

## **Safety Data Sheet**

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Document group:29-9033-1Version number:1.00Revision date:02/05/2023Supersedes date:Initial issue.

**Transportation version number:** 

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<sup>TM</sup> Scotch-Weld<sup>TM</sup> Epoxy Structural Adhesive DP-100 KIT

#### **Product Identification Numbers**

UU-0101-3126-4

7100200484

## 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 tox.uk@mmm.com

Website: www.3M.com/uk

## **EU Member State Responsible Contact**

Address: 3M Ireland Ltd, The Iveagh Building, Carrickmines Park, Dublin D18 X015.

Telephone: +353 1 280 3555

## 1.4. Emergency telephone number

+44 (0)1344 858 000 or call your doctor.

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:

29-8932-5, 29-8950-7

## TRANSPORTATION INFORMATION

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

## KIT LABEL

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

#### **CLASSIFICATION:**

Skin Corrosion/Irritation, Category 1C - Skin Corr. 1C; H314 Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318 Skin Sensitization, Category 1 - Skin Sens. 1; H317

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

For full text of H phrases, see Section 16.

#### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

## SIGNAL WORD

DANGER.

#### **Symbols**

GHS05 (Corrosion) |GHS07 (Exclamation mark) |GHS09 (Environment) |

## **Pictograms**



#### Contains:

2,4,6-tris(dimethylaminomethyl)phenol.; Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide; bis-[4-(2,3-epoxipropoxi)phenyl]propane

#### **HAZARD STATEMENTS:**

H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

**Prevention:** 

P260A Do not breathe vapours.

P280D Wear protective gloves, protective clothing, and eye/face protection.

**Response:** 

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

shower.

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

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.

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## 3MTM Scotch-WeldTM Epoxy Structural Adhesive DP-100 KIT

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

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

## <=125 ml Hazard statements

H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.

## <=125 ml Precautionary statements

**Prevention:** 

P260A Do not breathe vapours.

P280D Wear protective gloves, protective clothing, and eye/face protection.

**Response:** 

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

or shower.

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

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

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

#### **Revision information:**

No revision information



## **Safety Data Sheet**

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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<sup>TM</sup> Scotch-Weld<sup>TM</sup> Epoxy Structural Adhesive DP-100: 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

## **EU Member State Responsible Contact**

Address: 3M Ireland Ltd, The Iveagh Building, Carrickmines Park, Dublin D18 X015.

Telephone: +353 1 280 3555

#### 1.4. Emergency telephone number

+44 (0)1344 858 000 or call your doctor.

## **SECTION 2: Hazard identification**

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

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

## **CLASSIFICATION:**

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

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

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

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

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For full text of H phrases, see Section 16.

## 2.2. Label elements

## CLP REGULATION (EC) No 1272/2008

#### SIGNAL WORD

WARNING.

#### **Symbols**

GHS07 (Exclamation mark) |GHS09 (Environment) |

**Pictograms** 



**Ingredients:** 

 Ingredient
 CAS Nbr
 EC No.
 % by Wt

 bis-[4-(2,3-epoxipropoxi)phenyl]propane
 1675-54-3
 216-823-5
 80 - 100

#### **HAZARD STATEMENTS:**

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

## PRECAUTIONARY STATEMENTS

**Prevention:** 

P273 Avoid release to the environment.

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.

<=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.

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

Ingredient	Identifier(s)	%	Classification according to Regulation	
			(EC) No. 1272/2008 [CLP]	
bis-[4-(2,3-epoxipropoxi)phenyl]propane	(CAS-No.) 1675-54-3	80 - 100	Skin Irrit. 2, H315	
	(EC-No.) 216-823-5		Eye Irrit. 2, H319	
	(REACH-No.) 01-		Skin Sens. 1, H317	
	2119456619-26		Aquatic Chronic 2, H411	

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

## 3.2. Mixtures

Not applicable

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### Inhalation

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

#### Skin contact

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

## Eye contact

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

#### If swallowed

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

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

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
Aldehydes.
Carbon monoxide
Carbon dioxide.

