



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the SS586 Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods.

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SECTION 1: Identification

1.1. Product identifier

3M Scotchkote Epoxy Coating 175UC (Part B)

Product Identification Numbers

GR-2001-0738-5	GR-2001-0739-3	GR-2001-0740-1	GR-2001-0743-5	GR-2001-0841-7
GR-2001-4240-8	GR-2001-4302-6	GR-2001-4361-2	GR-2001-4370-3	

1.2. Recommended use and restrictions on use

Recommended use

Coating., Chemical resistant paste.

1.3. Supplier's details

Address: 3M Technologies (S) Pte Ltd,10 Ang Mo Kio Street 65, Singapore 569059
Telephone: +65 6450 8888
Website: www.3m.com.sg

1.4. Emergency telephone number

+65 6591 6888 (8.15am - 5.00pm, Monday - Friday)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Acute Toxicity (inhalation): Category 3.
Acute Toxicity (oral): Category 4.
Serious Eye Damage/Irritation: Category 1.
Skin Corrosion/Irritation: Category 1.
Respiratory Sensitizer: Category 1.
Skin Sensitizer: Category 1.

2.2. Label elements

SIGNAL WORD

DANGER!

Symbols

Corrosion | Skull and crossbones | Health Hazard |

Pictograms



HAZARD STATEMENTS

H331	Toxic if inhaled.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.

PRECAUTIONARY STATEMENTS

Prevention:

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P284	Wear respiratory protection.
P280D	Wear protective gloves, protective clothing, and eye/face protection.
P280A	Wear eye/face protection.
P280E	Wear protective gloves.
P264	Wash thoroughly after handling.

Response:

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage:

P405	Store locked up.
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Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.
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2.3. Other hazards

Persons previously sensitised to amines may develop a cross-sensitisation reaction to certain other amines. - May cause chemical gastrointestinal burns.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Non-hazardous ingredients	Mixture	60 - 70

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Benzyl alcohol	100-51-6	10 - 20
Formaldehyde, polymer with benzenamine, hydrogenated	135108-88-2	10 - 20
Diethylenetriamine	111-40-0	1 - 5
4,4'-Methylenebis(cyclohexylamine)	1761-71-3	< 2
Salicylic acid	69-72-7	< 1
3,6,9-Triazaundecamethylenediamine	112-57-2	< 1

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. Get medical attention.

Skin contact

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

Eye contact

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

If swallowed

Rinse mouth. Do not induce vomiting. Get immediate medical attention.

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

See Section 11.1 Information on toxicological effects

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable 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.

Condition

During combustion.
During combustion.
During combustion.

5.3. Special protective actions 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

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to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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 container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. 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. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Store in a well-ventilated place. Keep container tightly closed. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

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
Benzyl alcohol	100-51-6	AIHA	TWA:44.2 mg/m ³ (10 ppm)	
Diethylenetriamine	111-40-0	ACGIH	TWA:1 ppm	SKIN
Diethylenetriamine	111-40-0	Singapore PELs	TWA(8 hours):4.2 mg/m ³ (1 ppm)	
3,6,9-Triazaundecamethylenediamine	112-57-2	AIHA	TWA(as aerosol):5 mg/m ³ (1 ppm)	SKIN; Dermal sensitizer

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

Singapore PELs : Singapore. Workplace Safety and Health (Permissible Exposure Levels of Toxic Substances) Order

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

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

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Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Full face shield.

Indirect vented goggles.

Skin/hand protection

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

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

Fluoroelastomer

Neoprene.

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an

Apron – Butyl rubber

Neoprene apron.

