< 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
heptane	(CAS-No.) 142-82-5 (EC-No.) 205-563-8	< 1	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1 Nota C
4-methylpentan-2-one	(CAS-No.) 108-10-1 (EC-No.) 203-550-1	< 1	Flam. Liq. 2, H225 Acute Tox. 4, H332(LC50 = 11 mg/l **ATE values per GB MCL**) Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 EUH066
cyclohexane	(CAS-No.) 110-82-7 (EC-No.) 203-806-2	< 1	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
formaldehyde	(CAS-No.) 50-00-0 (EC-No.) 200-001-8	< 0.02	Acute Tox. 2, H330 EUH071 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Muta. 2, H341 Carc. 1B, H350 Nota B,D,F Acute Tox. 3, H311

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

Specific Concentration Limits

Ingredient	Identifier(s)	Specific Concentration Limits
bis-[4-(2,3-epoxipropoxy)phenyl]propane	(CAS-No.) 1675-54-3 (EC-No.) 216-823-5	(C >= 5%) Skin Irrit. 2, H315 (C >= 5%) Eye Irrit. 2, H319
formaldehyde	(CAS-No.) 50-00-0 (EC-No.) 200-001-8	(C >= 25%)EUH071 (C >= 25%) Skin Corr. 1B, H314 (5% <= C < 25%) Skin Irrit. 2, H315 (C >= 25%) Eye Dam. 1, H318 (5% <= C < 25%) Eye Irrit. 2, H319 (C >= 0.2%) Skin Sens. 1A, H317

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

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

Skin contact

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

Eye contact

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If swallowed

Do not induce vomiting. Get immediate medical attention.

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

The most important symptoms and effects based on the GB CLP classification include:

Irritation to the skin (localized redness, swelling, itching, and dryness). Aspiration pneumonitis (coughing, gasping, choking, burning of the mouth, and difficulty breathing). Target organ effects. See Section 11 for additional details.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance

formaldehyde
Carbon monoxide
Carbon dioxide.
Hydrogen Chloride

Condition

During combustion.
During combustion.
During combustion.
During combustion.

5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (eg. gloves, respirators...) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapour accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
4-methylpentan-2-one	108-10-1	UK HSE	TWA:208 mg/m ³ (50 ppm);STEL:416 mg/m ³ (100 ppm)	SKIN
toluene	108-88-3	UK HSE	TWA: 191 mg/m ³ (50 ppm); STEL: 384 mg/m ³ (100 ppm)	SKIN
cyclohexane	110-82-7	UK HSE	TWA:350 mg/m ³ (100 ppm);STEL:1050 mg/m ³ (300 ppm)	
Titanium dioxide	13463-67-7	UK HSE	TWA(respirable):4 mg/m ³ ;TWA(Inhalable):10 mg/m ³	
heptane	142-82-5	UK HSE	TWA:2085 mg/m ³ (500 ppm)	
Dust, inhalable dust	471-34-1	UK HSE	TWA(as respirable dust):4 mg/m ³ ;TWA(as inhalable dust):10 mg/m ³	
formaldehyde	50-00-0	UK HSE	TWA:2.5 mg/m ³ (2 ppm);STEL:2.5 mg/m ³ (2 ppm)	
butanone	78-93-3	UK HSE	TWA: 600 mg/m ³ (200 ppm); STEL: 899 mg/m ³ (300 ppm)	SKIN

UK HSE : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

Biological limit values

Ingredient	CAS Nbr	Agency	Determinant	Biological Specimen	Sampling Time	Value	Additional comments
4-methylpentan-2-one	108-10-1	UK EH40 BMGVs	4-Methyl pentan-2-one	Urine	EOS	20 umol/L	
butanone	78-93-3	UK EH40 BMGVs	Butan-2-one	Urine	EOS	70 umol/L	

UK EH40 BMGVs : UK. EH40 Biological Monitoring Guidance Values (BMGVs)

EOS: End of shift.

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. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Safety glasses with side shields.

Indirect vented goggles.

Applicable Norms/Standards

Use eye protection conforming to EN 166

Skin/hand protection

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

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

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

Applicable Norms/Standards

Use gloves tested to EN 374

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

Respiratory protection

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

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

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

Applicable Norms/Standards

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Paste
Colour	White
Odor	Aromatic Mercaptan
Odour threshold	No data available.
Melting point/freezing point	Not applicable.
Boiling point/boiling range	285.3 °C [Details:Decomposes]
Flammability	Flammable Liquid: Category 2.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Flash point	17.1 °C [Test Method:Closed Cup] [Details:Test Data]
Autoignition temperature	No data available.
Decomposition temperature	No data available.
pH	substance/mixture is non-soluble (in water)
Kinematic Viscosity	No data available.
Water solubility	Nil
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Vapour pressure	No data available.
Density	1.27 g/ml

Relative density	1.27 [Ref Std: WATER=1]
Relative Vapour Density	>=1 [Ref Std: AIR=1]
Particle Characteristics	Not applicable.

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds	No data available.
Evaporation rate	No data available.
Molecular weight	Not applicable.
Percent volatile	17 %

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

Sparks and/or flames.

10.5 Incompatible materials

Strong oxidising agents.

Reducing agents.

Strong acids.

Strong bases.

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

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

Signs and Symptoms of Exposure

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

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact

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

Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion

Chemical (aspiration) pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish coloured skin (cyanosis), and may be fatal. Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:**Prolonged or repeated exposure may cause target organ effects:**

Ocular effects: Signs/symptoms may include blurred or significantly impaired vision. Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Olfactory effects: Signs/symptoms may include decreased ability to detect odours and complete loss of smell. Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.