## Condition

During combustion. During combustion. 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. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

## 6.3. Methods and material for containment and cleaning up

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

## 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Avoid breathing of vapours created during the cure cycle. For industrial/occupational use only. Not for consumer sale or use. 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 heat. Store away from strong bases. Store away from oxidising agents. Store away from amines.

## 3M™ Scotch-Weld™ Epoxy Structural Adhesive DP-100: part B

## 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	Degradation	Population	Human exposure	DNEL
	Product		pattern	
bis-[4-(2,3-		Worker	Dermal, Long-term	8.3 mg/kg bw/d
epoxipropoxi)phenyl]prop			exposure (8 hours),	
ane			Systemic effects	
bis-[4-(2,3-		Worker	Dermal, Short-term	8.3 mg/kg bw/d
epoxipropoxi)phenyl]prop			exposure, Systemic	
ane			effects	
bis-[4-(2,3-		Worker	Inhalation, Long-term	12.3 mg/m <sup>3</sup>
epoxipropoxi)phenyl]prop			exposure (8 hours),	_
ane			Systemic effects	
bis-[4-(2,3-		Worker	Inhalation, Short-term	12.3 mg/m <sup>3</sup>
epoxipropoxi)phenyl]prop			exposure, Systemic	
ane			effects	

## **Predicted no effect concentrations (PNEC)**

Ingredient	Degradation	Compartment	PNEC
	Product		
bis-[4-(2,3-		Freshwater	0.003 mg/l
epoxipropoxi)phenyl]propa			
ne			
bis-[4-(2,3-		Freshwater sediments	0.5 mg/kg d.w.
epoxipropoxi)phenyl]propa			
ne			
bis-[4-(2,3-		Intermittent releases to water	0.013 mg/l
epoxipropoxi)phenyl]propa			
ne			
bis-[4-(2,3-		Marine water	0.0003 mg/l
epoxipropoxi)phenyl]propa			
ne			
bis-[4-(2,3-		Marine water sediments	0.5 mg/kg d.w.
epoxipropoxi)phenyl]propa			
ne			
bis-[4-(2,3-		Sewage Treatment Plant	10 mg/l
epoxipropoxi)phenyl]propa			
ne			

## 8.2. Exposure controls

In addition, refer to the annex for more information.

#### 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)

#### Eve/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:

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

Applicable Norms/Standards Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

## Respiratory protection

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

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

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

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136: filter type A

## 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: Yellow liquid Colour Yellow Odor Slight Odor **Odour threshold** No data available. Melting point/freezing point Not applicable. >=200 °C

Boiling point/boiling range Flammability (solid, gas) Not applicable. Flammable Limits(LEL) Not applicable. Flammable Limits(UEL) Not applicable.

>=150 °C [Test Method:Closed Cup] Flash point

**Autoignition temperature** No data available. **Decomposition temperature** No data available. pН

**Kinematic Viscosity** 11,207 mm<sup>2</sup>/sec Water solubility No data available. Solubility- non-water No data available. Partition coefficient: n-octanol/water No data available. Vapour pressure Not applicable. 1.16 g/cm3 **Density** 

Relative density 1.16 [*Ref Std:* WATER=1]

**Relative Vapour Density** Not applicable.

#### 9.2. Other information

9.2.2 Other safety characteristics

**EU Volatile Organic Compounds** 0.1 % weight No data available. **Evaporation rate** Percent volatile 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

Amines.

Strong bases.

Strong oxidising agents.

## 10.6 Hazardous decomposition products

Condition **Substance** 

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 internal hazard assessments.

