

Safety Data Sheet

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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 Scotch-Weld AF-163-2 Structural Adhesive Film

Product Identification Numbers

XA-0078-0002-3	XA-0078-0005-6	XA-0078-0007-2	XA-0078-0008-0	XA-0078-0009-8
XA-0078-0011-4	XA-0078-0012-2	XA-0078-0015-5	XA-0078-0016-3	XA-0078-0028-8
XA-0078-0030-4	XA-0078-0073-4	XA-0078-0078-3	XA-0078-0112-0	XA-0078-0113-8
7000104218	7100024737	7000104222	7100020915	7100000651
7000104223	7000104224	7000104227	7000104228	7100000483
7000104231	7000104244	7000104247	7000104251	7100000497

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

Identified uses

Structural Film Adhesive.

1.3. Details of the supplier of the safety data sheet

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

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

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

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.

A similar mixture has been tested for skin corrosion/irritation and the test results do not meet the criteria for classification.

A similar mixture has been tested for skin sensitization and the test results do not meet the criteria for classification.

The eye damage/irritation classification is not applied due to the nature of this product (adhesive film).

CLASSIFICATION:

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

For full text of H phrases, see Section 16.

2.2. Label elements

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

Symbols

GHS09 (Environment) |

Pictograms



HAZARD STATEMENTS:

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P273 Avoid release to the environment.

Response:

P391 Collect spillage.

SUPPLEMENTAL INFORMATION:

Supplemental Hazard Statements:

EUH208 Contains Adipohydrazide. | bis-[4-(2,3-epoxipropoxi)phenyl]propane. May produce

an allergic reaction.

60% of the mixture consists of components of unknown acute oral toxicity.

Contains 60% 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)	0%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
EPOXY RESIN REACTION PRODUCT	None	45 - 65	Substance not classified as hazardous
bis-[4-(2,3-epoxipropoxi)phenyl]propane	(CAS-No.) 1675-54-3 (EC-No.) 216-823-5	15 - 40	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Dicyandiamide	(CAS-No.) 461-58-5 (EC-No.) 207-312-8	< 5	Substance not classified as hazardous
N,N"-(4-Methyl-m-phenylene)bis[N',N'-dimethylurea]	(CAS-No.) 17526-94-2 (EC-No.) 241-523-6	< 1.5	Substance not classified as hazardous
PHENOL, 2,2',6-TRIBROMO-4,4'- ISOPROPYLIDENEDI-	(CAS-No.) 6386-73-8 (EC-No.) 228-988-0	< 1	Aquatic Acute 1, H400,M=1 Aquatic Chronic 2, H411
Adipohydrazide	(CAS-No.) 1071-93-8 (EC-No.) 213-999-5	< 1	Aquatic Chronic 2, H411 Skin Sens. 1B, H317

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
		(C >= 5%) Skin Irrit. 2, H315 (C >= 5%) Eye Irrit. 2, H319

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

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If swallowed

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

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition
Aldehydes.	During combustion.
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Hydrogen cyanide.	During combustion.
Ammonia	During combustion.
Oxides of nitrogen.	During combustion.

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. Observe precautions from other sections.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Avoid breathing dust/fume/gas/mist/vapours/spray. 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

Store away from heat. Store away from amines.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

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

Provide ventilated enclosure for heat curing. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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

None required.

Skin/hand protection

No protective gloves required.

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 Solid. **Specific Physical Form:** Film Colour Red Odor Odourless

Odour threshold No data available. Melting point/freezing point No data available. Boiling point/boiling range Not applicable. Flammability (solid, gas) Not classified Flammable Limits(LEL) Not applicable. Flammable Limits(UEL) Not applicable. Flash point No flash point

Not applicable. Autoignition temperature **Decomposition temperature** No data available.

pН substance/mixture is non-soluble (in water)

Kinematic Viscosity Not applicable.

Water solubility Nil

Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNot applicable.Vapour pressureNot applicable.DensityNot applicable.Relative densityNot applicable.Relative Vapour DensityNot applicable.

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic CompoundsNo data available.Evaporation rateNot applicable.Molecular weightNo data available.Percent volatile0 % 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

Heat.

10.5 Incompatible materials

Amines.

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.

Skin contact

Contact with the skin during product use is not expected to result in significant irritation.