Reproductive/Developmental Toxicity:

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

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Toxicological Data

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Inhalation-Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na ₂ (Sx)), reduced	Dermal	Rat	LD50 > 7,800 mg/kg
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na ₂ (Sx)), reduced	Ingestion	Rat	LD50 > 5,000 mg/kg
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
toluene	Dermal	Rat	LD50 12,000 mg/kg
toluene	Inhalation-Vapour (4 hours)	Rat	LC50 30 mg/l
toluene	Ingestion	Rat	LD50 5,550 mg/kg
Oxidised polyethylene	Ingestion	Rat	LD50 > 2,500 mg/kg

3M Aerospace Sealant AC-350 A-1/2, A-1, and A-2 Base

Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
butanone	Dermal	Rabbit	LD50 > 8,050 mg/kg
butanone	Inhalation-Vapour (4 hours)	Rat	LC50 34.5 mg/l
butanone	Ingestion	Rat	LD50 2,737 mg/kg
heptane	Dermal	similar compounds	LD50 > 2,000 mg/kg
heptane	Inhalation-Vapour (4 hours)	similar compounds	LC50 > 33.5 mg/l
heptane	Ingestion	similar compounds	LD50 > 5,000 mg/kg
4-methylpentan-2-one	Dermal	Rabbit	LD50 > 16,000 mg/kg
4-methylpentan-2-one	Inhalation-Vapour (4 hours)	Rat	LC50 11 mg/l
4-methylpentan-2-one	Ingestion	Rat	LD50 3,038 mg/kg
cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
cyclohexane	Inhalation-Vapour (4 hours)	Rat	LC50 > 32.9 mg/l
cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Dermal	Rat	LD50 > 1,600 mg/kg
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Ingestion	Rat	LD50 > 1,000 mg/kg
Formaldehyde, oligomeric reaction products with phenol	Dermal	Rat	LD50 > 2,000 mg/kg
Formaldehyde, oligomeric reaction products with phenol	Ingestion	Rat	LD50 > 2,900 mg/kg
formaldehyde	Dermal	Rabbit	LD50 270 mg/kg
formaldehyde	Inhalation-Gas (4 hours)	Rat	LC50 470 ppm
formaldehyde	Ingestion	Rat	LD50 800 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na ₂ (Sx)), reduced	Rabbit	No significant irritation
Calcium carbonate	Rabbit	No significant irritation
toluene	Rabbit	Irritant
Oxidised polyethylene	Professional judgement	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
butanone	Rabbit	Minimal irritation
heptane	Professional judgement	Mild irritant
4-methylpentan-2-one	Rabbit	Mild irritant
cyclohexane	Rabbit	Mild irritant
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Rabbit	Mild irritant
Formaldehyde, oligomeric reaction products with phenol	Human and animal	Mild irritant
formaldehyde	official classification	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na ₂ (Sx)), reduced	Rabbit	No significant irritation
Calcium carbonate	Rabbit	No significant irritation
toluene	Rabbit	Moderate irritant
Oxidised polyethylene	Professional judgement	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
butanone	Rabbit	Severe irritant
heptane	similar compounds	Mild irritant
4-methylpentan-2-one	Rabbit	Mild irritant
cyclohexane	Rabbit	Mild irritant
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Rabbit	Moderate irritant
Formaldehyde, oligomeric reaction products with phenol	Human and animal	Moderate irritant
formaldehyde	official classification	Corrosive

Skin Sensitisation

Name	Species	Value
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na ₂ (Sx)), reduced		Not classified
toluene	Guinea pig	Not classified
Titanium dioxide	Human and animal	Not classified
heptane	similar compounds	Not classified
4-methylpentan-2-one	Guinea pig	Not classified
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Human and animal	Sensitising
Formaldehyde, oligomeric reaction products with phenol	Human and animal	Sensitising
formaldehyde	Guinea pig	Sensitising

Respiratory Sensitisation

Name	Species	Value
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Human	Not classified
Formaldehyde, oligomeric reaction products with phenol	Human	Not classified
formaldehyde	Human	Some positive data exist, but the data are not sufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
toluene	In Vitro	Not mutagenic

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toluene	In vivo	Not mutagenic
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
butanone	In Vitro	Not mutagenic
heptane	In Vitro	Not mutagenic
4-methylpentan-2-one	In Vitro	Not mutagenic
cyclohexane	In Vitro	Not mutagenic
cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification
bis-[4-(2,3-epoxipropoxy)phenyl]propane	In vivo	Not mutagenic
bis-[4-(2,3-epoxipropoxy)phenyl]propane	In Vitro	Some positive data exist, but the data are not sufficient for classification
formaldehyde	In Vitro	Some positive data exist, but the data are not sufficient for classification
formaldehyde	In vivo	Mutagenic

Carcinogenicity

Name	Route	Species	Value
toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.
butanone	Inhalation	Human	Not carcinogenic
4-methylpentan-2-one	Inhalation	Multiple animal species	Carcinogenic.
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
formaldehyde	Not specified.	Human and animal	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Calcium carbonate	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
toluene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
toluene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.3 mg/l	1 generation
toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse
butanone	Inhalation	Not classified for development	Rat	LOAEL 8.8 mg/l	during gestation
4-methylpentan-2-one	Inhalation	Not classified for female reproduction	Multiple animal species	NOAEL 8.2 mg/l	2 generation
4-methylpentan-2-one	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	13 weeks
4-methylpentan-2-one	Inhalation	Not classified for male reproduction	Multiple animal species	NOAEL 8.2 mg/l	2 generation

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4-methylpentan-2-one	Inhalation	Not classified for development	Mouse	NOAEL 12.3 mg/l	during organogenesis
cyclohexane	Inhalation	Not classified for female reproduction	Rat	NOAEL 24 mg/l	2 generation
cyclohexane	Inhalation	Not classified for male reproduction	Rat	NOAEL 24 mg/l	2 generation
cyclohexane	Inhalation	Not classified for development	Rat	NOAEL 6.9 mg/l	2 generation
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
formaldehyde	Ingestion	Not classified for male reproduction	Rat	NOAEL 100 mg/kg	not applicable
formaldehyde	Inhalation	Not classified for development	Rat	NOAEL 10 ppm	during gestation

