

Safety Data Sheet

Copyright, 2023, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

 Document group:
 32-6399-3
 Version number:
 4.00

 Revision date:
 17/02/2023
 Supersedes date:
 14/10/2022

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 Scotch-Weld™ Structural Plastic Adhesive DP8010 Blue

Product Identification Numbers

62-2863-1445-5 62-2863-3630-0 62-2863-5030-1

7100036719 7100036717 7100291546

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 Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.

Telephone: +353 1 280 3555 E Mail: tox.uk@mmm.com

Website: www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

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:

31-9758-9, 18-1419-3

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:

Acute Toxicity, Category 4 - Acute Tox. 4; H302

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318

Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334

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

Germ Cell Mutagenicity, Category 2 - Muta. 2; H341

Reproductive Toxicity, Category 1B - Repr. 1B; H360D

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) |GHS08 (Health Hazard) |GHS09 (Environment) |

Pictograms



Contains:

Tetrahydrofurfuryl methacrylate.; succinic anhydride; methyl methacrylate; maleic anhydride; [2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate; Boron, hexaethyl[mu-(1,6-hexanediamine-kN1:kN6)]di-; 2-Ethylhexyl methacrylate; 2-ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)

HAZARD STATEMENTS:

H302 Harmful if swallowed. H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H360D May damage the unborn child.

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P201 Obtain special instructions before use.

P261A Avoid breathing vapours.

P280B Wear protective gloves and eye/face protection.

Page: 2 of 3

Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

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

<=125 ml Hazard statements

H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H360D May damage the unborn child.

<=125 ml Precautionary statements

Prevention:

P201 Obtain special instructions before use.

P261A Avoid breathing vapours.

P280B Wear protective gloves and eye/face protection.

Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

SUPPLEMENTAL INFORMATION:

Supplemental Precautionary Statements:

Restricted to professional users.

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

Revision information:

Label: CLP Ingredients - kit components information was modified.

Section 2: <125ml Precautionary - Prevention information was modified.

Label: CLP Precautionary - Prevention information was modified.



Safety Data Sheet

Copyright, 2023, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

 Document group:
 18-1419-3
 Version number:
 16.00

 Revision date:
 16/02/2023
 Supersedes date:
 12/10/2021

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-WeldTM Structural Plastic Adhesive DP8010 and Structural Plastic Adhesive 8010, Part A

Product Identification Numbers

62-2883-7530-6

7100050479

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 Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.

Telephone: +353 1 280 3555 E Mail: tox.uk@mmm.com Website: www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

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:

Acute Toxicity, Category 4 - Acute Tox. 4; H302

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318

Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334

Skin Sensitization, Category 1 - Skin Sens. 1; H317 Germ Cell Mutagenicity, Category 2 - Muta. 2; H341

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) |GHS08 (Health Hazard) |GHS09 (Environment) |





Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt	
Polyfunctional Aziridine	64265-57-2	264-763-3	10 - 30	
Amine Borane Complex	223674-50-8	426-100-8	1 - 15	

HAZARD STATEMENTS:

H302 Harmful if swallowed. H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P261A Avoid breathing vapours.

P280B Wear protective gloves and eye/face protection.

Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

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

<=125 ml Hazard statements

H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.

<=125 ml Precautionary statements

Prevention:

P261A Avoid breathing vapours.

P280B Wear protective gloves and eye/face protection.

Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

62% of the mixture consists of components of unknown acute oral toxicity.

Contains 17% of components with unknown hazards to the aquatic environment.

Notes on labelling

Polyfunctional aziridine is classified as Acute Tox. 2 (H330) based on dust/mist (aerosol) data.

When incorporated into this product, this substance cannot become aerosolized.

Based on available toxicology data and this substance's very low vapour pressure, the saturated vapour of polyfunctional aziridine is not expected to be acutely toxic. Therefore, the classification is not applicable for this material when used as intended.

2.3. Other hazards

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

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)	%	Classification according to Regulation
			(EC) No. 1272/2008 [CLP]
Synthetic Rubber Oligomer	Trade Secret	40 - 70	Substance not classified as hazardous
Polyfunctional Aziridine	(CAS-No.) 64265-57-2	10 - 30	Acute Tox. 2, H330
	(EC-No.) 264-763-3		Eye Dam. 1, H318
			Resp. Sens. 1, H334
			Skin Sens. 1, H317
			Muta. 2, H341
			Aquatic Chronic 2, H411
Amine Borane Complex	(CAS-No.) 223674-50-8	1 - 15	Acute Tox. 4, H302
	(EC-No.) ELINCS 426-		Eye Irrit. 2, H319
	100-8		Skin Sens. 1, H317
	(REACH-No.) 01-		
	0000017250-82		

Silane, trimethoxyoctyl-, hydrolysis	(CAS-No.) 67762-90-7	1 - 5	Substance with a national occupational
products with silica			exposure limit

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.

Eve 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

The most important symptoms and effects based on the CLP classification include:

Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Harmful if swallowed.

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

n
711
ombustion.

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

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. Use personal protective equipment (eg. gloves, respirators...) as required.

7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Store away from heat. Store away from acids.

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

 Silicon dioxide
 67762-90-7
 Ireland OELs
 TWA(Total inhalable dust)(8

licon dioxide 67762-90-7 Ireland OELs TWA(Total inhalable dust)(8 hours):6 mg/m3;TWA(as

respirable dust)(8 hours):2.4

mg/m3

Ireland OELs: Ireland. OELs 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 Indust. Inspect./Ministry (IE)

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. Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Indirect vented goggles.

Applicable Norms/Standards
Use eye protection conforming to EN 166

Skin/hand protection

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

MaterialThickness (mm)Breakthrough TimePolymer laminateNo data availableNo data available

Applicable Norms/Standards Use gloves tested to EN 374

Respiratory protection

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 Liquid.

Specific Physical Form: Viscous Liquid

Page: 6 of 14

ColourColourlessOdorMild AcrylicOdour thresholdNo data available.Melting point/freezing pointNot applicable.

