

## **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(tm) Scotch-Weld(tm) 2216 B/A

#### **Product Identification Numbers**

UU-0067-9038-8 UU-0067-9040-4 UU-0067-9064-4

7100141727 7100141986 7100141716

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

## **Identified uses**

Industrial use.

#### 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:

11-1947-8, 35-2112-7

## TRANSPORTATION INFORMATION

UU-0067-9038-8, UU-0067-9040-4, UU-0067-9064-4

**ADR/RID:** UN3077, NOT RESTRICTED AS PER SPECIAL PROVISION 375, ENVIRONMENTALLY HAZARDOUS SUBSTANCE EXEMPTION, (EPOXY RESIN), III, --.

IMDG-CODE: UN3077, NOT RESTRICTED AS PER IMDG CODE 2.10.2.7, MARINE POLLUTANT EXCEPTION,

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## 3M(tm) Scotch-Weld(tm) 2216 B/A

(EPOXY RESIN), III, IMDG-Code segregation code: NONE, EMS: --.

ICAO/IATA: UN3077, NOT RESTRICTED AS PER SPECIAL PROVISION A197, ENVIRONMENTALLY

HAZARDOUS SUBSTANCE EXCEPTION, (EPOXY RESIN), III.

## KIT LABEL

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

#### **CLASSIFICATION:**

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 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) |





#### Contains:

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane; 3,3'-Oxybis(ethyleneoxy)bis(propylamine); Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine)

## **HAZARD STATEMENTS:**

H318 Causes serious eye damage. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

## PRECAUTIONARY STATEMENTS

**Prevention:** 

P280B Wear protective gloves and eye/face protection.

P273 Avoid release to the environment.

**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.

P310 Immediately call a POISON CENTRE or doctor/physician.

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## 3M(tm) Scotch-Weld(tm) 2216 B/A

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

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

## <=125 ml Precautionary statements

**Prevention:** 

P280B Wear protective gloves and eye/face protection.

**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.

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).

## Notes on labelling

Material classified as severe skin irritant and corrosive to eyes per test data.

## **Revision information:**

Section 1: Product identification numbers information was modified. Section 01: SAP Material Numbers information was modified.



## **Safety Data Sheet**

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Transportation version number: 1.00 (08/05/2018)

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(tm) Scotch-Weld(tm) 2216 B/A: Part A

#### **Product Identification Numbers**

UU-0067-9061-0

7100140578

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

## **Identified uses**

Industrial use.

## 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 1 - Eye Dam. 1; H318 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Skin Sensitization, Category 1 - Skin Sens. 1; H317

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) |





**Ingredients:** 

Ingredient CAS Nbr EC No. % by Wt

Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine)
3,3'-Oxybis(ethyleneoxy)bis(propylamine)
4246-51-9
224-207-2
7 - 13

**HAZARD STATEMENTS:** 

H318 Causes serious eye damage. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

#### PRECAUTIONARY STATEMENTS

**Prevention:** 

P280B Wear protective gloves and eye/face protection.

**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.

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

H318 Causes serious eye damage. H317 May cause an allergic skin reaction.

## <=125 ml Precautionary statements

**Prevention:** 

P280B Wear protective gloves and eye/face protection.

**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.

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

52% of the mixture consists of components of unknown acute oral toxicity.

Contains 52% of components with unknown hazards to the aquatic environment.

#### Notes on labelling

All or part of the classification is based on toxicity 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	EC No.	REACH	% by Wt	Classification
			Registration		
			No.		
Fatty acids, C18-unsaturated, dimers,	68911-25-1			30 - 60	Skin Irrit. 2, H315; Eye
polymers with 3,3'-					Dam. 1, H318; Skin Sens.
oxybis(ethyleneoxy)bis(propylamine)					1, H317
Kaolin	1332-58-7	310-194-1		30 - 60	Substance with a
					Community level exposure
					limit in the workplace
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	224-207-2		7 - 13	Skin Sens. 1, H317
					Skin Corr. 1B, H314
Carbon black	1333-86-4	215-609-9		< 1	Substance with a
					Community level exposure
					limit in the workplace
Titanium dioxide	13463-67-7	236-675-5		0.1 - 1	Substance with a
					Community level exposure
					limit in the workplace

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 for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately 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.