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
toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
toluene	Inhalation	immune system	Not classified	Mouse	NOAEL 0.004 mg/l	3 hours
toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
butanone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	official classification	NOAEL Not available	
butanone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
butanone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
butanone	Ingestion	liver	Not classified	Rat	NOAEL Not available	not applicable
butanone	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 1,080 mg/kg	not applicable
heptane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
heptane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
heptane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
4-methylpentan-2-one	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 0.1 mg/l	2 hours
4-methylpentan-2-one	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
4-methylpentan-2-one	Inhalation	vascular system	Not classified	Dog	NOAEL Not available	not available
4-methylpentan-2-one	Ingestion	central nervous	May cause drowsiness or	Rat	LOAEL 900	not applicable

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		system depression	dizziness		mg/kg	
cyclohexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
cyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
cyclohexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Formaldehyde, oligomeric reaction products with phenol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
formaldehyde	Inhalation	respiratory system	Causes damage to organs	Rat	LOAEL 128 ppm	6 hours
formaldehyde	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Calcium carbonate	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
toluene	Inhalation	auditory system nervous system eyes olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
toluene	Inhalation	heart liver kidney and/or bladder	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks
toluene	Inhalation	endocrine system	Not classified	Rat	NOAEL 1.1 mg/l	4 weeks
toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not available	20 days
toluene	Inhalation	bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 1.1 mg/l	8 weeks
toluene	Inhalation	hematopoietic system vascular system	Not classified	Human	NOAEL Not available	occupational exposure
toluene	Inhalation	gastrointestinal tract	Not classified	Multiple animal species	NOAEL 11.3 mg/l	15 weeks
toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
toluene	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
toluene	Ingestion	liver kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
toluene	Ingestion	hematopoietic system	Not classified	Mouse	NOAEL 600 mg/kg/day	14 days
toluene	Ingestion	endocrine system	Not classified	Mouse	NOAEL 105 mg/kg/day	28 days
toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105 mg/kg/day	4 weeks
Titanium dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years

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Titanium dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
butanone	Dermal	nervous system	Not classified	Guinea pig	NOAEL Not available	31 weeks
butanone	Inhalation	liver kidney and/or bladder heart endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system immune system muscles	Not classified	Rat	NOAEL 14.7 mg/l	90 days
butanone	Ingestion	liver	Not classified	Rat	NOAEL Not available	7 days
butanone	Ingestion	nervous system	Not classified	Rat	NOAEL 173 mg/kg/day	90 days
heptane	Inhalation	nervous system	Not classified	Rat	NOAEL 6.15 mg/l	30 weeks
heptane	Inhalation	peripheral nervous system	Not classified	Rat	NOAEL 12.5 mg/l	16 weeks
heptane	Inhalation	hematopoietic system kidney and/or bladder	Not classified	Rat	NOAEL 12.2 mg/l	26 weeks
4-methylpentan-2-one	Inhalation	liver	Not classified	Rat	NOAEL 0.41 mg/l	13 weeks
4-methylpentan-2-one	Inhalation	heart	Not classified	Multiple animal species	NOAEL 0.8 mg/l	2 weeks
4-methylpentan-2-one	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL 0.4 mg/l	90 days
4-methylpentan-2-one	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 4.1 mg/l	14 weeks
4-methylpentan-2-one	Inhalation	endocrine system hematopoietic system	Not classified	Multiple animal species	NOAEL 0.41 mg/l	90 days
4-methylpentan-2-one	Inhalation	nervous system	Not classified	Multiple animal species	NOAEL 0.41 mg/l	13 weeks
4-methylpentan-2-one	Ingestion	endocrine system hematopoietic system liver kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
4-methylpentan-2-one	Ingestion	heart immune system muscles nervous system respiratory system	Not classified	Rat	NOAEL 1,040 mg/kg/day	120 days
cyclohexane	Inhalation	liver	Not classified	Rat	NOAEL 24 mg/l	90 days
cyclohexane	Inhalation	auditory system	Not classified	Rat	NOAEL 1.7 mg/l	90 days
cyclohexane	Inhalation	kidney and/or bladder	Not classified	Rabbit	NOAEL 2.7 mg/l	10 weeks
cyclohexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 24 mg/l	14 weeks
cyclohexane	Inhalation	peripheral nervous system	Not classified	Rat	NOAEL 8.6 mg/l	30 weeks
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Ingestion	auditory system heart endocrine	Not classified	Rat	NOAEL 1,000	28 days

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ane		system hematopoietic system liver eyes kidney and/or bladder			mg/kg/day	
Formaldehyde, oligomeric reaction products with phenol	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
formaldehyde	Dermal	respiratory system	Not classified	Mouse	NOAEL 80 mg/kg/day	60 weeks
formaldehyde	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.3 ppm	28 months
formaldehyde	Inhalation	liver	Not classified	Rat	NOAEL 20 ppm	13 weeks
formaldehyde	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 15 ppm	3 weeks
formaldehyde	Inhalation	nervous system	Not classified	Mouse	NOAEL 10 ppm	13 weeks
formaldehyde	Inhalation	endocrine system immune system muscles kidney and/or bladder	Not classified	Rat	NOAEL 15 ppm	28 months
formaldehyde	Inhalation	gastrointestinal tract	Not classified	Rat	NOAEL 15 ppm	2 years
formaldehyde	Inhalation	eyes vascular system	Not classified	Rat	NOAEL 14.3 ppm	2 years
formaldehyde	Inhalation	heart	Not classified	Mouse	NOAEL 14.3 ppm	2 years
formaldehyde	Ingestion	liver	Not classified	Rat	NOAEL 300 mg/kg/day	2 years
formaldehyde	Ingestion	immune system	Not classified	Rat	NOAEL 20 mg/kg/day	4 weeks
formaldehyde	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 15 mg/kg/day	24 months
formaldehyde	Ingestion	nervous system	Not classified	Rat	NOAEL 109 mg/kg/day	2 years
formaldehyde	Ingestion	heart endocrine system hematopoietic system respiratory system vascular system	Not classified	Rat	NOAEL 300 mg/kg/day	2 years
formaldehyde	Ingestion	skin muscles eyes	Not classified	Rat	NOAEL 109 mg/kg/day	2 years

