

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

1.1. Product identifier

3M Scotch-Weld Epoxy Adhesive DP105 Clear

Product Identification Numbers

UU-0080-9069-6

7100114638

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

Identified uses

Structural adhesive.

1.3. Details of the supplier of the safety data sheet

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

 Telephone:
 +44 (0)1344 858 000

 E Mail:
 tox.uk@mmm.com

 Website:
 www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

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

05-6783-4, 05-6781-8

TRANSPORTATION INFORMATION

UU-0080-9069-6

Not hazardous for transportation

KIT LABEL

2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Skin Sensitization, Category 1A - Skin Sens. 1A; H317 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

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

WARNING.

Symbols:

GHS07 (Exclamation mark) |

Pictograms



Contains:

Triethylenetetramine; 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane; 4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane; alpha-Hydro-omega-hydroxy-poly[oxy(methyl-1,2-ethanediyl)], ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether

HAZARD STATEMENTS:

H319 Causes serious eye irritation. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P280E Wear protective gloves.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

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

Disposal:

P501 Dispose of contents/container in accordance with applicable local/regional/national/international

Page: 2 of 3

regulations.

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

<=125 ml Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

<=125 ml Precautionary statements

Prevention:

P280E Wear protective gloves.

Response:

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

Revision information:No revision information



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

1.1. Product identifier

3M Scotch-Weld Epoxy Adhesive DP105 Clear, Part A

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

Identified uses

Structural adhesive.

1.3. Details of the supplier of the safety data sheet

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

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

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

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

For full text of H phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

WARNING.

Symbols:

GHS07 (Exclamation mark) |

Pictograms



Ingredients:

Ingredient CAS Nbr EC No. % by Wt

72244-98-5

alpha-Hydro-omega-hydroxy-poly[oxy(methyl-1,2-ethanediyl)], ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether

Triethylenetetramine 112-24-3 203-950-6 < 3

HAZARD STATEMENTS:

H317 May cause an allergic skin reaction.

PRECAUTIONARY STATEMENTS

Prevention:

P280E Wear protective gloves.

Response:

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

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

<=125 ml Hazard statements

H317 May cause an allergic skin reaction.

<=125 ml Precautionary statements

Prevention:

P280E Wear protective gloves.

Response:

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

Notes on labelling

All or part of the classification is based on toxicity test data.

Skin 2, Eye 1 removed based on test data.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	REACH Registration No.	% by Wt	Classification
alpha-Hydro-omega-hydroxy-poly[oxy(methyl-1,2-ethanediyl)],	72244-98-5		90 - 99	Skin Sens. 1B, H317

90 - 99

ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-					
mercaptopropyl ether					
Propyleneoxide modified polyamine	Trade		1 -	10	Substance not classified as
	Secret				hazardous
Triethylenetetramine	112-24-3	203-950-6	< 3		Acute Tox. 3, H311; Skin Corr. 1B, H314; Skin Sens. 1A, H317; Aquatic Chronic 3, H412
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	221-220-5	< 3		Skin Corr. 1A, H314 Acute Tox. 3, H331; Acute Tox. 3, H311; Acute Tox. 4, H302

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

No need for first aid is anticipated.

Skin contact

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

Eye contact

No need for first aid is anticipated.

If swallowed

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

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

See Section 11.1 Information on toxicological effects

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

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

Hazardous Decomposition or By-Products

SubstanceConditionCarbon monoxide.During combustion.Carbon dioxide.During combustion.Oxides of sulphur.During combustion.

Toxic vapour, gas, particulate.

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. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

Avoid breathing 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.

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

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

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

None required.

Skin/hand protection

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

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

Material	Thickness (mm)	Breakthrough Time
Butyl rubber.	0.5	> 8 hours
Neoprene.	0.5	> 8 hours

The glove data presented are based on the substance driving dermal toxicity and the conditions present at the time of testing. Breakthrough time may be altered when the glove is subjected to use conditions that place additional stress on the glove.