Apron - polymer laminate

Respiratory protection

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

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

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Thixotropic liquid.
Appearance/Odour	Ammoniacal Odour Amber Colour
Odour threshold	<i>No data available.</i>
pH	<i>No data available.</i>
Melting point/Freezing point	<i>Not applicable.</i>
Boiling point/Initial boiling point/Boiling range	≥ 110 °C
Flash point	≥ 104 °C [<i>Test Method: Closed Cup</i>]
Evaporation rate	<i>No data available.</i>
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Vapour pressure	≤ 133.3 Pa [<i>@ 20 °C</i>]
Vapour density	<i>No data available.</i>
Density	1.03 g/ml
Relative density	1.03 [<i>Ref Std: WATER=1</i>]

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Water solubility	Negligible
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Autoignition temperature	≥ 400 °C
Decomposition temperature	<i>No data available.</i>
Viscosity	<i>No data available.</i>
Molecular weight	<i>No data available.</i>
Volatile organic compounds (VOC)	2.654 g/l [<i>Test Method</i> :tested per EPA method 24] [<i>Details</i> :Parts A and B mixed]

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Amines.

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

Strong acids.

Strong bases.

Strong oxidising agents.

10.6 Hazardous decomposition products

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

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

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Inhalation

Toxic if inhaled. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

Skin contact

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

Eye contact

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

Ingestion

Harmful if swallowed.

Gastrointestinal corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea; blood in the faeces and/or vomitus may also be seen. May cause additional health effects (see below).

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Liver effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice. Muscular effects: Signs/symptoms may include generalised muscle weakness, paralysis and atrophy.

Reproductive/Developmental Toxicity:

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

Additional information:

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

Toxicological Data

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE0.5 - 1 mg/l
Overall product	Ingestion		No data available; calculated ATE300 - 2,000 mg/kg
Benzyl alcohol	Inhalation-Dust/Mist (4 hours)	Rat	LC50 8.8 mg/l
Benzyl alcohol	Ingestion	Rat	LD50 1,230 mg/kg
Diethylenetriamine	Dermal	Rabbit	LD50 1,045 mg/kg
Diethylenetriamine	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.07 mg/l
Diethylenetriamine	Ingestion	Rat	LD50 819 mg/kg
4,4'-Methylenebis(cyclohexylamine)	Dermal	Rabbit	LD50 2,110 mg/kg
4,4'-Methylenebis(cyclohexylamine)	Ingestion	Rat	LD50 350 mg/kg
Salicylic acid	Dermal	Rat	LD50 > 2,000 mg/kg
Salicylic acid	Ingestion	Rat	LD50 891 mg/kg
3,6,9-Triazaundecamethylenediamine	Dermal	Rabbit	LD50 660 mg/kg
3,6,9-Triazaundecamethylenediamine	Ingestion	Rat	LD50 2,140 mg/kg

ATE = acute toxicity estimate

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Name	Species	Value
Benzyl alcohol	Multiple animal species	Mild irritant
Diethylenetriamine	Rabbit	Corrosive
4,4'-Methylenebis(cyclohexylamine)	Rabbit	Corrosive
Salicylic acid	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Benzyl alcohol	Rabbit	Severe irritant
Diethylenetriamine	Rabbit	Corrosive
4,4'-Methylenebis(cyclohexylamine)	Rabbit	Corrosive
Salicylic acid	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
Benzyl alcohol	Human and animal	Not classified
Diethylenetriamine	Guinea pig	Sensitising
4,4'-Methylenebis(cyclohexylamine)	Guinea pig	Sensitising
Salicylic acid	Mouse	Not classified

Photosensitisation

Name	Species	Value
Salicylic acid	Mouse	Not sensitizing

Respiratory Sensitisation

Name	Species	Value
Diethylenetriamine	Human	Sensitising

Germ Cell Mutagenicity

Name	Route	Value
Benzyl alcohol	In vivo	Not mutagenic
Benzyl alcohol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Diethylenetriamine	In Vitro	Not mutagenic
Salicylic acid	In Vitro	Not mutagenic
Salicylic acid	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Benzyl alcohol	Ingestion	Multiple animal species	Not carcinogenic
Diethylenetriamine	Dermal	Multiple animal species	Not carcinogenic