Aspiration Hazard

Name	Value
toluene	Aspiration hazard
heptane	Aspiration hazard
4-methylpentan-2-one	Some positive data exist, but the data are not sufficient for classification
cyclohexane	Aspiration hazard

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

11.2. Information on other hazards

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

SECTION 12: Ecological information

The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and

data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na ₂ (Sx)), reduced	68611-50-7	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Calcium carbonate	471-34-1	Green algae	Experimental	72 hours	EC50	>100 mg/l
Calcium carbonate	471-34-1	Rainbow trout	Experimental	96 hours	LC50	>100 mg/l
Calcium carbonate	471-34-1	Water flea	Experimental	48 hours	EC50	>100 mg/l
Calcium carbonate	471-34-1	Green algae	Experimental	72 hours	EC10	100 mg/l
Oxidised polyethylene	68441-17-8	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
toluene	108-88-3	Grass Shrimp	Experimental	96 hours	LC50	9.5 mg/l
toluene	108-88-3	Green algae	Experimental	72 hours	EC50	12.5 mg/l
toluene	108-88-3	Leopard frog	Experimental	9 days	LC50	0.39 mg/l
toluene	108-88-3	Pink Salmon	Experimental	96 hours	LC50	6.41 mg/l
toluene	108-88-3	Water flea	Experimental	48 hours	EC50	3.78 mg/l
toluene	108-88-3	Coho Salmon	Experimental	40 days	NOEC	1.39 mg/l
toluene	108-88-3	Diatom	Experimental	72 hours	NOEC	10 mg/l
toluene	108-88-3	Water flea	Experimental	7 days	NOEC	0.74 mg/l
toluene	108-88-3	Activated sludge	Experimental	12 hours	IC50	292 mg/l
toluene	108-88-3	Bacteria	Experimental	16 hours	NOEC	29 mg/l
toluene	108-88-3	Bacteria	Experimental	24 hours	EC50	84 mg/l
toluene	108-88-3	Redworm	Experimental	28 days	LC50	>150 mg per kg of bodyweight
toluene	108-88-3	Soil microbes	Experimental	28 days	NOEC	<26 mg/kg (Dry Weight)
Titanium dioxide	13463-67-7	Activated sludge	Experimental	3 hours	NOEC	>=1,000 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	EC50	>10,000 mg/l
Titanium dioxide	13463-67-7	Fathead minnow	Experimental	96 hours	LC50	>100 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	NOEC	5,600 mg/l
butanone	78-93-3	Fathead minnow	Experimental	96 hours	LC50	2,993 mg/l

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butanone	78-93-3	Green algae	Experimental	96 hours	ErC50	2,029 mg/l
butanone	78-93-3	Water flea	Experimental	48 hours	EC50	308 mg/l
butanone	78-93-3	Green algae	Experimental	96 hours	ErC10	1,289 mg/l
butanone	78-93-3	Water flea	Experimental	21 days	NOEC	100 mg/l
butanone	78-93-3	Bacteria	Experimental	16 hours	LOEC	1,150 mg/l
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	Activated sludge	Analogous Compound	3 hours	IC50	>100 mg/l
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	Rainbow trout	Estimated	96 hours	LC50	2 mg/l
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	Water flea	Estimated	48 hours	EC50	1.8 mg/l
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	Green algae	Experimental	72 hours	ErC50	>11 mg/l
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	Green algae	Experimental	72 hours	NOEC	4.2 mg/l
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	Water flea	Experimental	21 days	NOEC	0.3 mg/l
cyclohexane	110-82-7	Fathead minnow	Experimental	96 hours	LC50	4.53 mg/l
cyclohexane	110-82-7	Water flea	Experimental	48 hours	EC50	0.9 mg/l
cyclohexane	110-82-7	Bacteria	Experimental	24 hours	IC50	97 mg/l
heptane	142-82-5	Water flea	Experimental	48 hours	EC50	1.5 mg/l
heptane	142-82-5	Water flea	Estimated	21 days	NOEC	0.17 mg/l
4-methylpentan-2-one	108-10-1	Green algae	Experimental	96 hours	EC50	400 mg/l
4-methylpentan-2-one	108-10-1	Water flea	Experimental	48 hours	EC50	>200 mg/l
4-methylpentan-2-one	108-10-1	Zebra Fish	Experimental	96 hours	LC50	>179 mg/l
4-methylpentan-2-one	108-10-1	Fathead minnow	Experimental	32 days	NOEC	56.2 mg/l
4-methylpentan-2-one	108-10-1	Water flea	Experimental	21 days	NOEC	78 mg/l
4-methylpentan-2-one	108-10-1	Activated sludge	Experimental	30 minutes	EC50	>1,000
Formaldehyde, oligomeric reaction products with phenol	9003-35-4	N/A	Data not available or insufficient for classification	N/A	N/A	n/a
formaldehyde	50-00-0	Green algae	Experimental	72 hours	ErC50	4.89 mg/l
formaldehyde	50-00-0	Striped bass	Experimental	96 hours	LC50	6.7 mg/l
formaldehyde	50-00-0	Water flea	Experimental	48 hours	EC50	5.8 mg/l
formaldehyde	50-00-0	Medaka	Experimental	28 days	NOEC	>=48 mg/l
formaldehyde	50-00-0	Water flea	Experimental	21 days	NOEC	>=6.4 mg/l
formaldehyde	50-00-0	Activated sludge	Experimental	3 hours	EC50	19