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

## 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.

#### **Eve contact**

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### Ingestion

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

#### **Toxicological Data**

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

## **Acute Toxicity**

reute 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)phenyllpropane	Ingestion	Rat	LD50 > 1.000  mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

ĺ	Name	Species	Value
ſ	bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rabbit	Mild irritant

## **Serious Eye Damage/Irritation**

Name	Species	Value
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rabbit	Moderate irritant

#### Skin Sensitisation

Skiii Schsitisation	Kiii Schsitisation			
Name	Species	Value		
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Human and animal	Sensitising		

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## 3M™ Scotch-Weld™ Epoxy Structural Adhesive DP-100: part B

**Respiratory Sensitisation** 

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

**Germ Cell Mutagenicity** 

our management		
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

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

## **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

## 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- epoxipropoxi)phenyl]prop ane	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

## **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 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
bis-[4-(2,3- epoxipropoxi)phenyl]pr opane	1675-54-3	Activated sludge	Analogous Compound	3 hours	IC50	>100 mg/l
bis-[4-(2,3- epoxipropoxi)phenyl]pr opane	1675-54-3	Rainbow trout	Estimated	96 hours	LC50	2 mg/l
bis-[4-(2,3- epoxipropoxi)phenyl]pr opane	1675-54-3	Water flea	Estimated	48 hours	EC50	1.8 mg/l
bis-[4-(2,3- epoxipropoxi)phenyl]pr opane	1675-54-3	Green algae	Experimental	72 hours	ErC50	>11 mg/l
bis-[4-(2,3- epoxipropoxi)phenyl]pr opane	1675-54-3	Green algae	Experimental	72 hours	NOEC	4.2 mg/l
bis-[4-(2,3- epoxipropoxi)phenyl]pr opane	1675-54-3	Water flea	Experimental	21 days	NOEC	0.3 mg/l

## 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
bis-[4-(2,3- epoxipropoxi)phenyl]propa ne	1675-54-3	Experimental Biodegradation	28 days	BOD		OECD 301F - Manometric respirometry
bis-[4-(2,3- epoxipropoxi)phenyl]propa ne	1675-54-3	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	117 hours (t 1/2)	OECD 111 Hydrolysis func of pH

## 12.3: Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
bis-[4-(2,3- epoxipropoxi)phenyl]propa	1675-54-3	Experimental Bioconcentration		Log Kow	3.242	OECD 117 log Kow HPLC method
ne						

## 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
bis-[4-(2,3-epoxipropoxi)phenyl]propa		Modeled Mobility in Soil	Koc	450 l/kg	Episuite <sup>TM</sup>
ne					

## 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. Endocrine disrupting properties

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

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

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

## EU waste code (product as sold)

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

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

## **SECTION 14: Transportation information**

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	UN3082	UN3082	UN3082
14.2 UN proper shipping name	SUBSTANCE, LIQUID,	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(LIQUID EPOXY RESIN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(LIQUID EPOXY RESIN)
14.3 Transport hazard class(es)	9	9	9
14.4 Packing group	III	Ш	Ш
14.5 Environmental hazards	Environmentally Hazardous	Not applicable	Marine Pollutant

14.6 Special precautions for	Please refer to the other	Please refer to the other	Please refer to the other
user	sections of the SDS for	sections of the SDS for further	sections of the SDS for
	further information.	information.	further information.
14.7 Marine Transport in	No data available.	No data available.	No data available.
bulk according to IMO			
instruments			
Control Temperature	No data available.	No data available.	No data available.
<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
ADR Classification Code	M6	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

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

## **SECTION 15: Regulatory information**

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

## Carcinogenicity

<u>Ingredient</u>	CAS Nbr	<u>Classification</u>	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 through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

bis-[4-(2,3-epoxipropoxi)phenyl]propane 1675-54-3

#### 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. 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.

#### DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1 None

## 3M™ Scotch-Weld™ Epoxy Structural Adhesive DP-100: part B

Seveso named dangerous substances, Annex 1, Part 2 None

## Regulation (EU) No 649/2012

No chemicals listed

## 15.2. Chemical Safety Assessment

A chemical safety assessment has 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