Reproductive Toxicity

3M Scotchkote Epoxy Coating 175UC (Part B)**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
Benzyl alcohol	Ingestion	Not classified for development	Mouse	NOAEL 550 mg/kg/day	during organogenesis
Diethylenetriamine	Ingestion	Not classified for male reproduction	Rat	NOAEL 300 mg/kg/day	28 days
Diethylenetriamine	Ingestion	Not classified for development	Rat	NOAEL 300 mg/kg/day	prematuring & during gestation
Diethylenetriamine	Ingestion	Not classified for female reproduction	Rat	NOAEL 30 mg/kg/day	prematuring & during gestation
Salicylic acid	Ingestion	Toxic to development	Rat	NOAEL 75 mg/kg/day	during organogenesis

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

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Benzyl alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Benzyl alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Benzyl alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Diethylenetriamine	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
4,4'-Methylenebis(cyclohexylamine)	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Benzyl alcohol	Ingestion	endocrine system muscles kidney and/or bladder	Not classified	Rat	NOAEL 400 mg/kg/day	13 weeks
Benzyl alcohol	Ingestion	nervous system respiratory system	Not classified	Mouse	NOAEL 645 mg/kg/day	8 days
Diethylenetriamine	Ingestion	endocrine system liver kidney and/or bladder	Not classified	Rat	NOAEL 1,210 mg/kg/day	90 days
4,4'-Methylenebis(cyclohexylamine)	Ingestion	liver muscles	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 15 mg/kg/day	36 days
Salicylic acid	Ingestion	liver	Not classified	Rat	NOAEL 500 mg/kg/day	3 days

Aspiration Hazard

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

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

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be

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reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

GHS Acute 3: Harmful to aquatic life.

Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Non-hazardous ingredients	Mixture		Data not available or insufficient for classification			
Benzyl alcohol	100-51-6	Fathead minnow	Experimental	96 hours	LC50	460 mg/l
Benzyl alcohol	100-51-6	Green Algae	Experimental	72 hours	EC50	770 mg/l
Benzyl alcohol	100-51-6	Water flea	Experimental	48 hours	EC50	230 mg/l
Benzyl alcohol	100-51-6	Green Algae	Experimental	72 hours	NOEC	310 mg/l
Benzyl alcohol	100-51-6	Water flea	Experimental	21 days	NOEC	51 mg/l
Formaldehyde, polymer with benzenamine, hydrogenated	135108-88-2	Green algae	Experimental	72 hours	EC50	43.94 mg/l
Formaldehyde, polymer with benzenamine, hydrogenated	135108-88-2	Guppy	Experimental	96 hours	LC50	63 mg/l
Formaldehyde, polymer with benzenamine, hydrogenated	135108-88-2	Water flea	Experimental	48 hours	EC50	15.4 mg/l
Formaldehyde, polymer with benzenamine, hydrogenated	135108-88-2	Green algae	Experimental	72 hours	Effect Concentration 10%	1.2 mg/l
Diethylenetriamine	111-40-0	Green Algae	Experimental	72 hours	EC50	1,164 mg/l
Diethylenetriamine	111-40-0	Guppy	Experimental	96 hours	LC50	430 mg/l
Diethylenetriamine	111-40-0	Water flea	Experimental	48 hours	EC50	16 mg/l
Diethylenetriamine	111-40-0	Green algae	Experimental	72 hours	NOEC	10 mg/l
Diethylenetriamine	111-40-0	Three-spined stickleback	Experimental	28 days	NOEC	>10 mg/l
Diethylenetriamine	111-40-0	Water flea	Experimental	21 days	NOEC	5.6 mg/l
4,4'-Methylenebis(cyclohexylamin	1761-71-3	Algae	Experimental	72 hours	EC50	2,164 mg/l