Applicable Norms/Standards Use gloves tested to EN 374

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid.

Appearance/Odourclear, mercaptan odourOdour thresholdNo data available.pHNot applicable.Boiling point/boiling range>=93.3 °CMelting pointNot applicable.Flammability (solid, gas)Not applicable.Explosive propertiesNot classifiedOxidising propertiesNot classified

Flash point >=93.3 °C [Test Method:Closed Cup]

Autoignition temperatureNo data available.Flammable Limits(LEL)No data available.Flammable Limits(UEL)No data available.Vapour pressure<=13.3 Pa</th>

Relative density 1.15 [*Ref Std*:WATER=1]

Water solubility Nil

Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Evaporation rateNo data available.Vapour densityNo data available.Decomposition temperatureNo data available.

Viscosity 8,000 - 16,000 mPa-s [@ 22.8 °C]

Density 1.15 g/ml

9.2. Other information

EU Volatile Organic Compounds

No data available.

No data available.

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 is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

<u>Substance</u> <u>Condition</u>

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation

No known health effects.

Skin contact

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

Eve contact

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

Ingestion

May be harmful if swallowed.

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

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- Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
alpha-Hydro-omega-hydroxy-poly[oxy(methyl-1,2-ethanediyl)], ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether	Dermal	Rabbit	LD50 > 10,200 mg/kg
alpha-Hydro-omega-hydroxy-poly[oxy(methyl-1,2-ethanediyl)], ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2- hydroxy-3-mercaptopropyl ether	Ingestion	Rat	LD50 2,600 mg/kg
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	Dermal	Rabbit	LD50 238 mg/kg
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	Inhalation- Vapour (4 hours)	Rat	LC50 2.2 mg/l
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	Ingestion	Rat	LD50 570 mg/kg
Triethylenetetramine	Dermal	Rabbit	LD50 550 mg/kg
Triethylenetetramine	Ingestion	Rat	LD50 2,500 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Overall product	Rabbit	Mild irritant
alpha-Hydro-omega-hydroxy-poly[oxy(methyl-1,2-ethanediyl)], ether with 2,2-	Rabbit	No significant irritation
bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether		
Triethylenetetramine	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Overall product	Rabbit	Mild irritant
alpha-Hydro-omega-hydroxy-poly[oxy(methyl-1,2-ethanediyl)], ether with 2,2-	Rabbit	Mild irritant
bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether		
Triethylenetetramine	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
alpha-Hydro-omega-hydroxy-poly[oxy(methyl-1,2-ethanediyl)], ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether	Mouse	Sensitising
Triethylenetetramine	Guinea pig	Sensitising

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
alpha-Hydro-omega-hydroxy-poly[oxy(methyl-1,2-ethanediyl)], ether with 2,2-	In Vitro	Not mutagenic
bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether		-

Carcinogenicity

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

Reproductive Toxicity

Reproductive and/or Developmental Effects

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

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
alpha-Hydro-omega- hydroxy-poly[oxy(methyl- 1,2-ethanediyl)], ether with 2,2-bis(hydroxymethyl)- 1,3-propanediol (4:1), 2- hydroxy-3-mercaptopropyl ether	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 75 mg/kg/day	90 days
alpha-Hydro-omega- hydroxy-poly[oxy(methyl- 1,2-ethanediyl)], ether with 2,2-bis(hydroxymethyl)- 1,3-propanediol (4:1), 2- hydroxy-3-mercaptopropyl ether	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 250 mg/kg/day	90 days
alpha-Hydro-omega- hydroxy-poly[oxy(methyl- 1,2-ethanediyl)], ether with 2,2-bis(hydroxymethyl)- 1,3-propanediol (4:1), 2- hydroxy-3-mercaptopropyl ether	Ingestion	endocrine system heart skin immune system nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days

Aspiration Hazard

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

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

SECTION 12: Ecological information

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

12.1. Toxicity

No product test data available.