Boiling point/boiling range >=98.9 °C [@ 101,325 Pa]

Flammability (solid, gas)

Flammable Limits(LEL)

Flammable Limits(UEL)

No data available.

No data available.

Flash point 96.7 °C [Test Method: Closed Cup] [Details: Specific method:

SETAFLASH ASTM D-3278-96]

Autoignition temperatureNo data available.Decomposition temperatureNo data available.

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

Kinematic Viscosity28,222 mm²/secWater solubilitySlight (less than 10%)Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.

Vapour pressure 13.3 Pa [@ 20 °C] [Details:MITS data]

 Density
 1.063 g/ml [@ 20 °C]

 Relative density
 1.063 [Ref Std: WATER=1]

Relative Vapour Density *No data available.*

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds

Evaporation rate

No data available.

No data available.

No data available.

No data available.

Percent volatile

No data available.

0 % [Test Method: ACS]

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is considered to be non reactive under normal use conditions

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Strong acids.

10.6 Hazardous decomposition products

Substance Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the 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. Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

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

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

Ingestion

Harmful if swallowed.

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

Additional Health Effects:

Genotoxicity:

Genotoxicity and Mutagenicity: May interact with genetic material and possibly alter gene expression.

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	Ingestion		No data available; calculated ATE >300 - =2,000
			mg/kg
Polyfunctional Aziridine	Dermal	Rabbit	LD50 > 3,000 mg/kg
Polyfunctional Aziridine	Inhalation-	Rat	LC50 0.252 mg/l
	Dust/Mist		
	(4 hours)		
Polyfunctional Aziridine	Ingestion	Rat	LD50 3,038 mg/kg
Amine Borane Complex	Ingestion	Rat	LD50 693 mg/kg
Silane, trimethoxyoctyl-, hydrolysis products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silane, trimethoxyoctyl-, hydrolysis products with silica	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		
	(4 hours)		
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Polyfunctional Aziridine	Rabbit	Mild irritant
Amine Borane Complex	Rabbit	No significant irritation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Polyfunctional Aziridine	Rabbit	Corrosive
Amine Borane Complex	Professio	Severe irritant
	nal	
	judgemen	
	t	
Silane, trimethoxyoctyl-, hydrolysis products with silica	Rabbit	No significant irritation

Skin Sensitisation

Kiii Schsitisation			
Name	Species	Value	
Polyfunctional Aziridine	Human	Sensitising	
	and		
	animal		
Amine Borane Complex	Guinea	Sensitising	
	pig		
Silane, trimethoxyoctyl-, hydrolysis products with silica	Human	Not classified	
	and		
	animal		

Respiratory Sensitisation

Name	Species	Value
Polyfunctional Aziridine	Human	Sensitising

Germ Cell Mutagenicity

Name	Route	Value
Polyfunctional Aziridine	In vivo	Mutagenic
Amine Borane Complex	In Vitro	Not mutagenic
Silane, trimethoxyoctyl-, hydrolysis products with silica	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Silane, trimethoxyoctyl-, hydrolysis products with silica	Not	Mouse	Some positive data exist, but the data are not
	specified.		sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

tepi duceive unu/di Bevelopmentui Eneces						
Name	Route	Value	Species	Test result	Exposure	
					Duration	
Silane, trimethoxyoctyl-, hydrolysis	Ingestion	Not classified for female reproduction	Rat	NOAEL 509	1 generation	
products with silica		_		mg/kg/day		
Silane, trimethoxyoctyl-, hydrolysis	Ingestion	Not classified for male reproduction	Rat	NOAEL 497	1 generation	
products with silica				mg/kg/day		
Silane, trimethoxyoctyl-, hydrolysis	Ingestion	Not classified for development	Rat	NOAEL	during	
products with silica	_			1,350	organogenesis	
-				mg/kg/day		

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure
						Duration
Polyfunctional Aziridine	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Rat	NOAEL Not available	4 hours
			classification			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure
						Duration
Silane, trimethoxyoctyl-, hydrolysis products with silica	Inhalation	respiratory system silicosis	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.

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
Synthetic Rubber Oligomer	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Polyfunctional Aziridine	64265-57-2	Algae or other aquatic plants	Experimental	72 hours	EC50	3.8 mg/l
Polyfunctional Aziridine	64265-57-2	Fish	Experimental	96 hours	LC50	2.35 mg/l
Polyfunctional Aziridine	64265-57-2	Invertebrate	Experimental	48 hours	EC50	6.96 mg/l
Amine Borane Complex	223674-50-8	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Silane, trimethoxyoctyl-, hydrolysis products with silica	67762-90-7	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Synthetic Rubber Oligomer			N/A	N/A	N/A	N/A
		insufficient				
Polyfunctional Aziridine	64265-57-2	Experimental	28 days	CO2 evolution	<60 %CO2	OECD 301B - Modified

.....

		Biodegradation			evolution/THC	sturm or CO2
					O2 evolution	
Amine Borane Complex	223674-50-8	Experimental	28 days		l	EC C.4.C. CO2 Evolution
		Biodegradation			evolution/THC	Test
					O2 evolution	
Silane, trimethoxyoctyl-,	67762-90-7	Data not availbl-	N/A	N/A	N/A	N/A
hydrolysis products with		insufficient				
silica						

12.3: Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Synthetic Rubber Oligomer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyfunctional Aziridine	64265-57-2	Modeled Bioconcentration		Log Kow	0.5	ACD/Labs ChemSketch TM
Amine Borane Complex	223674-50-8	Experimental Bioconcentration		Log Kow	>5.99	EC A.8 Partition Coefficient
Silane, trimethoxyoctyl-, hydrolysis products with silica	67762-90-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Polyfunctional Aziridine	64265-57-2	Modeled Mobility	Koc	19,000 l/kg	Episuite TM
		in Soil			

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

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	No data available.	No data available.	No data available.
14.2 UN proper shipping name	No data available.	No data available.	No data available.
14.3 Transport hazard class(es)	No data available.	No data available.	No data available.
14.4 Packing group	No data available.	No data available.	No data available.
14.5 Environmental hazards	No data available.	No data available.	No data available.
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.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	No data available.	No data available.	No data available.
IMDG Segregation Code	No data available.	No data available.	No data available.