#### 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 of dust created by cutting, sanding, grinding or machining. For industrial/occupational use only. Not for consumer sale or use. Do not handle until all safety precautions have been read and understood. 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.) Use personal protective equipment (eg. gloves, respirators...) as required.

## 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

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

Ingredient **Additional comments CAS Nbr** Limit type Agency Kaolin UK HSC 1332-58-7 TWA (as respirable dust): 2  $mg/m^3$ Carbon black UK HSC TWA: 3.5 mg/m<sup>3</sup>; STEL: 7 1333-86-4  $mg/m^3$ Titanium dioxide 13463-67-7 UK HSC TWA(Inhalable):10 mg/m3;TWA(respirable):4  $mg/m^3$ 

UK HSC: UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

#### **Biological limit values**

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

**Recommended monitoring procedures:**Information on recommended monitoring procedures can be obtained from UK HSC

#### 8.2. Exposure controls

#### 8.2.1. Engineering controls

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

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

#### Eye/face protection

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

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 and particulates

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

Applicable Norms/Standards

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

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

**Appearance** 

**Oxidising properties** 

Physical state Liquid.
Colour Dark Gray

**Specific Physical Form:** Paste **Odor** Amine

Odour thresholdNo data available.pHNo data available.Boiling point/boiling range>=152.2 °CMelting pointNo data available.Flammability (solid, gas)Not applicable.Explosive propertiesNot classified

Flash point >=151.7 °C [Test Method:Closed Cup]

Not classified

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

**Relative density** 1.24 - 1.32 [*Ref Std*:WATER=1]

Water solubility No data available. Solubility- non-water No data available. Partition coefficient: n-octanol/water No data available. **Evaporation rate** No data available. Vapour density No data available. **Decomposition temperature** No data available. Viscosity 40 - 80 Pa-s [@ 23 °C] **Density** No data available.

9.2. Other information

**EU Volatile Organic Compounds Molecular weight**No data available.

Not applicable.

## **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

None known.

#### 10.5 Incompatible materials

Strong acids.

Strong oxidising agents.

## 10.6 Hazardous decomposition products

Substance

**Condition** 

None known.

## **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

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

#### Skin contact

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

#### Eve 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

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

## **Additional Health Effects:**

## Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

## 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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Kaolin	Dermal		LD50 estimated to be > 5,000 mg/kg
Kaolin	Ingestion	Human	LD50 > 15,000 mg/kg
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Dermal	Rabbit	LD50 2,500 mg/kg
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Ingestion	Rat	LD50 3,160 mg/kg
Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation-	Rat	LC50 > 6.82 mg/l
	Dust/Mist		
	(4 hours)		
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Carbon black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon black	Ingestion	Rat	LD50 > 8,000 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine)	Rabbit	Irritant
Kaolin	Professio	No significant irritation
	nal judgemen	
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	t Rabbit	Corrosive
Titanium dioxide	Rabbit	No significant irritation
Carbon black	Rabbit	No significant irritation

**Serious Eve Damage/Irritation** 

Name	Species	Value
Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine)	similar health hazards	Corrosive
Kaolin	Professio nal judgemen t	No significant irritation
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	similar health hazards	Corrosive
Titanium dioxide	Rabbit	No significant irritation
Carbon black	Rabbit	No significant irritation

## **Skin Sensitisation**

Skiii Schsitisation							
Name		Value					
Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-	Guinea	Sensitising					
oxybis(ethyleneoxy)bis(propylamine) Titanium dioxide	pig Human	Not classified					
Trainum dioxide	and	Not classified					
	animal						

## **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
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
Carbon black	In Vitro	Not mutagenic
Carbon black	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

caremogeniery			
Name	Route	Species	Value
Kaolin	Inhalation	Multiple	Not carcinogenic
		animal	
		species	
Titanium dioxide	Ingestion	Multiple	Not carcinogenic
		animal	
		species	
Titanium dioxide	Inhalation	Rat	Carcinogenic.
Carbon black	Dermal	Mouse	Not carcinogenic
Carbon black	Ingestion	Mouse	Not carcinogenic
Carbon black	Inhalation	Rat	Carcinogenic.