Material	CAS#	Organism	Туре	Exposure	Test endpoint	Test result
alpha-Hydro-omega- hydroxy- poly[oxy(methyl-1,2- ethanediyl)], ether with 2,2- bis(hydroxymethyl)- 1,3-propanediol (4:1), 2-hydroxy-3-	72244-98-5	Organism	Data not available or insufficient for classification	Zaposure	rest enapome	restresure
mercaptopropyl ether Propyleneoxide modified polyamine	Trade Secret		Data not available or insufficient for classification			
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)		Green algae	Experimental	72 hours	EC50	24 mg/l
N,N,N',N'-Tetramethyl- 2,2'-oxybis(ethylamine)		Zebra Fish	Experimental	96 hours	LC50	131.2 mg/l
N,N,N',N'-Tetramethyl- 2,2'-oxybis(ethylamine)	3033-62-3	Water flea	Experimental	48 hours	EC50	102 mg/l
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Green algae	Experimental	72 hours	Effect Concentration 10%	5 mg/l
Triethylenetetramine	112-24-3	Green algae	Experimental	72 hours	EC50	20 mg/l
Triethylenetetramine	112-24-3	Water flea	Experimental	48 hours	EC50	31.1 mg/l
Triethylenetetramine	112-24-3	Guppy	Experimental	96 hours	LC50	570 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
alpha-Hydro-omega- hydroxy-poly[oxy(methyl- 1,2-ethanediyl)], ether with 2,2-bis(hydroxymethyl)-1,3- propanediol (4:1), 2- hydroxy-3-mercaptopropyl ether	72244-98-5	Data not availbl- insufficient			N/A	
Propyleneoxide modified polyamine	Trade Secret	Data not availbl- insufficient			N/A	
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Experimental Biodegradation	28 days	BOD	0 % BOD/ThBOD	OECD 301C - MITI test (I)
Triethylenetetramine	112-24-3	Experimental Biodegradation	20 days	BOD	0 % weight	OECD 301D - Closed bottle test

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
alpha-Hydro-omega- hydroxy-poly[oxy(methyl- 1,2-ethanediyl)], ether with 2,2-bis(hydroxymethyl)- 1,3-propanediol (4:1), 2- hydroxy-3-mercaptopropyl ether	72244-98-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Propyleneoxide modified polyamine	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
N,N,N',N'-Tetramethyl- 2,2'-oxybis(ethylamine)	3033-62-3	Experimental Bioconcentration		Log Kow	-0.339	Other methods
Triethylenetetramine	112-24-3	Experimental BCF- Carp	42 days	Bioaccumulation factor	<5.0	OECD 305E - Bioaccumulation flow- through fish test

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

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

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

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

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

EU waste code (product as sold)

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

20 01 27* Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

ADR/IMDG/IATA: Not restricted for transport.

SECTION 15: Regulatory information

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

Global inventory status

Contact 3M for more information. The components of this 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 Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). 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 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. 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.

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.

SECTION 16: Other information

List of relevant H statements

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H412	Harmful to aquatic life with long lasting effects.

Revision information:

Section 6: Accidental release environmental information information was modified.

Section 12: Component ecotoxicity information information was modified.

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

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

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



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

1.1. Product identifier

3M Scotch-Weld Epoxy Adhesive DP105 Clear, Part B

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

Identified uses

Structural adhesive.

1.3. Details of the supplier of the safety data sheet

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

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

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

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

Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

WARNING.

Symbols:

GHS07 (Exclamation mark) |

Pictograms



Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	30583-72-3	500-070-7	70 - 80
4,4'-ISOPROPYLIDENEDIPHENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	25068-38-6	500-033-5	20 - 24

HAZARD STATEMENTS:

H319 Causes serious eye irritation. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P280E Wear protective gloves.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

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

Disposal:

P501 Dispose of contents/container in accordance with applicable local/regional/national/international

regulations.