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na ₂ (Sx)), reduced	68611-50-7	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Calcium carbonate	471-34-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Oxidised polyethylene	68441-17-8	Data not availbl-insufficient	N/A	N/A	N/A	N/A
toluene	108-88-3	Experimental Biodegradation	20 days	BOD	80 %BOD/ThOD	APHA Std Meth Water/Wastewater
toluene	108-88-3	Experimental Photolysis		Photolytic half-life (in air)	5.2 days (t 1/2)	
Titanium dioxide	13463-67-7	Data not availbl-insufficient	N/A	N/A	N/A	N/A
butanone	78-93-3	Experimental Biodegradation	28 days	BOD	98 %BOD/ThOD	OECD 301D - Closed bottle test
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	Experimental Biodegradation	28 days	BOD	5 %BOD/COD	OECD 301F - Manometric respirometry
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	117 hours (t 1/2)	OECD 111 Hydrolysis func of pH
cyclohexane	110-82-7	Experimental Biodegradation	28 days	BOD	77 %BOD/ThOD	OECD 301F - Manometric respirometry
cyclohexane	110-82-7	Experimental Photolysis		Photolytic half-life (in air)	4.3 days (t 1/2)	
heptane	142-82-5	Experimental Biodegradation	28 days	BOD	101 %BOD/ThOD	OECD 301C - MITI test (I)
heptane	142-82-5	Experimental Photolysis		Photolytic half-life (in air)	4.24 days (t 1/2)	
4-methylpentan-2-one	108-10-1	Experimental Biodegradation	28 days	BOD	83 %BOD/ThOD	OECD 301F - Manometric respirometry
4-methylpentan-2-one	108-10-1	Experimental Photolysis		Photolytic half-life (in air)	2.3 days (t 1/2)	
Formaldehyde, oligomeric reaction products with phenol	9003-35-4	Estimated Biodegradation	28 days	BOD	3 %BOD/ThOD	
formaldehyde	50-00-0	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	99 %removal of DOC	OECD 301A - DOC Die Away Test
formaldehyde	50-00-0	Experimental Biodegradation	160 days	BOD	99.5 %BOD/COD	OECD 303A - Simulated Aerobic

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na ₂ (Sx)), reduced	68611-50-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Calcium carbonate	471-34-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Oxidised polyethylene	68441-17-8	Data not available or insufficient for	N/A	N/A	N/A	N/A

		classification				
toluene	108-88-3	Experimental BCF - Other	72 hours	Bioaccumulation factor	90	
toluene	108-88-3	Experimental Bioconcentration		Log Kow	2.73	
Titanium dioxide	13463-67-7	Experimental BCF - Fish	42 days	Bioaccumulation factor	9.6	
butanone	78-93-3	Experimental Bioconcentration		Log Kow	0.3	OECD 117 log Kow HPLC method
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	Experimental Bioconcentration		Log Kow	3.242	OECD 117 log Kow HPLC method
cyclohexane	110-82-7	Experimental BCF - Fish	56 days	Bioaccumulation factor	129	OECD305-Bioconcentration
cyclohexane	110-82-7	Experimental Bioconcentration		Log Kow	3.44	
heptane	142-82-5	Estimated Bioconcentration		Bioaccumulation factor	105	
4-methylpentan-2-one	108-10-1	Experimental Bioconcentration		Log Kow	1.9	OECD 117 log Kow HPLC method
Formaldehyde, oligomeric reaction products with phenol	9003-35-4	Estimated Bioconcentration		Bioaccumulation factor	2.57	
formaldehyde	50-00-0	Experimental Bioconcentration		Log Kow	0.35	

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
toluene	108-88-3	Experimental Mobility in Soil	Koc	37-160 l/kg	
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	Modeled Mobility in Soil	Koc	450 l/kg	Episuite™
cyclohexane	110-82-7	Modeled Mobility in Soil	Koc	970 l/kg	Episuite™
4-methylpentan-2-one	108-10-1	Modeled Mobility in Soil	Koc	150 l/kg	Episuite™
Formaldehyde, oligomeric reaction products with phenol	9003-35-4	Experimental Mobility in Soil	Koc	637 l/kg	OECD 121 Estim. of Koc by HPLC
formaldehyde	50-00-0	Estimated Mobility in Soil	Koc	15.9 l/kg	

12.5. Results of the PBT and vPvB assessment

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

12.6. Other adverse effects

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. Empty drums/barrels/containers used for

transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

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

EU waste code (product as sold)

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

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN1866	UN1866	UN1866
14.2 UN proper shipping name	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	II	II	II
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	F1	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

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

SECTION 15: Regulatory information

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

Carcinogenicity

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	Gr. 3: Not classifiable	International Agency for Research on Cancer The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain, UK Mandatory Classification and Labelling list
formaldehyde	50-00-0	Carc. 1B	
formaldehyde	50-00-0	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain, UK Mandatory Classification and Labelling list
4-methylpentan-2-one	108-10-1	Carc. 2	
4-methylpentan-2-one	108-10-1	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
toluene	108-88-3	Gr. 3: Not classifiable	International Agency for Research on Cancer

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

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

<u>Ingredient</u>	<u>CAS Nbr</u>
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3
cyclohexane	110-82-7
toluene	108-88-3

Restriction status: listed in UK REACH Annex XVII

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

Restriction

Regulation UK regulation 2023/63 (marketing and use of explosive precursors and poisons)

This product contains a reportable substance according to UK legislation 1972/66: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see UK Regulation 2023/63 for further details.