## 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
3,3'-	Inhalation	respiratory irritation	Some positive data exist, but the		NOAEL Not	
Oxybis(ethyleneoxy)bis(pr opylamine)			data are not sufficient for classification		available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Kaolin	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL NA	occupational exposure
Kaolin	Inhalation	pulmonary fibrosis	Not classified	Rat	NOAEL Not available	
Titanium dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Carbon black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure

## **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	linformation
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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
Fatty acids, C18- unsaturated, dimers, polymers with 3,3'- oxybis(ethyleneoxy)bis (propylamine)	68911-25-1		Data not available or insufficient for classification			
Kaolin	1332-58-7	Water flea	Experimental	48 hours	LC50	>1,100 mg/l
3,3'- Oxybis(ethyleneoxy)bis (propylamine)	4246-51-9	Green algae	Experimental	72 hours	EC50	>500 mg/l
3,3'- Oxybis(ethyleneoxy)bis (propylamine)	4246-51-9	Golden Orfe	Experimental	96 hours	LC50	>1,000 mg/l
3,3'- Oxybis(ethyleneoxy)bis (propylamine)	4246-51-9	Water flea	Experimental	48 hours	EC50	218.16 mg/l
3,3'- Oxybis(ethyleneoxy)bis (propylamine)	4246-51-9	Green algae	Experimental	72 hours	Effect Concentration 10%	5.4 mg/l
Carbon black	1333-86-4		Data not available or insufficient for classification			
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	EC50	>10,000 mg/l
Titanium dioxide	13463-67-7	Fathead minnow	Experimental	96 hours	LC50	>100 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	NOEC	5,600 mg/l

## 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Fatty acids, C18- unsaturated, dimers, polymers with 3,3'- oxybis(ethyleneoxy)bis(pro pylamine)	68911-25-1	Data not availbl- insufficient			N/A	
Kaolin	1332-58-7	Data not availbl- insufficient			N/A	
3,3'- Oxybis(ethyleneoxy)bis(pro pylamine)	4246-51-9	Estimated Photolysis		Photolytic half-life (in air)	2.96 hours (t 1/2)	Other methods
3,3'- Oxybis(ethyleneoxy)bis(pro pylamine)	4246-51-9	Experimental Biodegradation	25 days	CO2 evolution	-8 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
Carbon black	1333-86-4	Data not availbl- insufficient			N/A	
Titanium dioxide	13463-67-7	Data not availbl- insufficient			N/A	

## 12.3: Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Fatty acids, C18- unsaturated, dimers, polymers with 3,3'- oxybis(ethyleneoxy)bis(pro pylamine)	68911-25-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Kaolin	1332-58-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
3,3'- Oxybis(ethyleneoxy)bis(pr opylamine)	4246-51-9	Experimental Bioconcentration		Log Kow	-1.25	Other methods
Carbon black	1333-86-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Experimental BCF- Carp	42 days	Bioaccumulation factor	9.6	Other methods

#### 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

## **SECTION 14: Transportation information**

UU-0067-9061-0

Not hazardous for transportation

## **SECTION 15: Regulatory information**

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

#### Carcinogenicity

Ing	gredient	CAS Nbr	Classification	Regulation
Ca	rbon black	1333-86-4	Grp. 2B: Possible human	International Agency
			carc.	for Research on Cancer
Tit	anium dioxide	13463-67-7	Grp. 2B: Possible human	International Agency
			carc.	for Research on Cancer

#### 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

H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

#### **Revision information:**

CLP Remark(phrase) information was added.

Section 4: First aid for ingestion (swallowing) information information was modified.

Section 4: First aid for skin contact information information was modified.