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

<=125 ml Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

<=125 ml Precautionary statements

Prevention:

P280E Wear protective gloves.

Response:

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

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EC No.	REACH	% by Wt	Classification
			Registration		
			No.		
4,4'-Isopropylidenedicyclohexanol,	30583-72-3	500-070-7		70 - 80	Skin Sens. 1, H317; Aquatic
oligomeric reaction products with 1-					Chronic 3, H412
chloro-2,3-epoxypropane					
4,4'-ISOPROPYLIDENEDIPHENOL-	25068-38-6	500-033-5	01-	20 - 24	Skin Irrit. 2, H315; Eye Irrit.
EPICHLOROHYDRIN POLYMER			2119456619-		2, H319; Skin Sens. 1,
(MW unknown or <=700)			26		H317; Aquatic Chronic 2,
					H411
[3-(2,3-Epoxypropoxy)propyl]	2530-83-8	219-784-2	01-	0.5 -	Eye Dam. 1, H318
trimethoxysilane			2119513212-	1.5	
-			58		

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

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

<u>Substance</u>	Condition
Aldehydes.	During combustion.
Hydrocarbons.	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Hydrogen Chloride	During combustion.
Ketones.	During combustion.
Toxic vapour, gas, particulate.	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. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

Avoid breathing 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.)

7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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.

Derived no effect level (DNEL)

Ingredient [DN]	Degradation	Population	Human exposure	DNEL		
F2 (2.2	Product	*** 1	pattern			
[3-(2,3-		Worker	Dermal, Long-term	21 mg/kg bw/d		
Epoxypropoxy)propyl]			exposure (8 hours),			
trimethoxysilane			Systemic effects			
[3-(2,3-		Worker	Dermal, Short-term	21 mg/kg bw/d		
Epoxypropoxy)propyl]			exposure, Systemic			
trimethoxysilane			effects			
[3-(2,3-		Worker	Inhalation, Long-term	147 mg/m ³		
Epoxypropoxy)propyl]			exposure (8 hours),			
trimethoxysilane			Systemic effects			
[3-(2,3-		Worker	Inhalation, Short-term	147 mg/m³		
Epoxypropoxy)propyl]			exposure, Systemic			
trimethoxysilane			effects			
4,4'-		Worker	Dermal, Long-term	8.3 mg/kg bw/d		
ISOPROPYLIDENEDIPH			exposure (8 hours),			
ENOL-			Systemic effects			
EPICHLOROHYDRIN						
POLYMER (MW						
unknown or <=700)						
4,4'-		Worker	Dermal, Short-term	8.3 mg/kg		
ISOPROPYLIDENEDIPH			exposure, Systemic			
ENOL-			effects			
EPICHLOROHYDRIN						
POLYMER (MW						
unknown or <=700)						
4,4'-		Worker	Inhalation, Long-term	12.3 mg/m³		
ISOPROPYLIDENEDIPH			exposure (8 hours),			
ENOL-			Systemic effects			
EPICHLOROHYDRIN						
POLYMER (MW						
unknown or <=700)						
4,4'-		Worker	Inhalation, Short-term	12.3 mg/m³		
ISOPROPYLIDENEDIPH			exposure, Systemic			
ENOL-			effects			
EPICHLOROHYDRIN						
POLYMER (MW						
unknown or <=700)						

Predicted no effect concentrations (PNEC)

Ingredient	Degradation Product	Compartment	PNEC
[3-(2,3- Epoxypropoxy)propyl]		Agricultural soil	0.13 mg/kg d.w.