Global inventory status

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

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for the application of	
	Lower-tier requirements	Upper-tier requirements
P5c FLAMMABLE LIQUIDS*	5000	50000

*If maintained at a temperature above its boiling point or if particular processing conditions, such as high pressure or high temperature, may create major-accident hazards, P5a or P5b FLAMMABLE LIQUIDS may apply
Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
formaldehyde	50-00-0	5	50

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

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

SECTION 16: Other information**List of relevant H statements**

EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.

H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure: nervous system sensory organs.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Revision information:

No revision information

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

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

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



Safety Data Sheet

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Revision date: 01/10/2025

Version number: 1.00
Supersedes date: Initial issue.

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

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

1.1. Product identifier

Aerospace Sealant AC-350 A-2 Catalyst

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

Identified uses

Curing Agent

1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.
Telephone: +44 (0)1344 858 000
E Mail: ner-productstewardship@mmm.com
Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

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

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

CLASSIFICATION:

Acute Toxicity, Category 4 - Acute Tox. 4; H302
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

For full text of H phrases, see Section 16.

2.2. Label elements

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

SIGNAL WORD

WARNING.

Symbols

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

Pictograms

Ingredient	CAS Nbr	EC No.	% by Wt
manganese dioxide	1313-13-9	215-202-6	25 - 50
Disodium oxide	1313-59-3	215-208-9	< 2

HAZARD STATEMENTS:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure: nervous system.

PRECAUTIONARY STATEMENTS**Prevention:**

P260A Do not breathe vapours.

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.

2.3. Other hazards

None known.

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

SECTION 3: Composition/information on ingredients**3.1. Substances**

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
manganese dioxide	(CAS-No.) 1313-13-9 (EC-No.) 215-202-6	25 - 50	Acute Tox. 4, H332 Acute Tox. 4, H302

			EUH031 STOT RE 2, H373
Oxydiethylene dibenzoate	(CAS-No.) 120-55-8 (EC-No.) 204-407-6	20 - 45	Substance not classified as hazardous
Oxydipropyl dibenzoate	(CAS-No.) 27138-31-4 (EC-No.) 248-258-5	< 15	Aquatic Chronic 3, H412
Zeolites	(CAS-No.) 1318-02-1 (EC-No.) 215-283-8	2 - 10	Substance with a national occupational exposure limit
Aluminium Oxide (non-fibrous)	(CAS-No.) 1344-28-1 (EC-No.) 215-691-6	< 5	Substance with a national occupational exposure limit
Silicon dioxide	(CAS-No.) 7631-86-9 (EC-No.) 231-545-4	< 5	Substance with a national occupational exposure limit
Disodium oxide	(CAS-No.) 1313-59-3 (EC-No.) 215-208-9	< 2	EUH014 Acute Tox. 3, H301 Skin Corr. 1B, H314 STOT SE 3, H335
Heterocyclic Organic Compound	Trade Secret	< 2	Substance not classified as hazardous
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	(CAS-No.) 68909-20-6 (EC-No.) 272-697-1	< 2	EUH066 STOT RE 2, H373

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

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If swallowed

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

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

The most important symptoms and effects based on the GB CLP classification include:

Irritation to the skin (localized redness, swelling, itching, and dryness). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision). Harmful if swallowed. Target organ effects. See Section 11 for additional details.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures**5.1. Extinguishing media**

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products**Substance**

Carbon monoxide

Carbon dioxide.

Oxides of nitrogen.

Oxides of sulphur.

Condition

During combustion.

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. Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Do not 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. Avoid release to the environment.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

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
Manganese, inorganic compounds	1313-13-9	UK HSE	TWA(as Mn, respirable fraction):0.05 mg/m3	
Aluminium oxides	1318-02-1	UK HSE	TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3	
Aluminium Oxide (non-fibrous)	1344-28-1	UK HSE	TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3	
Silicon dioxide	68909-20-6	UK HSE	TWA(as respirable dust):2.4 mg/m3;TWA(as inhalable dust):6 mg/m3	
DUST, INERT OR NUISANCE	7631-86-9	UK HSE	TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3	
Silicon dioxide	7631-86-9	UK HSE	TWA(as respirable dust):2.4 mg/m3;TWA(as inhalable dust):6 mg/m3	

UK HSE : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

Biological limit values

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

8.2. Exposure controls**8.2.1. Engineering controls**

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

8.2.2. Personal protective equipment (PPE)**Eye/face protection**

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

Safety glasses with side shields.

Indirect vented goggles.

Applicable Norms/Standards

Use eye protection conforming to EN 166

Skin/hand protection

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

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

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

Applicable Norms/Standards

Use gloves tested to EN 374

Respiratory protection

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

Half facepiece or full facepiece air-purifying respirator suitable for 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 type P

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Black-Brown
Odor	No data available.
Odour threshold	No data available.
Melting point/freezing point	Not applicable.
Boiling point/boiling range	No data available.
Flammability	Not applicable.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Flash point	Flash point > 93 °C (200 °F)
Autoignition temperature	No data available.
Decomposition temperature	No data available.
pH	10
Kinematic Viscosity	Not applicable.
Water solubility	Not applicable.
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Vapour pressure	No data available.
Density	1.6 kg/l
Relative density	1.61
Relative Vapour Density	No data available.

Particle Characteristics*Not applicable.***9.2. Other information****9.2.2 Other safety characteristics****EU Volatile Organic Compounds***No data available.***Evaporation rate***No data available.***Molecular weight***No data available.***Percent volatile**

0.1 % 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

Not determined

10.5 Incompatible materials

Reducing agents.

10.6 Hazardous decomposition products**Substance****Condition**

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

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

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

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact

May be harmful in contact with skin. Skin Irritation: Signs/symptoms may include localised redness, swelling, itching,

dryness, cracking, blistering, and pain.

Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion

Harmful if swallowed.

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

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate. Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure.