H315 Causes skin irritation. May cause an allergic skin reaction. H317 H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

## **Revision information:**

No revision information

## Annex

1. Title	
Substance identification	bis-[4-(2,3-epoxipropoxi)phenyl]propane; EC No. 216-823-5; CAS Nbr 1675-54-3;
Exposure Scenario Name	Formulation
Lifecycle Stage	Formulation or re-packing
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	Batch manufacture of a chemical substance or formulation (including polymerisation reactions).
2. Operational conditions and risk mana	ngement 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:  Protective Gloves - Chemical resistant. Refer to Section 8 of the SDS for specific glove material.;  Environmental:  Waste Water treatment - Incineration;
Waste management measures	Do not apply industrial sludge to natural soils; Prevent leaks and prevent soil / water pollution caused by leaks;
3. Prediction of exposure	1
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	bis-[4-(2,3-epoxipropoxi)phenyl]propane; EC No. 216-823-5; CAS Nbr 1675-54-3;
Exposure Scenario Name	Industrial Transfer
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	
<b>Operating Conditions</b>	Physical state:Liquid.
	General operating conditions: Continuous release; Duration of exposure per day at workplace [for one worker]: 8 hours/day; Emission days per year: 225 days per year; Local freshwater dilution factor: 10; Local marine water dilution factor: 100;
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	Discharge to aquatic environment is restricted; Do not apply industrial sludge to natural soils; 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.
1. Title	
Substance identification	bis-[4-(2,3-epoxipropoxi)phenyl]propane; EC No. 216-823-5; CAS Nbr 1675-54-3;
Exposure Scenario Name	Industrial Use of Adhesives
Lifecycle Stage	Use at industrial sites
Contributing activities	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
Processes, tasks and activities covered	Application of product with a roller or brush. Application of product with applicator gun. Application with a wipe. Transfers without dedicated controls, including loading, filling, dumping, bagging.
2. Operational conditions and risk mana	
Operating Conditions	Physical state:Liquid. General operating conditions: Duration of use: 8 hours/day; Emission days per year: 220 days/year; Frequency of exposure at workplace [for one worker]: 5 days/week;

Risk management measures	Under the operational conditions described above the following risk management measures apply:  General risk management measures:  Human health:  Protective Gloves - Chemical resistant. 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;		
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.		

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.

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

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## Safety Data Sheet

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**Document group:** 29-8932-5 Version number: 1.01 02/05/2023 **Revision date:** 22/05/2023 **Supersedes date:** 

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<sup>TM</sup> Scotch-Weld<sup>TM</sup> Epoxy Structural Adhesive DP-100: 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 www.3M.com/uk Website.

## **EU Member State Responsible Contact**

Address: 3M Ireland Ltd, The Iveagh Building, Carrickmines Park, Dublin D18 X015.

Telephone: +353 1 280 3555

#### 1.4. Emergency telephone number

+44 (0)1344 858 000 or call your doctor.

## **SECTION 2: Hazard identification**

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

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

## **CLASSIFICATION:**

Skin Corrosion/Irritation, Category 1C - Skin Corr. 1C; H314 Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318

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

DANGER.

#### **Symbols**

GHS05 (Corrosion) |GHS07 (Exclamation mark) |

#### **Pictograms**



## **Ingredients:**

Ingredient	CAS Nbr	EC No.	% by Wt
Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide	72244-98-5	701-196-7	80 - 100
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	202-013-9	5 - 10

## **HAZARD STATEMENTS:**

H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

## PRECAUTIONARY STATEMENTS

**Prevention:** 

P260A Do not breathe vapours.

P280D Wear protective gloves, protective clothing, and eye/face protection.

**Response:** 

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

shower.

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

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

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

## <=125 ml Hazard statements

H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

## <=125 ml Precautionary statements

**Prevention:** 

P260A Do not breathe vapours.