trimethoxysilane [3-(2,3- Epoxypropoxy)propyl] trimethoxysilane [3-(2,3- Epoxypropoxy)propyl] trimethoxysilane [3-(2,3-
Epoxypropoxy)propyl] trimethoxysilane [3-(2,3- Epoxypropoxy)propyl] trimethoxysilane
trimethoxysilane [3-(2,3- Epoxypropoxy)propyl] trimethoxysilane
[3-(2,3- Epoxypropoxy)propyl] trimethoxysilane
Epoxypropoxy)propyl] trimethoxysilane
trimethoxysilane
1 [3 (2,3
Epoxypropoxy)propyl]
trimethoxysilane
[3-(2,3-
Epoxypropoxy)propyl]
trimethoxysilane
[3-(2,3-
Epoxypropoxy)propyl]
trimethoxysilane
4,4'-
ISOPROPYLIDENEDIPH
ENOL-
EPICHLOROHYDRIN
POLYMER (MW unknown
or <=700)
4,4'-
ISOPROPYLIDENEDIPH
ENOL-
EPICHLOROHYDRIN
,
EPICHLOROHYDRIN
,
or <=700)
or <=700) 4,4'-
4,4'-
4,4'- ISOPROPYLIDENEDIPH
4,4'- ISOPROPYLIDENEDIPH ENOL-
4,4'- ISOPROPYLIDENEDIPH ENOL- EPICHLOROHYDRIN
4,4'- ISOPROPYLIDENEDIPH ENOL- EPICHLOROHYDRIN POLYMER (MW unknown
4,4'- ISOPROPYLIDENEDIPH ENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)
4,4'- ISOPROPYLIDENEDIPH ENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700) 4,4'-
4,4'- ISOPROPYLIDENEDIPH ENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700) 4,4'- ISOPROPYLIDENEDIPH
4,4'- ISOPROPYLIDENEDIPH ENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700) 4,4'- ISOPROPYLIDENEDIPH ENOL-
POLYMER (MW unknown or <=700) 4,4'- ISOPROPYLIDENEDIPH ENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700) 4,4'- ISOPROPYLIDENEDIPH ENOL-

8.2. Exposure controls

In addition, refer to the annex for more information.

8.2.1. Engineering controls

No engineering controls required.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Indirect vented goggles.

Applicable Norms/Standards

Use eye protection conforming to EN 166

Skin/hand protection

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

MaterialThickness (mm)Breakthrough TimePolymer laminateNo data availableNo data available

Applicable Norms/Standards Use gloves tested to EN 374

Respiratory protection

None required.

8.2.3. Environmental exposure controls

Refer to Annex

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid.

Specific Physical Form: Viscous Liquid

Appearance/Odourclear, slight epoxy odourOdour thresholdNo data available.pHNot applicable.

Boiling point/boiling range>=115.6 °CMelting pointNot applicable.Flammability (solid, gas)Not applicable.Explosive propertiesNot classifiedOxidising propertiesNot classified

Flash point >=115.6 °C [Test Method:Pensky-Martens Closed Cup]

Autoignition temperatureNo data available.Flammable Limits(LEL)No data available.Flammable Limits(UEL)No data available.

Vapour pressure <=186,158.4 Pa [@ 55 °C] **Relative density** 1.11 [*Ref Std:* WATER=1]

Water solubility Nil

Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Evaporation rateNo data available.Vapour densityNo data available.Decomposition temperatureNo data available.Viscosity1,000 - 5,000 mPa-s

Density 1.11 g/ml

9.2. Other information

EU Volatile Organic Compounds

No data available.

No data available.

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 is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

10.5 Incompatible materials

Strong acids.

Strong oxidising agents.

10.6 Hazardous decomposition products

<u>Substance</u> <u>Condition</u>

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation

No health effects are expected.

Skin contact

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

Eye contact

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

Ingestion

May be harmful if swallowed.