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. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory.

DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

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

Seveso named dangerous substances, Annex 1, Part 2 None

Regulation (EU) No 649/2012

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

0 1 . 0

List of relevant H statements

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects.
H411	Toxic to aquatic life with long lasting effects.

Revision information:

Section 2: <125ml Precautionary - Prevention information was modified.

Label: CLP Classification information was modified.

Label: CLP Environmental Hazard Statements information was added.

Label: CLP Percent Unknown information was modified.

Label: CLP Precautionary - Prevention information was modified.

Label: Graphic information was modified.

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

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was modified.

Section 09: Kinematic Viscosity information information was modified.

Section 9: Vapour density value information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

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

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

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

Section 11: Reproductive Toxicity Table information was modified.

- Section 11: Serious Eye Damage/Irritation Table information was modified.
- Section 11: Skin Corrosion/Irritation Table information was modified.
- Section 11: Skin Sensitization Table information was modified.
- Section 11: Target Organs Repeated Table information was added.
- Section 11: Target Organs Repeated Table information was deleted.
- Section 12: Component ecotoxicity information information was modified.
- Section 12: Mobility in soil information information was added.
- Section 12: No Data text for mobility in soil information was deleted.
- Section 12: Persistence and Degradability information information was modified.
- Section 12:Bioccumulative potential information information was modified.
- Section 14 Multiplier Main Heading information was deleted.
- Section 14 Multiplier Regulation Data information was deleted.
- Section 14 Transport Category Main Heading information was deleted.
- Section 14 Transport Category Regulation Data information was deleted.
- Section 14 Marine transport in bulk according to IMO instruments Main Heading information was modified.
- Section 14 Tunnel Code Main Heading information was deleted.
- Section 14 Tunnel Code Regulation Data information was deleted.
- Section 14 UN Number information was modified.
- Section 15: Seveso Hazard Category Text information was added.

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

Section 2: No PBT/vPvB information available warning information was added.

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 Ireland MSDSs are available at www.3M.com



Safety Data Sheet

Copyright, 2024, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Document group: 31-9758-9 **Version number:** 5.00

Revision date: 22/11/2024 **Supersedes date:** 16/02/2023

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-WeldTM Structural Plastic Adhesive DP8010 Blue and Structural Plastic Adhesive 8010 Blue, Part B

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 Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.

Telephone: +353 1 280 3555 E Mail: tox.uk@mmm.com Website: www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

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:

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318

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

Reproductive Toxicity, Category 1B - Repr. 1B; H360D

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) |GHS08 (Health Hazard) |

Pictograms



Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
Tetrahydrofurfuryl Methacrylate	2455-24-5	219-529-5	30 - 60
2-Ethylhexyl Methacrylate	688-84-6	211-708-6	10 - 24
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	20882-04-6	244-096-4	1 - 9
succinic anhydride	108-30-5	203-570-0	< 0.6
methyl methacrylate	80-62-6	201-297-1	< 0.2
maleic anhydride	108-31-6	203-571-6	< 0.002

HAZARD STATEMENTS:

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction. H360D May damage the unborn child.

H412 Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P201 Obtain special instructions before use.

P280I Wear protective gloves, eye/face protection, and respiratory 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.
H360D May damage the unborn child.

H412 Harmful to aquatic life with long lasting effects.

<=125 ml Precautionary statements

Prevention:

P201 Obtain special instructions before use.

P280I Wear protective gloves, eye/face protection, and respiratory 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.

SUPPLEMENTAL INFORMATION:

Supplemental Precautionary Statements:

Restricted to professional users.

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)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tetrahydrofurfuryl Methacrylate	(CAS-No.) 2455-24-5 (EC-No.) 219-529-5 (REACH-No.) 01- 2120748481-53	30 - 60	Skin Sens. 1, H317 Repr. 1B, H360D Aquatic Chronic 3, H412
Acrylate Polymer	Trade Secret	10 - 30	Substance not classified as hazardous
2-Ethylhexyl Methacrylate	(CAS-No.) 688-84-6 (EC-No.) 211-708-6	10 - 24	Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Dibutyl itaconate	(CAS-No.) 2155-60-4 (EC-No.) 218-451-9	< 10	Substance not classified as hazardous
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	(CAS-No.) 20882-04-6 (EC-No.) 244-096-4	1 - 9	Eye Dam. 1, H318 Skin Sens. 1, H317
Glass Microspheres	Trade Secret	0.1 - 5	Substance not classified as hazardous
naphthenic acids, copper salts	(CAS-No.) 1338-02-9 (EC-No.) 215-657-0	< 1	Flam. Liq. 3, H226 Acute Tox. 4, H302 Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=1
succinic anhydride	(CAS-No.) 108-30-5 (EC-No.) 203-570-0	< 0.6	EUH071 Acute Tox. 4, H302 Skin Corr. 1, H314

			Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317
tetrahydro-2-furyl-methanol	(CAS-No.) 97-99-4 (EC-No.) 202-625-6	< 0.25	Eye Irrit. 2, H319 Repr. 1B, H360Df
methyl methacrylate	(CAS-No.) 80-62-6 (EC-No.) 201-297-1	< 0.2	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 Nota D
styrene	(CAS-No.) 100-42-5 (EC-No.) 202-851-5	< 0.2	Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT RE 1, H372 Nota D Aquatic Chronic 3, H412 Asp. Tox. 1, H304 STOT SE 3, H335
maleic anhydride	(CAS-No.) 108-31-6 (EC-No.) 203-571-6	< 0.002	EUH071 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372

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
1	(CAS-No.) 108-31-6 (EC-No.) 203-571-6	(C >= 0.001%) Skin Sens. 1A, H317

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

The most important symptoms and effects based on the CLP classification include:

Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision).