P280D Wear protective gloves, protective clothing, and eye/face protection.

**Response:** 

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

or shower.

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

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

2% of the mixture consists of components of unknown acute dermal toxicity.

Contains 2% 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)	0/0	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide	(CAS-No.) 72244-98-5 (EC-No.) 701-196-7	80 - 100	Aquatic Chronic 3, H412 Skin Sens. 1B, H317
Bis[(dimethylamino)methyl]phenol	(CAS-No.) 71074-89-0 (EC-No.) 275-162-0	<= 1.5	Acute Tox. 4, H302 Skin Corr. 1C, H314
2,4,6-tris(dimethylaminomethyl)phenol	(CAS-No.) 90-72-2 (EC-No.) 202-013-9 (REACH-No.) 01- 2119560597-27	5 - 10	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318

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

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

## SECTION 4: First aid measures

## 4.1. Description of first aid measures

#### Inhalation

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

## Skin contact

Immediately flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate

ininiculately mash with large amounts of water for at least 13 ininiates. Remove containinated clothing. Oct ininiculate

medical attention. Wash clothing before reuse.

#### Eye contact

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

#### If swallowed

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

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

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
Carbon monoxide
Carbon dioxide.
Oxides of sulphur.

## 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.

Condition

During combustion.

During combustion.

During combustion.

## **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. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

## 6.3. Methods and material for containment and cleaning up

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

## 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

## 7.2. Conditions for safe storage including any incompatibilities

Store away from heat. 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	Degradation	Population	Human exposure	DNEL
	Product		pattern	
2,4,6-		Worker	Inhalation, Long-term	0.31 mg/m <sup>3</sup>
tris(dimethylaminomethyl)			exposure (8 hours),	_
phenol			Systemic effects	

## Predicted no effect concentrations (PNEC)

Ingredient	Degradation Product	Compartment	PNEC
2,4,6- tris(dimethylaminomethyl) phenol		Freshwater	0.084 mg/l
2,4,6- tris(dimethylaminomethyl) phenol		Intermittent releases to water	0.84 mg/l
2,4,6- tris(dimethylaminomethyl) phenol		Marine water	0.0084 mg/l
2,4,6- tris(dimethylaminomethyl) phenol		Sewage Treatment Plant	0.2 mg/l

#### 8.2. Exposure controls

In addition, refer to the annex for more information.

## 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.

#### 8.2.2. Personal protective equipment (PPE)

## Eye/face protection

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

Full face shield.

Indirect vented goggles.

Applicable Norms/Standards

Use eye/face 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

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

## **Respiratory protection**

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

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

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

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136: filter type A

## 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 stateLiquid.Specific Physical Form:Amber liquidColourAmberOdorMercaptanOdour thresholdNo data available.Melting point/freezing pointNot applicable.

Boiling point/boiling rangeNo data available.Flammability (solid, gas)Not applicable.Flammable Limits(LEL)Not applicable.Flammable Limits(UEL)Not applicable.

Flash point 149 °C [Test Method:Closed Cup]

Autoignition temperatureNo data available.Decomposition temperatureNo data available.

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

Kinematic Viscosity8,696 - 14,783 mm²/secWater solubilityNo data available.Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Vapour pressureNot applicable.Density1.13 - 1.17 kg/m3

Relative density 1.13 - 1.17 [Ref Std:WATER=1]

Relative Vapour Density

Not applicable.

#### 9.2. Other information

9.2.2 Other safety characteristics

**EU Volatile Organic Compounds Evaporation rate**0.1 % weight

No data available.

Percent volatile <= 1

## 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

#### internal hazard assessments.

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

## 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

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

## Eye contact

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

#### Ingestion

May be harmful if swallowed.

Gastrointestinal corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea; blood in the faeces and/or vomitus may also be seen.