Eye contact

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion

Physical Blockage: Signs/symptoms may include cramping, abdominal pain, and constipation.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Dermal	Rat	LD50 > 1,600 mg/kg
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Ingestion	Rat	LD50 > 1,000 mg/kg
Dicyandiamide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Dicyandiamide	Ingestion	Rat	LD50 > 30,000 mg/kg
N,N"-(4-Methyl-m-phenylene)bis[N',N'-dimethylurea]	Dermal	Rat	LD50 > 2,000 mg/kg
N,N"-(4-Methyl-m-phenylene)bis[N',N'-dimethylurea]	Ingestion	Rat	LD50 > 2,000 mg/kg
Adipohydrazide	Ingestion	Mouse	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Overall product	Multiple	No significant irritation
	animal	
	species	
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rabbit	Mild irritant
Dicyandiamide	Human	Minimal irritation
	and	
	animal	
N,N"-(4-Methyl-m-phenylene)bis[N',N'-dimethylurea]	Rabbit	No significant irritation
Adipohydrazide	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rabbit	Moderate irritant
Dicyandiamide	Professio	Mild irritant
	nal	
	judgemen	
	t	
N,N"-(4-Methyl-m-phenylene)bis[N',N'-dimethylurea]	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
Overall product	Guinea pig	Not classified
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Human and animal	Sensitising

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Dicyandiamide	Guinea	Not classified
	pig	
Adipohydrazide	Guinea	Sensitising
	pig	

Respiratory Sensitisation

Name	Species	Value
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
bis-[4-(2,3-epoxipropoxi)phenyl]propane	In vivo	Not mutagenic
bis-[4-(2,3-epoxipropoxi)phenyl]propane	In Vitro	Some positive data exist, but the data are not sufficient for classification
Dicyandiamide	In Vitro	Not mutagenic
Adipohydrazide	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Dicyandiamide	Ingestion	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
Dicyandiamide	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Dicyandiamide	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	44 days
Dicyandiamide	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
bis-[4-(2,3- epoxipropoxi)phenyl]prop ane	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
bis-[4-(2,3- epoxipropoxi)phenyl]prop ane	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks

bis-[4-(2,3-	Ingestion	auditory system	Not classified	Rat	NOAEL	28 days
epoxipropoxi)phenyl]prop		heart endocrine			1,000	
ane		system			mg/kg/day	
		hematopoietic				
		system liver eyes				
		kidney and/or				
		bladder				
Dicyandiamide	Ingestion	kidney and/or	Not classified	Rat	NOAEL	13 weeks
		bladder			6,822	
					mg/kg/day	

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
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Activated sludge	Analogous Compound	3 hours	IC50	>100 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Rainbow trout	Estimated	96 hours	LC50	2 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Water flea	Estimated	48 hours	EC50	1.8 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Green algae	Experimental	72 hours	ErC50	>11 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Green algae	Experimental	72 hours	NOEC	4.2 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Water flea	Experimental	21 days	NOEC	0.3 mg/l
Dicyandiamide	461-58-5	Bluegill	Experimental	96 hours	LC50	>1,000 mg/l
Dicyandiamide	461-58-5	Green algae	Experimental	72 hours	EC50	>1,000 mg/l
Dicyandiamide	461-58-5	Water flea	Experimental	48 hours	EC50	3,177 mg/l
Dicyandiamide	461-58-5	Green algae	Experimental	72 hours	NOEC	310 mg/l
Dicyandiamide	461-58-5	Water flea	Experimental	21 days	NOEC	25 mg/l
Dicyandiamide	461-58-5	Redworm	Experimental	14 days	LC50	>3,200 mg/kg (Dry Weight)