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 >2,000 - =5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >300 - =2,000 mg/kg
manganese dioxide	Dermal	Rat	LD50 2,000 mg/kg
manganese dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.5 mg/l
manganese dioxide	Ingestion	Rat	LD50 > 2,197 mg/kg
Oxydiethylene dibenzoate	Dermal	Rat	LD50 > 2,000 mg/kg
Oxydiethylene dibenzoate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 200 mg/l
Oxydiethylene dibenzoate	Ingestion	Rat	LD50 3,535 mg/kg
Oxydipropyl dibenzoate	Dermal	Rat	LD50 > 2,000 mg/kg
Oxydipropyl dibenzoate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 200 mg/l
Oxydipropyl dibenzoate	Ingestion	Rat	LD50 3,295 mg/kg
Zeolites	Dermal	Rabbit	LD50 > 2,000 mg/kg
Zeolites	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.57 mg/l
Zeolites	Ingestion	Rat	LD50 > 5,000 mg/kg
Silicon dioxide	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silicon dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Silicon dioxide	Ingestion	Rat	LD50 > 5,110 mg/kg
Aluminium Oxide (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminium Oxide (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminium Oxide (non-fibrous)	Ingestion	Rat	LD50 > 5,000 mg/kg
Disodium oxide	Ingestion	Professional judgement	LD50 estimated to be 50 - 300 mg/kg

Heterocyclic Organic Compound	Ingestion	Rat	LD50 > 5,000 mg/kg
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Ingestion	Rat	LD50 > 2,000 mg/kg
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Dermal	similar health hazards	LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
manganese dioxide	Rabbit	No significant irritation
Oxydiethylene dibenzoate	Rabbit	No significant irritation
Oxydipropyl dibenzoate	Rabbit	No significant irritation
Zeolites	Rabbit	No significant irritation
Silicon dioxide	Rabbit	No significant irritation
Aluminium Oxide (non-fibrous)	Rabbit	No significant irritation
Disodium oxide	similar compound	Corrosive
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
manganese dioxide	Rabbit	Mild irritant
Oxydiethylene dibenzoate	Rabbit	No significant irritation
Oxydipropyl dibenzoate	Rabbit	No significant irritation
Zeolites	Rabbit	Mild irritant
Silicon dioxide	Rabbit	No significant irritation
Aluminium Oxide (non-fibrous)	Rabbit	No significant irritation
Disodium oxide	similar compound	Corrosive
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
manganese dioxide	Mouse	Not classified
Oxydiethylene dibenzoate	Guinea pig	Not classified
Oxydipropyl dibenzoate	Guinea pig	Not classified
Silicon dioxide	Human and animal	Not classified
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Guinea pig	Not classified

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
manganese dioxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
manganese dioxide	In vivo	Some positive data exist, but the data are not sufficient for classification
Oxydiethylene dibenzoate	In Vitro	Not mutagenic
Oxydipropyl dibenzoate	In Vitro	Not mutagenic

Silicon dioxide	In Vitro	Not mutagenic
Aluminium Oxide (non-fibrous)	In Vitro	Not mutagenic
Heterocyclic Organic Compound	In Vitro	Not mutagenic
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Silicon dioxide	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
Aluminium Oxide (non-fibrous)	Inhalation	Rat	Not carcinogenic

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
manganese dioxide	Inhalation	Not classified for female reproduction	Rat	NOAEL 20 mg/m ³	2 generation
manganese dioxide	Inhalation	Not classified for male reproduction	Rabbit	LOAEL 250 mg/kg	1 days
manganese dioxide	Ingestion	Not classified for development	Rat	LOAEL 354 mg/kg/day	premating into lactation
manganese dioxide	Inhalation	Not classified for development	Rat	LOAEL 61 mg/m ³	gestation into lactation
Oxydiethylene dibenzoate	Ingestion	Not classified for female reproduction	Rat	NOAEL 10000 ppm in the diet	2 generation
Oxydiethylene dibenzoate	Ingestion	Not classified for male reproduction	Rat	NOAEL 10000 ppm in the diet	2 generation
Oxydiethylene dibenzoate	Ingestion	Not classified for development	Rabbit	NOAEL 75 mg/kg/day	during gestation
Oxydipropyl dibenzoate	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
Oxydipropyl dibenzoate	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
Oxydipropyl dibenzoate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation
Silicon dioxide	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silicon dioxide	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silicon dioxide	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation

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

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Disodium oxide	Inhalation	respiratory irritation	May cause respiratory irritation	Professional judgement	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
manganese dioxide	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Monkey	LOAEL 1.1 mg/m ³	10 months
manganese dioxide	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Oxydiethylene dibenzoate	Ingestion	hematopoietic system liver eyes kidney and/or bladder	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Oxydipropyl dibenzoate	Ingestion	hematopoietic system liver	Not classified	Rat	NOAEL 2,500 mg/kg/day	90 days
Silicon dioxide	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Aluminium Oxide (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminium Oxide (non-fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Inhalation	respiratory system	May cause damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.035 mg/l	13 weeks
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Inhalation	hematopoietic system kidney and/or bladder	Not classified	Rat	NOAEL 0.035 mg/l	13 weeks
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Ingestion	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	5 weeks

Aspiration Hazard

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

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

11.2. Information on other hazards

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

SECTION 12: Ecological information

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

12.1. Toxicity

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
manganese dioxide	1313-13-9	Rainbow trout	Endpoint not reached	96 hours	LC50	>100 mg/l
manganese dioxide	1313-13-9	Green algae	Experimental	72 hours	EC50	>100 mg/l