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>	<u>Condition</u>
Hydrocarbons.	During combustion.
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Hydrogen cyanide.	During combustion.
Oxides of nitrogen.	During combustion.

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. 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

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

7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from acids.

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
styrene	100-42-5	Ireland OELs	TWA(8 hours):85 mg/m3(20	
			ppm);STEL(15 minutes):170	
			mg/m3(40 ppm)	
maleic anhydride	108-31-6	Ireland OELs	TWA(inhalable fraction and	
			vapour)(8 hours):0.01 ppm	
methyl methacrylate	80-62-6	Ireland OELs	TWA(8 hours):50 ppm;TWA(8	Respiratory/Dermal
			hours):50 ppm;STEL(15	Sensitizer
			minutes):100 ppm;STEL(15	
			minutes):100 ppm	

Ireland OELs: Ireland. OELs 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 Indust. Inspect./Ministry (IE)

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: 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 Half facepiece or full facepiece supplied-air respirator

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

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	Liquid.	
Specific Physical Form:	Paste	
Colour	Blue-Green	
Odor	Mild Acrylic	
Odour threshold	No data available.	
Melting point/freezing point	Not applicable.	
Boiling point/boiling range	No data available.	
Flammability	Not applicable.	
Flammable Limits(LEL)	No data available.	
Flammable Limits(UEL)	No data available.	
Flash point	106.1 °C [Test Method:Closed Cup]	

Autoignition temperature	No data available.	
Decomposition temperature	No data available.	
pH	substance/mixture is non-soluble (in water)	
Kinematic Viscosity	No data available.	
Water solubility	Slight (less than 10%)	
Solubility- non-water	No data available.	
Partition coefficient: n-octanol/water	No data available.	
Vapour pressure	No data available.	
Density	0.95 - 1.05 g/ml	
Relative density	0.95 - 1.05 [Ref Std:WATER=1]	
Relative Vapour Density	No data available.	
Particle Characteristics	Not applicable.	

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic CompoundsNo data available.Evaporation rateNo data available.Molecular weightNo data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is considered to be non reactive under normal use conditions

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

Sparks and/or flames.

10.5 Incompatible materials

Strong acids.

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. Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest. May cause additional health effects (see below).

Skin contact

Contact with the skin during product use is not expected to result in significant irritation. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching. May cause additional health effects (see below).

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

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Reproductive/Developmental Toxicity:

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

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

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
Tetrahydrofurfuryl Methacrylate	Ingestion	Rat	LD50 4,000 mg/kg
Tetrahydrofurfuryl Methacrylate	Dermal	similar health hazards	LD50 estimated to be 2,000 - 5,000 mg/kg
2-Ethylhexyl Methacrylate	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
2-Ethylhexyl Methacrylate	Ingestion	Rat	LD50 > 2,000 mg/kg
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	Ingestion	Rat	LD50 > 2,000 mg/kg
naphthenic acids, copper salts	Dermal	similar compoun ds	LD50 > 2,000 mg/kg
naphthenic acids, copper salts	Ingestion	similar compoun ds	LD50 >300, < 2,000 mg/kg

Page: 9 of 22

succinic anhydride	Dermal	Rat	LD50 > 2,000 mg/kg
succinic anhydride	Ingestion	Rat	LD50 1,510 mg/kg
tetrahydro-2-furyl-methanol	Dermal	Professio	LD50 estimated to be 2,000 - 5,000 mg/kg
		nal	
		judgeme	
		nt	
tetrahydro-2-furyl-methanol	Inhalation-	Rat	LC50 > 3.1 mg/l
	Vapour (4		
	hours)		
tetrahydro-2-furyl-methanol	Ingestion	Rat	LD50 > 2,000 mg/kg
methyl methacrylate	Dermal	Rabbit	LD50 > 5,000 mg/kg
methyl methacrylate	Inhalation-	Rat	LC50 29.8 mg/l
	Vapour (4		
	hours)		
methyl methacrylate	Ingestion	Rat	LD50 7,900 mg/kg
styrene	Dermal	Rat	LD50 > 2,000 mg/kg
styrene	Inhalation-	Rat	LC50 11.8 mg/l
	Vapour (4		
	hours)		
styrene	Ingestion	Rat	LD50 5,000 mg/kg
maleic anhydride	Dermal	Rabbit	LD50 2,620 mg/kg
maleic anhydride	Ingestion	Rat	LD50 1,030 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Tetrahydrofurfuryl Methacrylate	Rabbit	No significant irritation
2-Ethylhexyl Methacrylate	Rabbit	Minimal irritation
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	Professio	Mild irritant
	nal	
	judgemen	
	t	
naphthenic acids, copper salts	Rabbit	No significant irritation
succinic anhydride	In vitro	Corrosive
	data	
tetrahydro-2-furyl-methanol	Rabbit	No significant irritation
methyl methacrylate	Rabbit	Irritant
styrene	Professio	Mild irritant
	nal	
	judgemen	
	t	
maleic anhydride	Human	Corrosive
	and	
	animal	

Serious Eye Damage/Irritation

Name	Species	Value
Tetrahydrofurfuryl Methacrylate	Rabbit	No significant irritation
2-Ethylhexyl Methacrylate	Rabbit	No significant irritation
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	In vitro	Corrosive
	data	
naphthenic acids, copper salts	In vitro	No significant irritation
	data	
succinic anhydride	similar	Corrosive
	health	
	hazards	
tetrahydro-2-furyl-methanol	Rabbit	Severe irritant
methyl methacrylate	Rabbit	Mild irritant
styrene	Professio	Moderate irritant
	nal	
	judgemen	
	t	
maleic anhydride	Rabbit	Corrosive