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N,N"-(4-Methyl-m-	17526-94-2	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
phenylene)bis[N',N						1
'-dimethylurea]						
N,N"-(4-Methyl-m-	17526-94-2	Common Carp	Experimental	96 hours	LC50	>100 mg/l
phenylene)bis[N',N		1	1			
'-dimethylurea]						1
N,N"-(4-Methyl-m-	17526-94-2	Green algae	Experimental	72 hours	ErC50	>100 mg/l
phenylene)bis[N',N	17320-74-2	Green aigae	Experimental	/2 Hours	Licso	2 100 mg/1
'-dimethylurea]						1
	17526 04 2	XX / CI	F	40.1	EGGO	100 //
N,N"-(4-Methyl-m-	17526-94-2	Water flea	Experimental	48 hours	EC50	>100 mg/l
phenylene)bis[N',N						1
'-dimethylurea]						
N,N"-(4-Methyl-m-	17526-94-2	Green algae	Experimental	72 hours	NOEC	100 mg/l
phenylene)bis[N',N						1
'-dimethylurea]						1
Adipohydrazide	1071-93-8	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
		1				-,***
Adipohydrazide	1071-93-8	Common Carp	Experimental	96 hours	LC50	>100 mg/l
Adipoliydrazide	10/1-93-6	Common Carp	Experimental	90 Hours	LC30	- 100 mg/1
A 1: 1 1 :1	1071 02 0	0 1	F : (1	72.1	E 050	0.7 //
Adipohydrazide	1071-93-8	Green algae	Experimental	72 hours	ErC50	8.7 mg/l
Adipohydrazide	1071-93-8	Water flea	Experimental	48 hours	EC50	>=106 mg/l
Adipohydrazide	1071-93-8	Green algae	Experimental	72 hours	NOEC	0.22 mg/l
' '			1			
PHENOL, 2,2',6-	6386-73-8	Diatom	Analogous	72 hours	EC50	0.43 mg/l
TRIBROMO-4,4'-	0300-73-0	Diatom	Compound	/2 Hours	LC30	0.45 Mg/1
ISOPROPYLIDEN			Compound			1
EDI-						1
PHENOL, 2,2',6-	6386-73-8	Fathead minnow	A1	96 hours	LC50	0.54 /1
	0380-/3-8	ratnead minnow	Analogous	96 nours	LC30	0.54 mg/l
TRIBROMO-4,4'-			Compound			
ISOPROPYLIDEN						1
EDI-						
PHENOL, 2,2',6-	6386-73-8	Green algae	Analogous	72 hours	EC50	>1.9 mg/l
TRIBROMO-4,4'-			Compound			
ISOPROPYLIDEN			•			1
EDI-						1
PHENOL, 2,2',6-	6386-73-8	Water flea	Analogous	48 hours	EC50	0.96 mg/l
TRIBROMO-4,4'-	0300 73 0	Water frea	Compound	To hours	ECSO	0.50 mg/1
ISOPROPYLIDEN			Compound			1
						1
EDI-	6206 72.0	D d 1 :	1 1	25.1	NOEG	0.16 //
PHENOL, 2,2',6-	6386-73-8	Fathead minnow	Analogous	35 days	NOEC	0.16 mg/l
TRIBROMO-4,4'-			Compound			
ISOPROPYLIDEN						
EDI-						
PHENOL, 2,2',6-	6386-73-8	Green algae	Analogous	72 hours	NOEC	0.5 mg/l
TRIBROMO-4,4'-			Compound			
ISOPROPYLIDEN						1
EDI-						
PHENOL, 2,2',6-	6386-73-8	Water flea	Analogous	21 days	NOEC	0.2 mg/l
	0380-73-8	water riea	Analogous	21 days	INUEC	0.3 mg/l
TRIBROMO-4,4'-			Compound			
ISOPROPYLIDEN						1
EDI-						

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Experimental Biodegradation	28 days	BOD		OECD 301F - Manometric respirometry
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	\ /	OECD 111 Hydrolysis func of pH
Dicyandiamide	461-58-5	Experimental Biodegradation	28 days		0 %removal of DOC	OECD 301E - Modif. OECD Screen
Dicyandiamide	461-58-5	Experimental Aquatic Inherent				OECD 302B Zahn- Wellens/EVPA