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4,4'-Methylenebis(cyclohexylamine)	1761-71-3	Golden Orfe	Experimental	96 hours	LC50	>100 mg/l
4,4'-Methylenebis(cyclohexylamine)	1761-71-3	Water flea	Experimental	48 hours	EC50	7.07 mg/l
4,4'-Methylenebis(cyclohexylamine)	1761-71-3	Water flea	Estimated	21 days	NOEC	4 mg/l
4,4'-Methylenebis(cyclohexylamine)	1761-71-3	Algae	Experimental	72 hours	Effect Concentration 10%	100 mg/l
Salicylic acid	69-72-7	Green algae	Experimental	72 hours	EC50	>100 mg/l
Salicylic acid	69-72-7	Ricefish	Experimental	96 hours	LC50	>100 mg/l
Salicylic acid	69-72-7	Water flea	Experimental	48 hours	EC50	870 mg/l
3,6,9-Triazaundecamethylenediamine	112-57-2	Green Algae	Experimental	72 hours	EC50	6.8 mg/l
3,6,9-Triazaundecamethylenediamine	112-57-2	Guppy	Experimental	96 hours	LC50	420 mg/l
3,6,9-Triazaundecamethylenediamine	112-57-2	Water flea	Experimental	48 hours	EC50	14.6 mg/l
3,6,9-Triazaundecamethylenediamine	112-57-2	Green Algae	Experimental	72 hours	NOEC	0.5 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Non-hazardous ingredients	Mixture	Data not available-insufficient			N/A	
Benzyl alcohol	100-51-6	Experimental Biodegradation	14 days	BOD	94 % BOD/ThBOD	OECD 301C - MITI test (I)
Formaldehyde, polymer with benzenamine, hydrogenated	135108-88-2	Experimental Biodegradation	28 days	BOD	0 % weight	Other methods
Diethylenetriamine	111-40-0	Experimental Biodegradation	21 days	BOD	87 % weight	OECD 301D - Closed bottle test
4,4'-Methylenebis(cyclohexylamine)	1761-71-3	Estimated Biodegradation	28 days	BOD	42 % weight	OECD 301C - MITI test (I)

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Salicylic acid	69-72-7	Experimental Biodegradation	14 days	BOD	88.1 % weight	OECD 301C - MITI test (I)
3,6,9-Triazaundecamethylenediamine	112-57-2	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301D - Closed bottle test

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Non-hazardous ingredients	Mixture	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Benzyl alcohol	100-51-6	Experimental Bioconcentration		Log Kow	1.10	Other methods
Formaldehyde, polymer with benzenamine, hydrogenated	135108-88-2	Experimental BCF-Carp	56 days	Bioaccumulation factor	≤ 219	OECD 305E - Bioaccumulation flow-through fish test
Diethylenetriamine	111-40-0	Experimental BCF-Carp	42 days	Bioaccumulation factor	≤ 6.3	OECD 305E - Bioaccumulation flow-through fish test
4,4'-Methylenebis(cyclohexylamine)	1761-71-3	Estimated Bioconcentration		Bioaccumulation factor	160	Estimated: Bioconcentration factor
Salicylic acid	69-72-7	Experimental Bioconcentration		Log Kow	2.26	Other methods
3,6,9-Triazaundecamethylenediamine	112-57-2	Estimated Bioconcentration		Log Kow	-7.3	Estimated: Octanol-water partition coefficient

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Disposal 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. 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.

SECTION 14: Transport Information

International Regulations

UN No.: Not restricted for transport.

UN Proper shipping name: Not restricted for transport.

Transportation Class (IMO): None assigned

Transportation Class (IATA): None assigned

Other Dangerous Goods Descriptions (IMO): None assigned

Other Dangerous Goods Descriptions (IATA): None assigned

Packing Group: None assigned

Marine pollutant: None assigned

SECTION 15: Regulatory information

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

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. 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.

SECTION 16: Other 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.

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