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manganese dioxide	1313-13-9	Water flea	Experimental	48 hours	EC50	>100 mg/l
manganese dioxide	1313-13-9	Green algae	Experimental	72 hours	EC10	100 mg/l
manganese dioxide	1313-13-9	Water flea	Experimental	8 days	NOEC	100 mg/l
Oxydiethylene dibenzoate	120-55-8	Green algae	Experimental	72 hours	EL50	11 mg/l
Oxydiethylene dibenzoate	120-55-8	Rainbow trout	Experimental	96 hours	LL50	2.9 mg/l
Oxydiethylene dibenzoate	120-55-8	Water flea	Experimental	48 hours	EL50	6.7 mg/l
Oxydiethylene dibenzoate	120-55-8	Green algae	Experimental	72 hours	NOEL	2.2 mg/l
Oxydiethylene dibenzoate	120-55-8	Activated sludge	Experimental	3 hours	EC50	>100 mg/l
Oxydiethylene dibenzoate	120-55-8	Redworm	Experimental	14 days	LC50	>1,000 mg/kg (Dry Weight)
Oxydipropyl dibenzoate	27138-31-4	Fathead minnow	Experimental	96 hours	LC50	3.7 mg/l
Oxydipropyl dibenzoate	27138-31-4	Green algae	Experimental	72 hours	EL50	4.9 mg/l
Oxydipropyl dibenzoate	27138-31-4	Water flea	Experimental	48 hours	EL50	19.31 mg/l
Oxydipropyl dibenzoate	27138-31-4	Green algae	Experimental	72 hours	EC10	0.89 mg/l
Zeolites	1318-02-1	African clawed frog	Analogous Compound	96 hours	LC50	1,800 mg/l
Zeolites	1318-02-1	Fathead minnow	Analogous Compound	96 hours	LC50	>680 mg/l
Zeolites	1318-02-1	Green algae	Analogous Compound	72 hours	EC50	130 mg/l
Zeolites	1318-02-1	Sediment organism	Analogous Compound	22 days	EC50	364.9 mg/l
Zeolites	1318-02-1	Water flea	Analogous Compound	48 hours	EC50	>100 mg/l
Zeolites	1318-02-1	Fathead minnow	Analogous Compound	30 days	NOEC	86.7 mg/l
Zeolites	1318-02-1	Green algae	Analogous Compound	72 hours	NOEC	18 mg/l
Zeolites	1318-02-1	Water flea	Analogous Compound	21 days	NOEC	32 mg/l
Zeolites	1318-02-1	Bacteria	Experimental	16 hours	EC50	950 mg/l
Zeolites	1318-02-1	Radish	Experimental	23 days	EC50	4,000 mg/kg (Dry Weight)
Aluminium Oxide (non-fibrous)	1344-28-1	N/A	Experimental	96 hours	LC50	>100 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	EC50	>100 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	Water flea	Experimental	48 hours	LC50	>100 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	NOEC	>100 mg/l
Silicon dioxide	7631-86-9	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Heterocyclic Organic Compound	Trade Secret	Green algae	Experimental	72 hours	EC50	>100 mg/l
Heterocyclic Organic Compound	Trade Secret	Green algae	Experimental	72 hours	NOEC	100 mg/l
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	Green algae	Experimental	72 hours	ErC50	>10,000 mg/l

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	Water flea	Experimental	24 hours	EC50	>1,000 mg/l
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	Zebra Fish	Experimental	96 hours	LC50	>10,000 mg/l
Disodium oxide	1313-59-3	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
manganese dioxide	1313-13-9	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Oxydiethylene dibenzoate	120-55-8	Experimental Biodegradation	28 days	CO2 evolution	93 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
Oxydipropyl dibenzoate	27138-31-4	Experimental Biodegradation	28 days	CO2 evolution	85 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
Zeolites	1318-02-1	Analogous Compound Hydrolysis		Hydrolytic half-life	60 days (t 1/2)	
Aluminium Oxide (non-fibrous)	1344-28-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Silicon dioxide	7631-86-9	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Heterocyclic Organic Compound	Trade Secret	Experimental Biodegradation	28 days	BOD	0 %BOD/ThOD	OECD 301F - Manometric respirometry
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Disodium oxide	1313-59-3	Data not availbl-insufficient	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
manganese dioxide	1313-13-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Oxydiethylene dibenzoate	120-55-8	Experimental Bioconcentration		Log Kow	3.2	
Oxydipropyl dibenzoate	27138-31-4	Modeled Bioconcentration		Bioaccumulation factor	8	Catalogic™
Zeolites	1318-02-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Aluminium Oxide (non-fibrous)	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Silicon dioxide	7631-86-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Heterocyclic Organic Compound	Trade Secret	Estimated Bioconcentration		Bioaccumulation factor	2.8	
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

hydrolysis products with silica						
Disodium oxide	1313-59-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Oxydiethylene dibenzoate	120-55-8	Experimental Mobility in Soil	Koc	1,500 l/kg	OECD 121 Estim. of Koc by HPLC
Heterocyclic Organic Compound	Trade Secret	Modeled Mobility in Soil	Koc	37,000 l/kg	Episuite™

12.5. Results of the PBT and vPvB assessment

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

12.6. Other adverse effects

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate 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

SECTION 14: Transportation information

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	No data available.	No data available.	No data available.
14.2 UN proper shipping name	No data available.	No data available.	No data available.
14.3 Transport hazard class(es)	No data available.	No data available.	No data available.

14.4 Packing group	No data available.	No data available.	No data available.
14.5 Environmental hazards	No data available.	No data available.	No data available.
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	No data available.	No data available.	No data available.
IMDG Segregation Code	No data available.	No data available.	No data available.

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

SECTION 15: Regulatory information

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

Carcinogenicity

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
Silicon dioxide	7631-86-9	Gr. 3: Not classifiable	International Agency for Research on Cancer
Zeolites	1318-02-1	Gr. 3: Not classifiable	International Agency for Research on Cancer

Global inventory status

Contact 3M for more information. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

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

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

SECTION 16: Other information**List of relevant H statements**

EUH014	Reacts violently with water.
EUH031	Contact with acid liberates toxic gas.
EUH066	Repeated exposure may cause skin dryness or cracking.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure: nervous system.
H412	Harmful to aquatic life with long lasting effects.

Revision information:

No revision information

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