Section 5: Fire - Advice for fire fighters information information was modified.

Section 6: Accidental release environmental information information was modified.

Section 6: Accidental release personal information information was modified.

Section 7: Precautions safe handling information information was modified.

Section 8: glove data value information was deleted.

Section 8: glove data value information was modified.

Section 09: Color information was added.

Section 09: Odor information was added.

Sections 3 and 9: Odour, colour, grade information information was deleted.

Section 11: Health Effects - Ingestion information information was modified.

Section 11: Health Effects - Skin information 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.

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

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

Section 15: Chemical Safety Assessment information was added.

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

Section 15: Regulations - Inventories information was deleted.

Sectio 16: UK disclaimer information was deleted.

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

provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

3M 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 2216 Structural Epoxy Adhesive (Part B) (Base)

#### **Product Identification Numbers**

UU-0067-9062-8

7100140400

## 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 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

WARNING.

## **Symbols:**

GHS07 (Exclamation mark) |GHS09 (Environment) |

**Pictograms** 





**Ingredients:** 

Ingredient CAS Nbr EC No. % by Wt

4,4'-ISOPROPYLIDENEDIPHENOL- 25068-38-6 500-033-5 70 - 90

EPICHLOROHYDRIN POLYMER (MW unknown

or <=700)

**HAZARD STATEMENTS:** 

H319 Causes serious eye irritation.
H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

## PRECAUTIONARY STATEMENTS

**Prevention:** 

P280E Wear protective gloves.

P273 Avoid release to the environment.

**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.

## **SECTION 3: Composition/information on ingredients**

Ingredient	CAS Nbr	EC No.	REACH	% by Wt	Classification
			Registration		
			No.		
4,4'-ISOPROPYLIDENEDIPHENOL-	25068-38-6	500-033-5		70 - 90	Skin Irrit. 2, H315; Eye Irrit.
EPICHLOROHYDRIN POLYMER					2, H319; Skin Sens. 1,
(MW unknown or <=700)					H317; Aquatic Chronic 2,
					H411
Kaolin	1332-58-7	310-194-1		10 - 30	Substance with a
					Community level exposure
					limit in the workplace

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

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

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> Aldehydes. Carbon monoxide.

Carbon dioxide.

Hydrogen Chloride

## **Condition**

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

## 5.3. Advice for fire-fighters

When fire fighting conditions are severe and total thermal decomposition of the product is possible, wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, tunic and trousers (leggings), 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. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

## 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not 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 in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store away from heat. Store away from oxidising agents.

## 7.3. Specific end use(s)

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

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

## Occupational exposure limits

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

for the component.

Ingredient CAS Nbr Agency Limit type Additional comments

Kaolin 1332-58-7 UK HSC TWA (as respirable dust): 2

 $mg/m^3$ 

UK HSC: UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

#### **Biological limit values**

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

## 8.2. Exposure controls

#### 8.2.1. Engineering controls

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

## 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

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

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

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 and particulates

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

Applicable Norms/Standards

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

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state Solid.
Specific Physical Form: Paste

Appearance/Odour Cream coloured paste, slight epoxy odour.

Odour thresholdNo data available.pHNot applicable.Boiling point/boiling range>=200 °CMelting pointNo data available.

Flammability (solid, gas)

Explosive properties

Oxidising properties

No data avaita
Not classified
Not classified
Not classified

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

Autoignition temperatureNo data available.Flammable Limits(LEL)Not applicable.Flammable Limits(UEL)Not applicable.Vapour pressureNot applicable.

**Relative density** 1.31 - 1.39 [*Ref Std*:WATER=1]

Water solubility Nil

Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Evaporation rateNot applicable.Vapour densityNot applicable.Decomposition temperatureNo data available.Viscosity75 - 150 Pa-s [@, 23 °C ]

**Density** 1.35 g/ml

9.2. Other information

EU Volatile Organic Compounds

No data available.

Molecular weight

Not applicable.

Percent volatile 0 %

## **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

None known.

## 10.5 Incompatible materials

Strong acids.