Page: 10 of 22

Skin Sensitisation

Name	Species	Value
Tetrahydrofurfuryl Methacrylate	In vitro	Sensitising
	data	-
2-Ethylhexyl Methacrylate	Guinea	Sensitising
	pig	
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	Professio	Sensitising
	nal	
	judgemen	
	t	
naphthenic acids, copper salts	Guinea	Not classified
	pig	
succinic anhydride	Mouse	Sensitising
tetrahydro-2-furyl-methanol	Mouse	Not classified
methyl methacrylate	Human	Sensitising
	and	-
	animal	
styrene	Guinea	Not classified
	pig	
maleic anhydride	Multiple	Sensitising
	animal	
	species	

Respiratory Sensitisation

Name	Species	Value
succinic anhydride	similar	Sensitising
	compoun	
	ds	
methyl methacrylate	Human	Not classified
maleic anhydride	Human	Sensitising

Germ Cell Mutagenicity

Name	Route	Value
Tetrahydrofurfuryl Methacrylate	In Vitro	Not mutagenic
2-Ethylhexyl Methacrylate	In Vitro	Not mutagenic
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	In Vitro	Not mutagenic
succinic anhydride	In Vitro	Not mutagenic
tetrahydro-2-furyl-methanol	In Vitro	Not mutagenic
methyl methacrylate	In vivo	Not mutagenic
methyl methacrylate	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
styrene	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
styrene	In vivo	Some positive data exist, but the data are not
		sufficient for classification
maleic anhydride	In vivo	Not mutagenic
maleic anhydride	In Vitro	Some positive data exist, but the data are not
		sufficient for classification

Carcinogenicity

Name	Route	Species	Value
succinic anhydride	Ingestion	Multiple animal species	Not carcinogenic
methyl methacrylate	Ingestion	Rat	Not carcinogenic
methyl methacrylate	Inhalation	Human and animal	Not carcinogenic
styrene	Ingestion	Mouse	Carcinogenic.

styrene	Inhalation	Human	Carcinogenic.
		and	
		animal	

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Tetrahydrofurfuryl Methacrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 300 mg/kg/day	29 days
Tetrahydrofurfuryl Methacrylate	Ingestion	Toxic to female reproduction	Rat	NOAEL 120 mg/kg/day	premating into lactation
Tetrahydrofurfuryl Methacrylate	Ingestion	Toxic to development	Rat	NOAEL 120 mg/kg/day	premating into lactation
2-Ethylhexyl Methacrylate	Ingestion	Not classified for male reproduction		NOAEL 1,000 mg/kg/day	49 days
2-Ethylhexyl Methacrylate	Ingestion	Not classified for female reproduction		NOAEL 300 mg/kg/day	premating into lactation
2-Ethylhexyl Methacrylate	Ingestion	Not classified for development		NOAEL 300 mg/kg/day	during gestation
tetrahydro-2-furyl-methanol	Ingestion	Toxic to female reproduction	Rat	NOAEL 50 mg/kg/day	premating into lactation
tetrahydro-2-furyl-methanol	Dermal	Toxic to male reproduction	Rat	NOAEL 100 mg/kg/day	13 weeks
tetrahydro-2-furyl-methanol	Ingestion	Toxic to male reproduction	Rat	NOAEL 150 mg/kg/day	47 days
tetrahydro-2-furyl-methanol	Inhalation	Toxic to male reproduction	Rat	NOAEL 0.6	90 days
tetrahydro-2-furyl-methanol	Ingestion	Toxic to development	Rat	NOAEL 50 mg/kg/day	premating into lactation
methyl methacrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
methyl methacrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
methyl methacrylate	Ingestion	Not classified for development	Rabbit	NOAEL 450 mg/kg/day	during gestation
methyl methacrylate	Inhalation	Not classified for development	Rat	NOAEL 8.3 mg/l	during organogenesis
styrene	Ingestion	Not classified for female reproduction	Rat	NOAEL 21 mg/kg/day	3 generation
styrene	Inhalation	Not classified for female reproduction	Rat	NOAEL 2.1 mg/l	2 generation
styrene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.1 mg/l	2 generation
styrene	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	60 days
styrene	Ingestion	Not classified for development	Rat	NOAEL 400 mg/kg/day	during gestation
styrene	Inhalation	Not classified for development	Multiple animal species	NOAEL 2.1 mg/l	during gestation
maleic anhydride	Ingestion	Not classified for female reproduction	Rat	NOAEL 55 mg/kg/day	2 generation
maleic anhydride	Ingestion	Not classified for male reproduction	Rat	NOAEL 55 mg/kg/day	2 generation
maleic anhydride	Ingestion	Not classified for development	Rat	NOAEL 140 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure
						Duration

Page: 12 of 22

[2-[(2-Methyl-1- oxoallyl)oxy]ethyl] hydrogen succinate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
succinic anhydride	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	
tetrahydro-2-furyl- methanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
methyl methacrylate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure
styrene	Inhalation	auditory system	Causes damage to organs	Multiple animal species	LOAEL 4.3 mg/l	not available
styrene	Inhalation	liver	Causes damage to organs	Mouse	LOAEL 2.1 mg/l	not available
styrene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	occupational exposure
styrene	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	
styrene	Inhalation	endocrine system	Not classified	Rat	NOAEL Not available	not available
styrene	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2.1 mg/l	not available
maleic anhydride	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Tetrahydrofurfuryl Methacrylate	Ingestion	hematopoietic system nervous system	Not classified	Rat	NOAEL 300 mg/kg/day	29 days
2-Ethylhexyl Methacrylate	Ingestion	heart endocrine system hematopoietic system liver immune system nervous system eyes kidney and/or bladder	Not classified	Rat	NOAEL 360 mg/kg/day	90 days
succinic anhydride	Ingestion	heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system kidney and/or bladder respiratory system	Not classified	Mouse	NOAEL 300 mg/kg/day	13 weeks
tetrahydro-2-furyl- methanol	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.2 mg/l	90 days
tetrahydro-2-furyl- methanol	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.6 mg/l	90 days
tetrahydro-2-furyl- methanol	Inhalation	eyes	Not classified	Rat	NOAEL 2.1 mg/l	90 days
tetrahydro-2-furyl- methanol	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 69 mg/kg/day	91 days
tetrahydro-2-furyl- methanol	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 150 mg/kg/day	28 days