## **Toxicological Data**

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

## Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
Reaction products of pentaerythritol, propoxylated and 1-chloro- 2,3-epoxypropane with hydrogen sulphide	Dermal	Rabbit	LD50 > 10,200 mg/kg
Reaction products of pentaerythritol, propoxylated and 1-chloro- 2,3-epoxypropane with hydrogen sulphide	Ingestion	Rat	LD50 2,600 mg/kg
2,4,6-tris(dimethylaminomethyl)phenol	Dermal	Rat	LD50 1,280 mg/kg
2,4,6-tris(dimethylaminomethyl)phenol	Ingestion	Rat	LD50 1,000 mg/kg
Bis[(dimethylamino)methyl]phenol	Ingestion		LD50 estimated to be 300 - 2,000 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-	Rabbit	No significant irritation
epoxypropane with hydrogen sulphide		
2,4,6-tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
Bis[(dimethylamino)methyl]phenol	similar	Corrosive
	compoun	
	ds	

Serious Eye Damage/Irritation

Name	Species	Value

## 3M™ Scotch-Weld™ Epoxy Structural Adhesive DP-100: Part A

Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-		Mild irritant
epoxypropane with hydrogen sulphide		
2,4,6-tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
Bis[(dimethylamino)methyl]phenol	similar	Corrosive
	compoun	
	ds	

## **Skin Sensitisation**

Name	Species	Value
Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide	Mouse	Sensitising
2,4,6-tris(dimethylaminomethyl)phenol	Guinea	Not classified
	pig	

## **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
Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulphide	In Vitro	Not mutagenic
2,4,6-tris(dimethylaminomethyl)phenol	In Vitro	Not mutagenic

## 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** 

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
2,4,6- tris(dimethylaminomethyl) phenol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Reaction products of pentaerythritol, propoxylated and 1-chloro- 2,3-epoxypropane with hydrogen sulphide	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 75 mg/kg/day	90 days
Reaction products of pentaerythritol, propoxylated and 1-chloro- 2,3-epoxypropane with hydrogen sulphide	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 250 mg/kg/day	90 days
Reaction products of pentaerythritol, propoxylated and 1-chloro- 2,3-epoxypropane with hydrogen sulphide	Ingestion	endocrine system   heart   skin   immune system   nervous system   eyes   kidney and/or bladder   respiratory system   vascular	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days

		system				
2,4,6-	Dermal	skin   liver   nervous	Not classified	Rat	NOAEL 125	28 days
tris(dimethylaminomethyl)		system   auditory			mg/kg/day	
phenol		system				
		hematopoietic				
		system   eyes				

## **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 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
Reaction products of pentaerythritol, propoxylated and 1- chloro-2,3- epoxypropane with hydrogen sulphide	72244-98-5	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Reaction products of pentaerythritol, propoxylated and 1- chloro-2,3- epoxypropane with hydrogen sulphide	72244-98-5	Green algae	Experimental	72 hours	EC50	>733 mg/l
Reaction products of pentaerythritol, propoxylated and 1- chloro-2,3- epoxypropane with hydrogen sulphide	72244-98-5	Water flea	Experimental	48 hours	EC50	12 mg/l
Reaction products of pentaerythritol, propoxylated and 1- chloro-2,3- epoxypropane with hydrogen sulphide	72244-98-5	Zebra Fish	Experimental	96 hours	LC50	87 mg/l
Reaction products of pentaerythritol, propoxylated and 1- chloro-2,3- epoxypropane with hydrogen sulphide	72244-98-5	Green algae	Experimental	72 hours	NOEC	338 mg/l
Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-	72244-98-5	Water flea	Experimental	21 days	NOEC	3.5 mg/l