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

Toxicological Data

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	Dermal	Rat	LD50 > 1,600 mg/kg
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	Ingestion	Rat	LD50 > 1,000 mg/kg
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	Dermal	Rabbit	LD50 4,000 mg/kg
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 5.3 mg/l
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	Ingestion	Rat	LD50 7,010 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	Rabbit	Mild irritant
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW	Rabbit	Moderate irritant
unknown or <=700)		
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW	Human	Sensitising
unknown or <=700)	and	
	animal	
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	Guinea	Not classified
	pig	

Respiratory Sensitisation

Name	Species	Value
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW	In vivo	Not mutagenic
unknown or $\ll 700$)		
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW	In Vitro	Some positive data exist, but the data are not
unknown or <=700)		sufficient for classification
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	In vivo	Not mutagenic
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	In Vitro	Some positive data exist, but the data are not
		sufficient for classification

Carcinogenicity

Name	Route	Species	Value
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN	Dermal	Mouse	Some positive data exist, but the data are not
POLYMER (MW unknown or <=700)			sufficient for classification
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	Dermal	Mouse	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
4,4'-ISOPROPYLIDENEDIPHENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-ISOPROPYLIDENEDIPHENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-ISOPROPYLIDENEDIPHENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
4,4'-ISOPROPYLIDENEDIPHENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	1 generation
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	1 generation
[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane	Ingestion	Not classified for development	Rat	NOAEL 3,000 mg/kg/day	during organogenesis

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
4,4'- ISOPROPYLIDENEDIPH ENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
4,4'- ISOPROPYLIDENEDIPH ENOL- EPICHLOROHYDRIN POLYMER (MW	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks

unknown or <=700)						
4,4'- ISOPROPYLIDENEDIPH ENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	Ingestion	auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
[3-(2,3- Epoxypropoxy)propyl] trimethoxysilane	Ingestion	heart endocrine system bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days

Aspiration Hazard

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

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

SECTION 12: Ecological information

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

12.1. Toxicity

No product test data available.

Material	CAS#	Organism	Type	Exposure	Test endpoint	Test result
4,4'-	30583-72-3	Green algae	Experimental	72 hours	EC50	>100 mg/l
Isopropylidenedicycloh						
exanol, oligomeric						
reaction products with						
1-chloro-2,3-						
epoxypropane						
4,4'-	30583-72-3	Rainbow trout	Experimental	96 hours	LC50	11.5 mg/l
Isopropylidenedicycloh						
exanol, oligomeric						
reaction products with						
1-chloro-2,3-						
epoxypropane						
4,4'-	25068-38-6	Water flea	Estimated	48 hours	LC50	0.95 mg/l
ISOPROPYLIDENEDI						
PHENOL-						
EPICHLOROHYDRIN						
POLYMER (MW						
unknown or <=700)						
4,4'-	25068-38-6	Rainbow trout	Experimental	96 hours	LC50	1.2 mg/l
ISOPROPYLIDENEDI						
PHENOL-						
EPICHLOROHYDRIN						
POLYMER (MW						
unknown or <=700)						
4,4'-	25068-38-6	Green Algae	Experimental	72 hours	EC50	>11 mg/l
ISOPROPYLIDENEDI						
PHENOL-						

EPICHLOROHYDRIN						
POLYMER (MW						
unknown or <=700)						
4,4'-	25068-38-6	Green Algae	Experimental	72 hours	NOEC	4.2 mg/l
ISOPROPYLIDENEDI	25000 50 0	Green ringue	Experimentar	72 Hours	NOLE	T.2 IIIg/1
PHENOL-						
EPICHLOROHYDRIN						
POLYMER (MW						
unknown or <=700)						
4,4'-	25068-38-6	Water flea	Experimental	21 days	NOEC	0.3 mg/l
ISOPROPYLIDENEDI			-			
PHENOL-						
EPICHLOROHYDRIN						
POLYMER (MW						
unknown or <=700)						
[3-(2,3-	2530-83-8	Common Carp	Experimental	96 hours	LC50	55 mg/l
Epoxypropoxy)propyl]						
trimethoxysilane						
[3-(2,3-	2530-83-8	Crustacea other	Experimental	48 hours	LC50	324 mg/l
Epoxypropoxy)propyl]						
trimethoxysilane						
[3-(2,3-	2530-83-8	Green algae	Experimental	96 hours	EC50	350 mg/l
Epoxypropoxy)propyl]						
trimethoxysilane						
[3-(2,3-	2530-83-8	Water flea	Experimental	21 days	NOEC	>=100 mg/l
Epoxypropoxy)propyl]						
trimethoxysilane						
[3-(2,3-	2530-83-8	Green Algae	Experimental	96 hours	NOEC	130 mg/l
Epoxypropoxy)propyl]						
trimethoxysilane						