tetrahydro-2-furyl- methanol	Ingestion	endocrine system kidney and/or bladder	Not classified	Rat	NOAEL 600 mg/kg/day	28 days
tetrahydro-2-furyl- methanol	Ingestion	liver eyes	Not classified	Rat	NOAEL 781 mg/kg/day	91 days
tetrahydro-2-furyl- methanol	Ingestion	heart nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	28 days
methyl methacrylate	Dermal	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
methyl methacrylate	Inhalation	olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
methyl methacrylate	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	14 weeks
methyl methacrylate	Inhalation	liver	Not classified	Mouse	NOAEL 12.3 mg/l	14 weeks
methyl methacrylate	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
methyl methacrylate	Ingestion	kidney and/or bladder heart skin endocrine system gastrointestinal tract hematopoietic system liver muscles nervous system respiratory system	Not classified	Rat	NOAEL 90.3 mg/kg/day	2 years
styrene	Inhalation	auditory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL not available	occupational exposure
styrene	Inhalation	eyes	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
styrene	Inhalation	liver	May cause damage to organs though prolonged or repeated exposure	Mouse	LOAEL 0.85 mg/l	13 weeks
styrene	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	LOAEL 1.1 mg/l	not available
styrene	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 0.85 mg/l	7 days
styrene	Inhalation	endocrine system	Not classified	Rat	NOAEL 0.6 mg/l	10 days
styrene	Inhalation	respiratory system	Not classified	Multiple animal species	LOAEL 0.09 mg/l	not available
styrene	Inhalation	heart gastrointestinal tract bone, teeth, nails, and/or hair muscles kidney and/or bladder	Not classified	Multiple animal species	NOAEL 4.3 mg/l	2 years
styrene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 500 mg/kg/day	8 weeks
styrene	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
styrene	Ingestion	liver kidney and/or bladder	Not classified	Rat	NOAEL 677 mg/kg/day	6 months
styrene	Ingestion	hematopoietic system	Not classified	Dog	NOAEL 600 mg/kg/day	470 days
styrene	Ingestion	heart respiratory system	Not classified	Rat	NOAEL 35 mg/kg/day	105 weeks
maleic anhydride	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.0011 mg/l	6 months
maleic anhydride	Inhalation	endocrine system hematopoietic system nervous system kidney	Not classified	Rat	NOAEL 0.0098 mg/l	6 months

		and/or bladder heart liver eyes				
maleic anhydride	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 55 mg/kg/day	80 days
maleic anhydride	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 250 mg/kg/day	183 days
maleic anhydride	Ingestion	heart nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	183 days
maleic anhydride	Ingestion	gastrointestinal tract	Not classified	Rat	NOAEL 150 mg/kg/day	80 days
maleic anhydride	Ingestion	hematopoietic system	Not classified	Dog	NOAEL 60 mg/kg/day	90 days
maleic anhydride	Ingestion	skin endocrine system immune system eyes respiratory system	Not classified	Rat	NOAEL 150 mg/kg/day	80 days

Aspiration Hazard

Name	Value
styrene	Aspiration hazard

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
Tetrahydrofurfuryl Methacrylate	2455-24-5	Fathead minnow	Experimental	96 hours	LC50	34.7 mg/l
Tetrahydrofurfuryl Methacrylate	2455-24-5	Green algae	Experimental	72 hours	ErC50	>100 mg/l
Tetrahydrofurfuryl Methacrylate	2455-24-5	Green algae	Experimental	72 hours	ErC10	100 mg/l
Tetrahydrofurfuryl Methacrylate	2455-24-5	Water flea	Experimental	21 days	NOEC	37.2 mg/l
Acrylate Polymer	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
2-Ethylhexyl Methacrylate	688-84-6	Green algae	Experimental	72 hours	ErC50	5.3 mg/l
2-Ethylhexyl Methacrylate	688-84-6	Medaka	Experimental	96 hours	LC50	2.8 mg/l
2-Ethylhexyl Methacrylate	688-84-6	Water flea	Experimental	48 hours	EC50	4.6 mg/l
2-Ethylhexyl Methacrylate	688-84-6	Green algae	Experimental	72 hours	NOEC	0.81 mg/l