D 10 C 1

		Biodegrad.				
Dicyandiamide	461-58-5	Experimental Biodegradation	61 days	CO2 evolution	1.1 %CO2 evolution/THCO2 evolution	OECD 309 Aero Sim Biod Water
N,N"-(4-Methyl-m- phenylene)bis[N',N '-dimethylurea]	17526-94-2	Experimental Aquatic Inherent Biodegrad.	28 days	Dissolv. Organic Carbon Deplet	10 %removal of DOC (does not pass 10-day window)	similar to OECD 302B
N,N"-(4-Methyl-m- phenylene)bis[N',N '-dimethylurea]	17526-94-2	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	33 days (t 1/2)	OECD 111 Hydrolysis func of pH
Adipohydrazide	1071-93-8	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	62.1 %removal of DOC	OECD 301E - Modif. OECD Screen
Adipohydrazide	1071-93-8	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	OECD 111 Hydrolysis func of pH
PHENOL, 2,2',6- TRIBROMO-4,4'- ISOPROPYLIDEN EDI-	6386-73-8	Modeled Biodegradation	28 days	BOD	16 %BOD/ThOD	Catalogic TM

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Experimental Bioconcentration		Log Kow	3.242	OECD 117 log Kow HPLC method
Dicyandiamide	461-58-5	Experimental BCF - Fish	42 days	Bioaccumulation factor	<=3.1	OECD305-Bioconcentration
Dicyandiamide	461-58-5	Experimental Bioconcentration		Log Kow	-0.52	OECD 107 log Kow shke flsk mtd
N,N"-(4-Methyl-m-phenylene)bis[N',N '-dimethylurea]	17526-94-2	Modeled Bioconcentration		Log Kow	0.77	Episuite TM
Adipohydrazide	1071-93-8	Experimental Bioconcentration		Log Kow	-2.7	OECD 107 log Kow shke flsk mtd
PHENOL, 2,2',6- TRIBROMO-4,4'- ISOPROPYLIDEN EDI-	6386-73-8	Modeled Bioconcentration		Bioaccumulation factor	410	Catalogic™
PHENOL, 2,2',6- TRIBROMO-4,4'- ISOPROPYLIDEN EDI-	6386-73-8	Modeled Bioconcentration		Log Kow	6.3	Episuite TM

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
bis-[4-(2,3- epoxipropoxi)pheny l]propane	1675-54-3	Modeled Mobility in Soil	Koc	450 l/kg	Episuite TM
Dicyandiamide	461-58-5	Modeled Mobility in Soil	Koc	9 l/kg	Episuite TM
Adipohydrazide	1071-93-8	Modeled Mobility in Soil	Koc	10 l/kg	Episuite TM
PHENOL, 2,2',6- TRIBROMO-4,4'- ISOPROPYLIDEN EDI-	6386-73-8	Modeled Mobility in Soil	Koc	170,000 l/kg	Episuite TM

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. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. 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	UN3077	UN3077	UN3077
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(EPOXY RESIN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(EPOXY RESIN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(EPOXY RESIN)
14.3 Transport hazard class(es)	9	9	9
14.4 Packing group	III	III	III
14.5 Environmental hazards	Environmentally Hazardous	Not applicable	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.

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ADR Classification Code	M7	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

Ingredient	CAS Nbr	Classification	Regulation
bis-[4-(2,3-epoxipropoxi)phenyl]propane	1675-54-3	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>	CAS Nbr
bis-[4-(2,3-epoxipropoxi)phenyl]propane	1675-54-3

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

Global inventory status

Contact 3M for more 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 new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for t	Qualifying quantity (tonnes) for the application of	
	Lower-tier requirements	Upper-tier requirements	
E2 Hazardous to the Aquatic	200	500	
environment			

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

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Revision information:

GB Section 02: CLP Ingredient table information was deleted.

GB Section 15: Label remarks and EU Detergent information was deleted.

Contains statement for sensitizers information was added.

Label: CLP Precautionary - Prevention information was added.

Label: CLP Precautionary - Response information was added.

Section 02: Label Elements: GB Percent Unknown information was added.

Section 02: Label Elements: GB Percent Unknown information was modified.

List of sensitizers information was added.

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

Section 03: SCL table information was modified.

Section 6: Accidental release personal information information was modified.

Section 7: Precautions safe handling information information was modified.

Section 8: Personal Protection - Skin/hand information information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Carcinogenicity Table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Respiratory Sensitization Table information was modified.

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

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

Section 11: Skin Sensitization Table information was modified.

Section 11: Target Organs - Repeated Table information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Mobility in soil information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

Section 15: Restrictions on manufacture ingredients information information was added.

Section 15: Seveso Hazard Category Text information was added.

Section 15: Seveso Substance Text information was deleted.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.

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.

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