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
4,4'- Isopropylidenedicyclohexan ol, oligomeric reaction products with 1-chloro-2,3- epoxypropane	30583-72-3	Experimental Biodegradation	28 days	BOD	0.1 % BOD/ThBOD	OECD 301D - Closed bottle test
4,4'- ISOPROPYLIDENEDIPHE NOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	25068-38-6	Estimated Hydrolysis		Hydrolytic half-life	<2 days (t 1/2)	Other methods
4,4'- ISOPROPYLIDENEDIPHE NOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	25068-38-6	Experimental Biodegradation	28 days	BOD	0 % BOD/ThBOD	OECD 301C - MITI test (I)
[3-(2,3- Epoxypropoxy)propyl] trimethoxysilane	2530-83-8	Experimental Hydrolysis		Hydrolytic half-life	6.5 hours (t 1/2)	Other methods
[3-(2,3- Epoxypropoxy)propyl] trimethoxysilane	2530-83-8	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	37 % weight	Other methods

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
4,4'-	30583-72-3	Experimental		Log Kow	3.84	Other methods
Isopropylidenedicyclohexa		Bioconcentration				
nol, oligomeric reaction						
products with 1-chloro-2,3-						
epoxypropane						

4,4'-	25068-38-6	Experimental BCF-	28 days	Bioaccumulation	<=42	OECD 305E -
ISOPROPYLIDENEDIPH		Carp		factor		Bioaccumulation flow-
ENOL-						through fish test
EPICHLOROHYDRIN						
POLYMER (MW unknown						
or <=700)						
[3-(2,3-	2530-83-8	Data not available	N/A	N/A	N/A	N/A
Epoxypropoxy)propyl]		or insufficient for				
trimethoxysilane		classification				

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

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

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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
20 01 27* Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

ADR/IMDG/IATA: Not restricted for transport.

SECTION 15: Regulatory information

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

Global inventory status

Contact 3M for more information. The components of this 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 Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). 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 material are in compliance with the provisions of Philippines RA 6969 requirements. 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. 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.

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information

List of relevant H statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Revision information:

Formulation: Section 16: Annex information was modified.

Industrial Application of Adhesives: Section 16: Annex information was deleted.

Industrial Use of Adhesives: Section 16: Annex information was added.

Section 6: Accidental release environmental information information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 13: 13.1. Waste disposal note information was modified.

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

Annex

1. Title	
Substance identification	4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW unknown or <=700); EC No. 500-033-5; CAS Nbr 25068-38-6;
Exposure Scenario Name	Formulation
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing) ERC 02 -Formulation into mixture
Processes, tasks and activities covered	Transfer of substances/mixtures into small containers e.g. tubes , bottles or small reservoirs.
2. Operational conditions and risk mana	gement measures
Operating Conditions	Physical state:Liquid. General operating conditions: Duration of use: 8 hours/day; Emission days per year: <= 225 days per year;
Risk management measures	Under the operational conditions described above the following risk management measures apply:

	General risk management measures: Human health: Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Refer to Section 8 of the SDS for specific glove material.; Environmental: None needed;
Waste management measures 3. Prediction of exposure	Do not apply industrial sludge to natural soils; Prevent leaks and prevent soil / water pollution caused by leaks; Sludge should be incinerated, contained or reclaimed;
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