2-Ethylhexyl Methacrylate	688-84-6	Water flea	Experimental	21 days	NOEC	0.105 mg/l
Dibutyl itaconate	2155-60-4	Common Carp	Experimental	96 hours	LC50	1.5 mg/l
Dibutyl itaconate	2155-60-4	Green algae	Experimental	72 hours	ErC50	6.9 mg/l
Dibutyl itaconate	2155-60-4	Water flea	Experimental	48 hours	EC50	19 mg/l
Dibutyl itaconate	2155-60-4	Green algae	Experimental	72 hours	ErC10	1.3 mg/l
Dibutyl itaconate	2155-60-4	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
[2-[(2-Methyl-1- oxoallyl)oxy]ethyl] hydrogen succinate	20882-04-6	Green algae	Experimental	72 hours	ErC50	>312 mg/l
[2-[(2-Methyl-1- oxoallyl)oxy]ethyl] hydrogen succinate	20882-04-6	Water flea	Experimental	48 hours	EC50	>515.4 mg/l
[2-[(2-Methyl-1- oxoallyl)oxy]ethyl] hydrogen succinate	20882-04-6	Green algae	Experimental	72 hours	ErC10	>=161 mg/l
naphthenic acids, copper salts	1338-02-9	Green algae	Estimated	72 hours	ErC50	0.629 mg/l
naphthenic acids, copper salts	1338-02-9	Water flea	Estimated	48 hours	EC50	0.0756 mg/l
naphthenic acids, copper salts	1338-02-9	Zebra Fish	Estimated	96 hours	LC50	0.07 mg/l
naphthenic acids, copper salts	1338-02-9	Fathead minnow	Estimated	32 days	EC10	0.0354 mg/l
naphthenic acids, copper salts	1338-02-9	Green algae	Estimated	N/A	NOEC	0.132 mg/l
naphthenic acids, copper salts	1338-02-9	Sediment Worm	Estimated	28 days	NOEC	110 mg/kg (Dry Weight)
naphthenic acids, copper salts	1338-02-9	Water flea	Estimated	7 days	NOEC	0.02 mg/l
naphthenic acids, copper salts	1338-02-9	Activated sludge	Estimated	N/A	EC50	42 mg/l
naphthenic acids, copper salts	1338-02-9	Barley	Estimated	4 days	NOEC	96 mg/kg (Dry Weight)
naphthenic acids, copper salts	1338-02-9	Redworm	Estimated	56 days	NOEC	60 mg/kg (Dry Weight)
naphthenic acids, copper salts	1338-02-9	Soil microbes	Estimated	4 days	NOEC	72 mg/kg (Dry Weight)
naphthenic acids, copper salts	1338-02-9	Springtail	Estimated	28 days	NOEC	167 mg/kg (Dry Weight)
succinic anhydride	108-30-5	Green algae	Hydrolysis Product		ErC50	>100 mg/l
succinic anhydride	108-30-5	Water flea	Hydrolysis Product		EC50	>100 mg/l
succinic anhydride	108-30-5	Zebra Fish	Hydrolysis Product		LC50	>1,000 mg/l
succinic anhydride	108-30-5	Water flea	Analogous Compound	21 days	NOEC	95.2 mg/l
succinic anhydride	108-30-5	Green algae	Hydrolysis Product		NOEC	100 mg/l
succinic anhydride	108-30-5	Activated sludge	Hydrolysis Product		EC20	>300 mg/l
tetrahydro-2-furyl- methanol	97-99-4	Green algae	Experimental	72 hours	EC50	>100 mg/l
tetrahydro-2-furyl- methanol	97-99-4	Medaka	Experimental	96 hours	LC50	>100 mg/l
tetrahydro-2-furyl- methanol	97-99-4	Water flea	Experimental	48 hours	EC50	>100 mg/l
tetrahydro-2-furyl- methanol	97-99-4	Green algae	Experimental	72 hours	NOEC	>100 mg/l
tetrahydro-2-furyl- methanol	97-99-4	Water flea	Experimental	21 days	NOEC	>100 mg/l

methyl methacrylate	80-62-6	Green algae	Experimental	72 hours	EC50	>110 mg/l
methyl methacrylate	80-62-6	Rainbow trout	Experimental	96 hours	LC50	>79 mg/l
methyl methacrylate	80-62-6	Water flea	Experimental	48 hours	EC50	69 mg/l
methyl methacrylate	80-62-6	Green algae	Experimental	72 hours	NOEC	110 mg/l
methyl methacrylate	80-62-6	Water flea	Experimental	21 days	NOEC	37 mg/l
methyl methacrylate	80-62-6	Activated sludge	Experimental	30 minutes	EC20	150 mg/l
methyl methacrylate	80-62-6	Soil microbes	Experimental	28 days	NOEC	>1,000 mg/kg (Dry Weight)
styrene	100-42-5	Activated sludge	Experimental	30 minutes	EC50	500 mg/l
styrene	100-42-5	Fathead minnow	Experimental	96 hours	LC50	4.02 mg/l
styrene	100-42-5	Green algae	Experimental	72 hours	EC50	4.9 mg/l
styrene	100-42-5	Water flea	Experimental	48 hours	EC50	4.7 mg/l
styrene	100-42-5	Green algae	Experimental	96 hours	EC10	0.28 mg/l
styrene	100-42-5	Water flea	Experimental	21 days	NOEC	1.01 mg/l
maleic anhydride	108-31-6	Bacteria	Experimental	18 hours	EC10	44.6 mg/l
maleic anhydride	108-31-6	Rainbow trout	Experimental	96 hours	LC50	75 mg/l
maleic anhydride	108-31-6	Green algae	Hydrolysis Product	72 hours	ErC50	74.4 mg/l
maleic anhydride	108-31-6	Water flea	Hydrolysis Product	48 hours	EC50	93.8 mg/l
maleic anhydride	108-31-6	Water flea	Experimental	21 days	NOEC	10 mg/l
maleic anhydride	108-31-6	Green algae	Hydrolysis Product	72 hours	ErC10	11.8 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Tetrahydrofurfuryl Methacrylate	2455-24-5	Experimental Biodegradation	28 days	BOD	75 %BOD/ThO D (< 10 day window)	OECD 301F - Manometric respirometry
Acrylate Polymer	Trade Secret	Data not availbl- insufficient	N/A	N/A	N/A	N/A
2-Ethylhexyl Methacrylate	688-84-6	Experimental Biodegradation	28 days	BOD	88 %BOD/ThO D	OECD 301C - MITI test (I)
Dibutyl itaconate	2155-60-4	Experimental Biodegradation	28 days	BOD	75 %BOD/ThO D	OECD 301F - Manometric respirometry
[2-[(2-Methyl-1- oxoallyl)oxy]ethyl] hydrogen succinate	20882-04-6	Experimental Biodegradation	28 days	BOD	≥80 %BOD/Th OD (< 10 day window)	OECD 301F - Manometric respirometry
[2-[(2-Methyl-1- oxoallyl)oxy]ethyl] hydrogen succinate	20882-04-6	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	OECD 111 Hydrolysis func of pH
naphthenic acids, copper salts	1338-02-9	Data not availbl- insufficient	N/A	N/A	N/A	N/A
succinic anhydride	108-30-5	Hydrolysis product Biodegradation	28 days	Dissolv. Organic Carbon Deplet	96.55 %remova l of DOC	OECD 301E - Modif. OECD Screen
succinic anhydride	108-30-5	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	4.3 minutes (t 1/2)	
tetrahydro-2-furyl-methanol	97-99-4	Experimental Biodegradation	28 days	BOD	92 %BOD/ThO D	OECD 301C - MITI test (I)
tetrahydro-2-furyl-methanol	97-99-4	Experimental		Hydrolytic half-life	>1 years (t 1/2)	OECD 111 Hydrolysis func