## 3M™ Scotch-Weld™ Epoxy Structural Adhesive DP-100: Part A

epoxypropane with hydrogen sulphide Bis[(dimethylamino)me	71074 90 0	N/A	Determet and its life	N/A	N/A	NA
thyl]phenol	/10/4-89-0	N/A	Data not available or insufficient for classification	N/A	N/A	INA
2,4,6- tris(dimethylaminometh yl)phenol	90-72-2	N/A	Experimental	96 hours	LC50	718 mg/l
2,4,6- tris(dimethylaminometh yl)phenol	90-72-2	Common Carp	Experimental	96 hours	LC50	>100 mg/l
2,4,6- tris(dimethylaminometh yl)phenol	90-72-2	Green algae	Experimental	72 hours	EC50	46.7 mg/l
2,4,6- tris(dimethylaminometh yl)phenol	90-72-2	Water flea	Experimental	48 hours	EC50	>100 mg/l
2,4,6- tris(dimethylaminometh yl)phenol	90-72-2	Green algae	Experimental	72 hours	NOEC	6.44 mg/l

## 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Reaction products of pentaerythritol, propoxylated and 1-chloro- 2,3-epoxypropane with hydrogen sulphide	72244-98-5	Experimental Biodegradation	28 days	CO2 evolution	5 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
Bis[(dimethylamino)methyl]phenol	71074-89-0	Modeled Biodegradation	28 days		41 %CO2 evolution/THC O2 evolution	Catalogic™
2,4,6- tris(dimethylaminomethyl)p henol	90-72-2	Experimental Biodegradation	28 days	BOD	4 %BOD/ThO D	OECD 301D - Closed bottle test

## 12.3: Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Reaction products of	72244-98-5	Estimated		Log Kow	>1.2	
pentaerythritol,		Bioconcentration				
propoxylated and 1-chloro-						
2,3-epoxypropane with						
hydrogen sulphide						
Bis[(dimethylamino)methyl	71074-89-0	Modeled		Log Kow	-2.34	ACD/Labs ChemSketch™
]phenol		Bioconcentration				
2,4,6-	90-72-2	Experimental		Log Kow	-0.66	830.7550 Part.Coef Shake
tris(dimethylaminomethyl)		Bioconcentration				Flask
phenol						

## 12.4. Mobility in soil

No test data available.

## 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. Endocrine disrupting properties

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

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

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

## EU waste code (product as sold)

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

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

## **SECTION 14: Transportation information**

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	UN3267	UN3267	UN3267
14.2 UN proper shipping	CORROSIVE LIQUID,	CORROSIVE LIQUID,	CORROSIVE LIQUID,
name	BASIC, ORGANIC, N.O.S.(TRIS(2,4,6- DIMETHYLAMINOMONO	BASIC, ORGANIC, N.O.S.(TRIS(2,4,6- DIMETHYLAMINOMONOM	BASIC, ORGANIC, N.O.S.(TRIS(2,4,6- DIMETHYLAMINOMONO
	METHYL)PHENOL)	ETHYL)PHENOL)	METHYL)PHENOL)
14.3 Transport hazard class(es)	8	8	8
14.4 Packing group	III	III	III
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Marine Transport in bulk according to IMO instruments	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.

D 10 C 1

<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
ADR Classification Code	C7	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	18 - ALKALIS

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

## Global inventory status

Contact 3M for more information.