1. Title		
Substance identification	[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane; EC No. 219-784-2; CAS Nbr 2530-83-8;	
Exposure Scenario Name	Formulation	
Lifecycle Stage	Use at industrial sites	
Contributing activities	PROC 05 -Mixing or blending in batch processes PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC 09 -Transfer of substance or mixture into small containers (dedicated	
	filling line, including weighing)	
	ERC 02 -Formulation into mixture	
Processes, tasks and activities covered	Mixing or blending of solid or liquid materials. Transfer of substance/mixture with dedicated engineering controls.	
2. Operational conditions and risk mana		
Operating Conditions	Physical state:Liquid. General operating conditions: Duration of use: 8 hours/day; Emission days per year: <= 200 days per year; Indoor use;	
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Face shield; Goggles - Chemical resistant; Local exhaust ventilation; Protective Clothing - Apron; Protective Gloves - Butyl Rubber; Protective Gloves - Fluoroelastomer (Viton); Protective Gloves - Polyvinyl Alcohol (PVA); Environmental: None needed;	
Waste management measures	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:	
3. Prediction of exposure		
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.	

1. Title	
Substance identification	[3-(2,3-Epoxypropoxy)propyl] trimethoxysilane;

	EC No. 219-784-2;
	CAS Nbr 2530-83-8;
	CAS NOT 2550-05-8,
Exposure Scenario Name	Industrial Mixing and Application
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 08b -Transfer of substance or mixture (charging and discharging) at
Contributing activities	dedicated facilities
	PROC 13 -Treatment of articles by dipping and pouring
D (1 1 (1))	ERC 05 -Use at industrial site leading to inclusion into/onto article
Processes, tasks and activities covered	Application of product. Transfer of substance/mixture with dedicated engineering
	controls. Transfer of substances/mixtures into small containers e.g. tubes, bottles
	or small reservoirs.
2. Operational conditions and risk man	<u> </u>
Operating Conditions	Physical state:Liquid.
	General operating conditions:
	Duration of use: 8 hours/day;
	Emission days per year: <= 200 days per year;
	Indoor use;
	Task: Transferring Material;
	Duration of use: 4 hours/day;
Risk management measures	Under the operational conditions described above the following risk management
	measures apply:
	General risk management measures:
	Human health:
	Face shield:
	Goggles - Chemical resistant;
	Protective Clothing - Apron;
	Protective Gloves - Butyl Rubber;
	Protective Gloves - Fluoroelastomer (Viton);
	Protective Gloves - Polyvinyl Alcohol (PVA);
	Environmental:
	None needed;
	None needed,
Waste management measures	Send to a municipal sewage treatment plant;
3. Prediction of exposure	
3. Prediction of exposure Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and

1. Title		
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW		
unknown or <=700);		
EC No. 500-033-5;		
CAS Nbr 25068-38-6;		
Industrial Use of Adhesives		
Use at industrial sites		
PROC 08a -Transfer of substance or mixture (charging and discharging) at non-		
dedicated facilities		
PROC 13 -Treatment of articles by dipping and pouring		
ERC 05 -Use at industrial site leading to inclusion into/onto article		
Application of product with applicator gun. Transfers without dedicated controls,		
including loading, filling, dumping, bagging.		
2. Operational conditions and risk management measures		
Physical state:Liquid.		
General operating conditions:		
Duration of use: 8 hours/day;		
Emission days per year: 220 days/year;		

Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Refer to Section 8 of the SDS for specific glove material.; Environmental: None needed;
Waste management measures	Do not apply industrial sludge to natural soils; Prevent discharge of undissolved substance to or recover from wastewater; Prevent leaks and prevent soil / water pollution caused by leaks; Sludge should be incinerated, contained or reclaimed;
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

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