Page: 17 of 22

		Hydrolysis		(pH 7)		of pH
methyl methacrylate	80-62-6	Experimental	14 days	BOD	94 %BOD/ThO	OECD 301C - MITI test (I)
		Biodegradation			D	
styrene	100-42-5	Experimental	28 days	BOD	70.9 %BOD/Th	
		Biodegradation			OD	
styrene	100-42-5	Experimental		Photolytic half-life	6.64 hours (t	
		Photolysis		(in air)	1/2)	
maleic anhydride	108-31-6	Hydrolysis product	25 days	CO2 evolution	>90 %CO2	OECD 301B - Modified
		Biodegradation			evolution/THC	sturm or CO2
					O2 evolution	
maleic anhydride	108-31-6	Experimental		Hydrolytic half-life	0.37 minutes (t	
		Hydrolysis			1/2)	

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Tetrahydrofurfuryl Methacrylate	2455-24-5	Experimental Bioconcentration		Log Kow	1.76	OECD 117 log Kow HPLC method
Acrylate Polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2-Ethylhexyl Methacrylate	688-84-6	Experimental Bioconcentration	96 hours	Bioaccumulation factor	37	OECD305-Bioconcentration
2-Ethylhexyl Methacrylate	688-84-6	Experimental Bioconcentration		Log Kow	4.95	similar to OECD 107
Dibutyl itaconate	2155-60-4	Experimental Bioconcentration		Log Kow	3.8	OECD 117 log Kow HPLC method
[2-[(2-Methyl-1- oxoallyl)oxy]ethyl] hydrogen succinate	20882-04-6	Experimental Bioconcentration		Log Kow	0.782	EC A.8 Partition Coefficient
naphthenic acids, copper salts	1338-02-9	Analogous Compound BCF - Fish	42 days	Bioaccumulation factor	≤27	OECD305-Bioconcentration
succinic anhydride	108-30-5	Hydrolysis product Bioconcentration		Log Kow	-0.59	
succinic anhydride	108-30-5	Experimental Bioconcentration		Log Kow	2.44	OECD 117 log Kow HPLC method
tetrahydro-2-furyl- methanol	97-99-4	Experimental Bioconcentration		Log Kow	-0.11	OECD 107 log Kow shke flsk mtd
methyl methacrylate	80-62-6	Experimental Bioconcentration		Log Kow	1.38	OECD 107 log Kow shke flsk mtd
styrene	100-42-5	Experimental Bioconcentration		Log Kow	2.96	
maleic anhydride	108-31-6	Experimental Bioconcentration		Log Kow	-2.61	OECD 107 log Kow shke flsk mtd

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Tetrahydrofurfuryl Methacrylate	2455-24-5	Modeled Mobility in Soil	Koc	25 l/kg	Episuite TM
2-Ethylhexyl Methacrylate	688-84-6	Modeled Mobility in Soil	Koc	2,348 l/kg	Episuite TM
Dibutyl itaconate	2155-60-4	Experimental Mobility in Soil	Koc	1,900 l/kg	OECD 121 Estim. of Koc by HPLC
[2-[(2-Methyl-1- oxoallyl)oxy]ethyl] hydrogen succinate	20882-04-6	Modeled Mobility in Soil	Koc	1 l/kg	ACD/Labs ChemSketch™
tetrahydro-2-furyl- methanol	97-99-4	Modeled Mobility in Soil	Koc	2 l/kg	Episuite TM
methyl methacrylate	80-62-6	Experimental Mobility in Soil	Koc	8.7-72 l/kg	

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

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

EU waste code (product as sold)

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances
20 01 27* Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	No data available.	No data available.	No data available.
14.2 UN proper shipping name	No data available.	No data available.	No data available.
14.3 Transport hazard class(es)	No data available.	No data available.	No data available.
14.4 Packing group	No data available.	No data available.	No data available.
14.5 Environmental hazards	No data available.	No data available.	No data available.

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.
Emergency Temperature	No data available.	No data available.	No data available.
ADD CL 'C' 1' C I	N. 14 '1.11	N. 14 2111	N. 14 7111
ADR Classification Code	No data available.	No data available.	No data available.
IMDC Segregation Code	No data available.	No data available.	No data available.
IMDG Segregation Code	ino data available.	No data available.	ino data avanable.

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

\sim	•		• • .
('9	rcino	σeni	citv
\sim u		CUI	CILY

<u>Ingredient</u>	CAS Nbr	Classification	Regulation
styrene	100-42-5	Grp. 2A: Probable	International Agency
		human carc.	for Research on Cancer
methyl methacrylate	80-62-6	Gr. 3: Not classifiable	International Agency
			for Research on Cancer
succinic anhydride	108-30-5	Gr. 3: Not classifiable	International Agency
			for Research on Cancer

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

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

EUH071	Corrosive to the respiratory tract.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H360D	May damage the unborn child.
H360Df	May damage the unborn child. Suspected of damaging fertility.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Revision information:

CLP: Ingredient table information was modified.

Label: CLP Percent Unknown information was deleted.

Label: CLP Percent Unknown information was modified.

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

Section 8: Respiratory protection - recommended respirators information information was modified.

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

Section 09: Flammability information information was added.

Section 09: Particle Characteristics N/A information was added.

Section 11: Acute Toxicity table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Reproductive Toxicity Table information was modified.

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

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

Section 11: Skin Sensitization Table information was modified

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

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

Section 12: Component ecotoxicity information information was modified.

Section 12: Mobility in soil information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

Section 15: Carcinogenicity information information was modified.

Section 15: Seveso Substance Text 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 Ireland MSDSs are available at www.3M.com