## **DIRECTIVE 2012/18/EU**

Seveso hazard categories, Annex 1, Part 1 None

Seveso named dangerous substances, Annex 1, Part 2 None

## Regulation (EU) No 649/2012

No chemicals listed

#### 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

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

## **Revision information:**

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

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

## Annex

1. Title	
Substance identification	2,4,6-tris(dimethylaminomethyl)phenol;
~	EC No. 202-013-9;
	CAS Nbr 90-72-2;
	, and the second
Exposure Scenario Name	Formulation
Lifecycle Stage	Formulation or re-packing
Contributing activities	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	Transfer of substances/mixtures into small containers e.g. tubes, bottles or small
	reservoirs. Transfers with dedicated controls, including loading, filling, dumping,
	bagging.
2. Operational conditions and risk mana	
<b>Operating Conditions</b>	Physical state:Liquid.
	General operating conditions:
	Air exchange rate:: >= 3 times per hour;
	Indoor use;
	Partially open and partially closed process;
	Processing Temperature:: <= 40 degree Celsius;
	Task: PROC08b;
	Duration of exposure per day at workplace [for one worker]: 8 hours/day;
	Duration of exposure per day at workplace [for one worker], 8 hours/day,
	Task: PROC09;
	Duration of exposure per day at workplace [for one worker]: <= 4 hour(s);
Risk management measures	Under the operational conditions described above the following risk management
Tush management measures	measures apply:
	General risk management measures:
	Human health:
	Local exhaust ventilation;
	Protective Gloves - Chemical resistant. Refer to Section 8 of the SDS for
	specific glove material.;
	Environmental:
	None needed;
Waste management measures	No use-specific waste management measures are required for this product. Refer
management measures	to Section 13 of main SDS for disposal instructions:
3. Prediction of exposure	to occurr to or main obe for disposal institutions.
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and
realction of exposure	PNECs when the identified risk management measures are adopted.
	1 11200 when the identified fish management measures are adopted.

1. Title	
Substance identification	2,4,6-tris(dimethylaminomethyl)phenol;
	EC No. 202-013-9;
	CAS Nbr 90-72-2;
Exposure Scenario Name	Industrial Use of Adhesives
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 05 -Mixing or blending in batch processes
	PROC 08a -Transfer of substance or mixture (charging and discharging) at non-
	dedicated facilities
	PROC 10 -Roller application or brushing
	PROC 13 -Treatment of articles by dipping and pouring
	ERC 05 -Use at industrial site leading to inclusion into/onto article

Page: 14 of 16

Processes, tasks and activities covered	Application of product with a roller or brush. Application of product with applicator gun. Mixing operations (open systems). Transfers without dedicated controls, including loading, filling, dumping, bagging.		
2. Operational conditions and risk mana			
Operating Conditions	Physical state:Liquid.  General operating conditions:  Air exchange rate:: >= 3 times per hour;		
	Duration of exposure per day at workplace [for one worker]: <= 4 hour(s); Indoor use; Processing Temperature:: <= 40 degree Celsius;		
	Task: PROC05; Duration of exposure per day at workplace [for one worker]: 8 hours/day;		
Risk management measures	Under the operational conditions described above the following risk management measures apply:  General risk management measures:		
	Human health: Local exhaust ventilation; Protective Gloves - Chemical resistant. Refer to Section 8 of the SDS for		
	specific glove material.; Environmental: None needed;		
Waste management measures	Do not release to waterways or sewers;		
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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1. Title	
Substance identification	2,4,6-tris(dimethylaminomethyl)phenol;
	EC No. 202-013-9;
	CAS Nbr 90-72-2;
Exposure Scenario Name	Hand-mixing of preparations, e.g. plasters, resins, two-component adhesives.
Lifecycle Stage	Widespread use by professional workers
Contributing activities	PROC 10 -Roller application or brushing
	ERC 08c -Widespread use leading to inclusion into/onto article (indoor)
Processes, tasks and activities covered	Application of product.
2. Operational conditions and risk mana	gement measures
<b>Operating Conditions</b>	Physical state:Liquid.
	General operating conditions:
	Duration of exposure per day at workplace [for one worker]: 8 hours/day;
	Indoor use;
	Processing Temperature:: <= 40 degree Celsius;
Risk management measures	Under the operational conditions described above the following risk management measures apply:
	General risk management measures:
	Human health:
	Local exhaust ventilation;
	Protective Gloves - Chemical resistant. Refer to Section 8 of the SDS for
	specific glove material.;
	Environmental:
	None needed;
	, in the second
Waste management measures	Do not release directly to waterways;
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and

D 15 0 1

PNECs when the identified risk management measures are adopted.

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.

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