Strong oxidising agents.

## 10.6 Hazardous decomposition products

**Substance** 

None known.

Condition

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

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain.

#### 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

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**

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >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
Kaolin	Dermal		LD50 estimated to be > 5,000 mg/kg
Kaolin	Ingestion	Human	LD50 > 15,000 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value

4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW	Rabbit	Mild irritant
unknown or <=700)		
Kaolin	Professio	No significant irritation
	nal	
	judgemen	
	t	

Serious Eye Damage/Irritation

Name	Species	Value
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW	Rabbit	Moderate irritant
unknown or <=700)		
Kaolin	Professio	No significant irritation
	nal	
	judgemen	
	t	

## **Skin Sensitisation**

Name	Species	Value
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	Human and	Sensitising
	animal	

**Respiratory Sensitisation** 

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

**Germ Cell Mutagenicity** 

Ger in Cen Wittagementy		
Name	Route	Value
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW	In vivo	Not mutagenic
unknown or <=700)		
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER (MW	In Vitro	Some positive data exist, but the data are not
unknown or <=700)		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
Kaolin	Inhalation	Multiple	Not carcinogenic
		animal	
		species	

# 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

## 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 unknown or <=700)	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
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
Kaolin	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL NA	occupational exposure
Kaolin	Inhalation	pulmonary fibrosis	Not classified	Rat	NOAEL Not available	

#### **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
4,4'- ISOPROPYLIDENEDI PHENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	25068-38-6	Green Algae	Experimental	72 hours	EC50	>11 mg/l
4,4'- ISOPROPYLIDENEDI PHENOL- EPICHLOROHYDRIN POLYMER (MW		Water flea	Estimated	48 hours	LC50	0.95 mg/l

unknown or <=700)						
4,4'- ISOPROPYLIDENEDI PHENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	25068-38-6	Rainbow trout	Experimental	96 hours	LC50	1.2 mg/l
4,4'- ISOPROPYLIDENEDI PHENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	25068-38-6	Water flea	Experimental	21 days	NOEC	0.3 mg/l
4,4'- ISOPROPYLIDENEDI PHENOL- EPICHLOROHYDRIN POLYMER (MW unknown or <=700)	25068-38-6	Green Algae	Experimental	72 hours	NOEC	4.2 mg/l
Kaolin	1332-58-7	Water flea	Experimental	48 hours	LC50	>1,100 mg/l

## 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
4,4'-		1	28 days	BOD	0 %	OECD 301C - MITI test (I)
ISOPROPYLIDENEDIPHE NOL-		Biodegradation			BOD/ThBOD	
EPICHLOROHYDRIN						
POLYMER (MW unknown						
or <=700)						
4,4'-	25068-38-6	Estimated		Hydrolytic half-life	<2 days (t 1/2)	Other methods
ISOPROPYLIDENEDIPHE		Hydrolysis				
NOL-						
EPICHLOROHYDRIN						
POLYMER (MW unknown						
or <=700)						
Kaolin	1332-58-7	Data not availbl-			N/A	
		insufficient				

## 12.3: Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
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)						
Kaolin	1332-58-7	Data not available	N/A	N/A	N/A	N/A
		or insufficient for				
		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**

UU-0067-9062-8

**ADR/RID:** UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (EPOXY RESIN), 9, III, (-), ENVIRONMENTALLY HAZARDOUS, ADR Classification Code: M7.

**IMDG-CODE:** UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (EPOXY RESIN), 9, III, IMDG-Code segregation code: NONE, EMS: FA,SF.

**ICAO/IATA:** UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (EPOXY RESIN), 9, III, fish and tree marking may be required (> 5kg/l).

# **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. 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

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

#### **Revision information:**

Section 3 and Section 9: General physical form information information was modified.

Section 6: Accidental release clean-up information information was modified.

Section 9: Flammability (solid, gas) information information was added.

Section 9: Flammability (solid, gas) information information was deleted.

Section 11: Reproductive and/or Developmental Effects text information was deleted.

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information 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.

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